

WES MENDELIAN INHERITED DISORDERS DG 2.18

<i>Gene</i>	<i>Median coverage</i>	<i>% covered >10x</i>	<i>% covered >20x</i>	<i>OMIM disease ID</i>
A4GALT	187.1	100.0	100.0	111400
AAAS	117.2	100.0	99.9	231550
AAGAB	152.4	100.0	99.2	148600
AARS	124.9	100.0	99.9	613287;616339
AARS2	131.5	100.0	99.4	614096;615889
AASS	168.0	100.0	99.7	238700
ABAT	105.5	100.0	99.4	613163
ABCA1	115.8	99.9	99.1	205400;604091
ABCA12	163.9	99.5	98.7	242500;601277
ABCA3	123.4	99.9	99.3	610921
ABCA4	123.6	99.9	99.3	248200;601718;604116
ABCA5	88.8	98.4	92.3	135400
ABCB11	170.4	100.0	99.7	601847;605479
ABCB4	151.8	99.9	99.6	600803;614972;602347
ABCB6	140.5	100.0	99.8	609153;614497;615402
ABCB7	148.9	99.5	98.2	301310
ABCC2	134.6	100.0	99.9	237500
ABCC6	117.1	93.6	92.4	614473;264800;177850
ABCC8	132.1	100.0	99.8	125853;610374;606176;256450;240800
ABCC9	172.8	100.0	99.9	239850;614050;608569
ABCD1	78.1	75.8	71.6	300100
ABCD3	125.8	99.8	97.7	616278
ABCD4	141.4	99.9	98.6	614857
ABCG5	173.9	100.0	100.0	210250
ABCG8	150.2	99.1	97.3	210250

ABHD12	102.3	98.7	92.3	612674
ABHD5	224.8	100.0	100.0	275630
ABL1	166.9	100.0	100.0	608232;617602
ACAD8	145.4	100.0	100.0	611283
ACAD9	141.7	100.0	99.9	611126
ACADM	154.1	99.8	99.0	201450
ACADS	129.3	99.9	98.2	201470
ACADSB	133.8	100.0	99.2	610006
ACADVL	138.0	99.4	97.3	201475
ACAN	128.7	96.5	92.7	608361;165800;612813
ACAT1	126.7	99.9	97.5	203750
ACD	148.6	100.0	99.9	616553
ACE	126.8	99.9	98.4	267430
ACER3	138.9	99.8	98.6	617762
ACO2	122.9	96.3	90.3	614559;616289
ACOX1	143.2	100.0	99.9	264470
ACOX2	120.6	100.0	99.2	617308
ACP4	97.1	97.2	88.8	617297
ACP5	186.4	99.8	98.3	607944
ACSF3	148.4	100.0	99.9	614265
ACSL4	131.9	98.7	94.6	300387
ACSL6	123.3	99.3	97.8	-
ACTA1	86.4	99.6	92.3	161800;255310;616852
ACTA2	107.2	100.0	99.0	613834;614042;611788
ACTB	74.3	99.7	96.1	607371;243310
ACTC1	119.1	100.0	99.7	612794;612098;613424
ACTG1	121.5	100.0	100.0	604717;614583
ACTG2	119.3	99.9	98.2	155310
ACTL6B	143.9	100.0	99.8	618470;618468
ACTN1	146.0	100.0	100.0	615193

ACTN2	147.3	100.0	100.0	612158;618654;618655
ACTN4	134.0	100.0	99.3	603278
ACVR1	181.9	100.0	100.0	135100
ACVR1B	165.2	99.7	97.4	-
ACVR2B	133.0	98.3	95.0	613751
ACVRL1	122.9	100.0	98.9	600376
ACY1	131.7	100.0	98.8	609924
ADA	105.4	100.0	99.7	102700
ADA2	90.5	100.0	99.0	182410;615688
ADAM10	154.1	94.8	93.9	615537
ADAM17	150.7	99.9	99.0	614328
ADAM22	154.2	99.9	99.5	617933
ADAM9	174.5	99.8	99.1	612775
ADAMTS10	125.3	99.9	98.5	277600
ADAMTS13	98.0	97.1	93.8	274150
ADAMTS17	125.2	92.8	89.0	613195
ADAMTS18	163.4	100.0	99.7	615458
ADAMTS2	124.1	99.0	96.6	225410
ADAMTS3	170.6	100.0	100.0	618154
ADAMTSL2	114.3	97.1	93.3	231050
ADAMTSL4	134.5	100.0	99.2	225200;225100
ADAR	122.4	100.0	99.8	615010;127400
ADAT3	89.9	100.0	99.7	615286
ADCY1	152.3	95.2	93.8	610154
ADCY5	132.5	95.1	91.2	606703
ADCY6	167.0	100.0	100.0	616287
ADD3	178.5	99.9	99.5	617008
ADGRE2	154.9	96.8	96.1	125630
ADGRG1	163.9	100.0	100.0	606854;615752
ADGRG2	95.4	98.3	92.7	300985

ADGRG6	160.5	99.9	99.0	616503
ADGRV1	155.0	99.6	98.6	604352;605472
ADIPOQ	139.5	100.0	100.0	612556
ADK	114.6	99.5	95.8	614300
ADNP	253.4	100.0	100.0	615873
ADPRHL2	159.0	100.0	99.8	618170
ADRB2	116.1	100.0	99.7	No OMIM phenotype
ADSL	150.2	99.2	98.7	103050
ADSSL1	122.3	90.2	87.5	617030
AEBP1	159.5	100.0	100.0	618000
AFF2	133.9	99.9	99.4	309548
AFF4	118.6	99.9	98.9	616368
AFG3L2	115.3	95.0	91.1	610246;614487
AFP	121.6	96.9	89.8	615969
AGA	191.3	100.0	100.0	208400
AGBL1	122.0	98.5	98.5	615523
AGBL5	124.5	99.9	99.3	617023
AGK	136.1	99.9	97.6	614691;212350
AGL	180.5	100.0	99.4	232400
AGPAT2	146.1	99.6	96.1	608594
AGPS	82.8	99.3	95.4	600121
AGRN	139.7	96.9	92.6	615120
AGT	208.7	100.0	100.0	267430
AGTPBP1	144.2	96.0	94.1	618276
AGTR1	192.6	92.0	91.8	267430
AGXT	150.4	100.0	100.0	259900
AHCY	117.4	100.0	99.2	613752
AHDC1	121.3	100.0	99.3	615829
AHI1	154.3	99.7	97.9	608629
AHR	205.4	100.0	99.6	618345

AHSG	186.5	99.9	99.5	203650
AICDA	148.6	100.0	100.0	605258
AIFM1	117.3	99.9	98.8	300614;300816;310490
AIMP1	92.0	99.2	94.5	260600
AIMP2	156.0	88.9	86.0	618006
AIP	132.1	100.0	99.0	102200
AIPL1	107.9	100.0	99.8	604393
AIRE	91.0	100.0	99.8	240300
AK1	153.9	100.0	100.0	612631
AK2	113.9	98.8	94.5	267500
AK7	132.3	99.7	98.1	617965
AKAP9	105.8	98.8	95.5	611820
AKR1C2	164.2	94.9	89.2	614279
AKR1D1	117.4	100.0	99.4	235555
AKT1	156.2	100.0	99.5	114480;615109;114500;176920;167000
AKT2	173.2	100.0	99.5	125853;240900
AKT3	103.3	98.7	94.5	615937
AL032819.3	.5	1.8	.0	618662
ALAD	95.0	99.3	94.1	612740
ALAS2	88.1	98.9	94.9	300751;300752
ALB	190.4	100.0	99.4	616000
ALDH18A1	142.2	100.0	99.9	601162;616586;219150;616603
ALDH1A3	112.3	97.2	94.5	615113
ALDH2	131.7	100.0	100.0	610251
ALDH3A2	138.4	95.3	94.6	270200
ALDH4A1	125.0	100.0	99.4	239510
ALDH5A1	106.9	91.0	81.5	271980
ALDH6A1	126.0	100.0	99.9	614105
ALDH7A1	77.2	94.4	88.8	266100
ALDOA	131.9	75.5	74.0	611881

ALDOB	156.8	100.0	99.1	229600
ALG1	48.4	53.0	45.8	608540
ALG11	162.5	96.8	96.8	613661
ALG12	161.9	100.0	100.0	607143
ALG13	92.1	98.4	92.6	300884
ALG14	250.7	100.0	99.9	616227
ALG2	98.3	100.0	100.0	607906;616228
ALG3	92.5	100.0	99.7	601110
ALG6	127.1	98.6	94.8	603147
ALG8	132.5	97.2	95.6	608104;617874
ALG9	124.5	100.0	99.7	263210;608776
ALKBH8	133.6	99.8	98.9	618504
ALMS1	203.4	99.8	99.5	203800
ALOX12B	131.3	100.0	100.0	242100
ALOXE3	127.8	100.0	99.5	606545
ALPK3	105.1	97.8	94.6	618052
ALPL	135.7	100.0	100.0	241500;146300;241510
ALS2	176.4	100.0	99.9	205100;606353;607225
ALX1	169.2	99.7	97.1	613456
ALX3	124.9	77.9	73.3	136760
ALX4	137.7	100.0	99.3	609597;613451
AMACR	159.5	100.0	100.0	614307;214950
AMBN	192.8	99.8	98.5	616270
AMELX	96.4	99.9	96.8	301200
AMER1	107.4	99.9	98.5	300373
AMH	54.3	96.4	83.8	261550
AMHR2	157.4	100.0	99.5	261550
AMMECR1	94.4	100.0	99.1	300990
AMN	77.8	89.7	80.0	261100
AMPD1	142.3	99.9	98.6	615511

AMPD2	139.8	99.8	98.9	615809;615686
AMT	153.3	100.0	100.0	605899
AMTN	137.6	99.6	98.6	617607
ANAPC1	91.5	59.4	57.7	618625
ANG	210.9	100.0	100.0	611895
ANGPTL3	104.9	98.8	95.4	605019
ANGPTL4	112.4	100.0	99.2	615881
ANK1	151.2	100.0	99.4	182900
ANK2	154.4	100.0	100.0	600919
ANK3	171.9	99.3	99.0	615493
ANKH	132.4	100.0	100.0	118600;123000
ANKLE2	164.7	99.9	98.6	616681
ANKRD11	119.3	97.5	94.8	148050
ANKRD26	94.5	95.0	89.3	188000
ANKS6	95.9	93.8	89.5	615382
ANLN	170.7	98.7	97.5	616032
ANO10	131.5	99.8	97.9	613728
ANO3	144.5	99.5	97.8	615034
ANO5	156.6	99.5	97.3	613319;166260;611307
ANO6	169.0	99.9	98.7	262890
ANOS1	97.2	89.8	88.9	308700
ANTXR1	127.7	99.7	97.9	230740
ANTXR2	143.4	100.0	98.2	228600
ANXA11	101.5	100.0	98.5	617839
AP1S1	124.8	99.9	99.5	609313
AP1S2	60.9	76.4	67.9	304340
AP2M1	124.8	100.0	100.0	618587
AP2S1	133.2	90.4	90.3	600740
AP3B1	140.4	99.2	95.8	608233
AP3B2	140.6	99.4	95.1	617276

AP3D1	125.3	99.8	98.6	617050
AP4B1	151.8	99.9	98.7	614066
AP4E1	120.4	99.8	98.7	184450;613744
AP4M1	145.6	99.9	98.9	612936
AP4S1	89.2	78.9	71.3	614067
AP5Z1	110.8	100.0	99.8	613647
APC	168.3	100.0	99.7	135290;613659;114550;114500;175100
APC2	93.7	97.6	92.7	617169
APCDD1	186.3	100.0	99.8	605389
APOA1	114.0	100.0	100.0	618463;105200
APOA2	97.1	84.2	81.5	-
APOA5	186.4	100.0	99.9	144650
APOB	186.7	99.8	99.3	144010;615558
APOC2	110.2	100.0	100.0	207750
APOC3	99.4	100.0	100.0	614028
APOE	64.4	98.9	90.7	611771;269600;104310;617347
APOPT1	92.5	81.9	80.7	220110
APP	133.3	100.0	99.9	104300;605714
APRT	81.4	100.0	99.5	614723
APTX	122.6	94.9	92.5	208920
AQP2	112.2	100.0	98.6	125800
AQP5	124.2	100.0	97.0	600231
AR	93.4	97.6	93.2	300633;313200;300068;312300
ARCN1	167.4	97.0	96.6	617164
ARF1	164.1	100.0	100.0	618185
ARFGF2	146.4	99.9	99.1	608097
ARG1	164.4	100.0	100.0	207800
ARHGAP26	152.0	100.0	99.9	607785
ARHGAP31	161.2	99.9	98.8	100300
ARHGDI A	211.1	100.0	100.0	615244

ARHGEF1	101.7	99.9	98.4	618459
ARHGEF10	132.1	99.8	98.0	608236
ARHGEF18	151.9	95.4	92.3	617433
ARHGEF2	124.8	100.0	99.9	617523
ARHGEF9	59.3	76.5	74.1	300607
ARID1A	146.7	98.1	96.4	614607
ARID1B	158.5	99.5	98.6	135900
ARID2	182.7	99.8	98.4	617808
ARL13B	108.1	100.0	99.2	612291
ARL2BP	81.9	95.9	88.3	615434
ARL3	89.4	100.0	98.4	618173;618161
ARL6	127.8	99.9	98.6	600151;613575
ARL6IP1	85.4	99.4	92.6	615685
ARMC2	155.6	100.0	99.2	618433
ARMC4	131.1	95.6	93.5	615451
ARMC5	153.8	100.0	99.4	615954
ARMC9	152.2	100.0	99.8	617622
ARNT2	147.3	100.0	100.0	615926
ARPC1B	131.7	100.0	100.0	617718
ARR3	102.2	100.0	99.8	301010
ARSA	126.4	100.0	99.8	250100
ARSB	127.0	96.9	88.3	253200
ARSE	102.6	99.0	93.0	302950
ARSG	132.9	100.0	99.5	618144
ARV1	128.4	100.0	99.9	617020
ARX	38.6	81.0	64.0	300215;300004;308350;300419;309510
ASAH1	158.2	99.7	98.6	228000;159950
ASB10	97.2	99.4	95.7	603383
ASCC1	158.1	97.7	94.4	614266;616867
ASCL1	149.5	100.0	97.6	209880

ASH1L	174.4	98.7	98.6	617796
ASL	113.6	100.0	99.6	207900
ASNS	98.7	99.4	95.2	615574
ASPA	151.4	99.9	98.3	271900
ASPH	129.9	99.9	98.8	601552
ASPM	127.9	99.7	98.2	608716
ASPSCR1	119.7	99.7	97.8	606243
ASS1	110.2	95.4	87.9	215700
ASXL1	146.1	100.0	99.5	614286;605039
ASXL2	162.5	99.7	98.9	617190
ASXL3	161.8	99.9	99.7	615485
ATAD1	77.5	99.6	95.1	618011
ATAD3A	84.8	91.9	83.2	617183
ATCAY	166.3	100.0	99.8	601238
ATF6	158.7	100.0	99.9	616517
ATG5	154.2	99.4	97.8	617584
ATIC	142.2	99.9	99.3	608688
ATL1	180.1	100.0	99.7	182600;613708
ATL3	147.6	99.8	98.3	615632
ATM	133.4	99.8	98.1	208900
ATN1	166.7	99.9	98.2	618494;125370
ATOH7	103.5	96.0	91.2	221900
ATP11C	91.2	98.7	93.8	301015
ATP13A2	138.1	100.0	99.5	606693;617225
ATP1A1	143.2	100.0	100.0	618036;618314
ATP1A2	183.1	100.0	100.0	602481;104290
ATP1A3	173.5	100.0	99.9	601338;128235;614820
ATP2A1	158.2	100.0	100.0	601003
ATP2A2	163.1	100.0	100.0	124200;101900
ATP2B3	139.5	99.5	97.5	302500

ATP2C1	139.0	100.0	99.6	169600
ATP5A1	84.3	95.2	87.6	616045;615228
ATP5D	72.7	96.2	89.3	618120
ATP5E	175.0	100.0	100.0	614053
ATP6AP1	104.8	98.2	92.1	300972
ATP6AP2	56.8	94.1	76.6	300423;300911
ATP6V0A2	133.7	100.0	99.5	219200;278250
ATP6V0A4	134.0	100.0	99.9	602722
ATP6V1A	156.0	99.9	98.7	618012;617403
ATP6V1B1	199.1	100.0	100.0	267300
ATP6V1B2	143.7	100.0	99.3	616455;124480
ATP6V1E1	82.2	93.1	88.3	617402
ATP7A	135.5	99.7	97.5	300489;304150;309400
ATP7B	146.0	99.9	99.2	277900
ATP8A2	134.7	100.0	99.7	615268
ATP8B1	141.0	96.5	94.0	243300;147480;211600
ATPAF2	118.7	100.0	100.0	604273
ATR	178.2	99.9	99.4	614564;210600
ATRX	102.2	99.4	96.3	300448;309580;301040
ATXN1	186.3	100.0	99.7	164400
ATXN10	153.4	99.9	99.2	603516
ATXN2	105.8	92.7	85.7	183090
ATXN3	112.4	94.5	89.8	109150
ATXN7	137.6	99.8	97.6	164500
ATXN8OS				608768
AUH	120.6	100.0	99.8	250950
AURKC	76.7	100.0	99.2	243060
AUTS2	141.1	98.2	95.8	615834
AVIL	132.4	100.0	99.9	618594
AVP	47.5	84.9	64.3	125700

AVPR2	111.5	100.0	99.4	304800;300539
AXIN1	151.7	100.0	99.6	114550;607864
AXIN2	140.7	100.0	99.9	608615;114500
B2M	237.4	100.0	100.0	241600;105200
B3GALNT2	117.0	93.8	89.4	615181
B3GALT6	43.1	75.7	69.7	271640;615349
B3GAT3	115.4	99.9	98.2	245600
B3GLCT	116.4	99.6	96.3	261540
B4GALNT1	156.9	99.3	95.0	609195
B4GALT1	110.9	100.0	99.8	607091
B4GALT7	122.2	99.8	97.4	130070
B4GAT1	118.1	100.0	100.0	615287
B9D1	112.7	92.2	92.0	614209;617120
B9D2	97.6	100.0	100.0	614175
BAAT	134.8	99.8	98.4	607748
BACH2	179.8	100.0	100.0	618394
BAG3	184.0	100.0	100.0	613881;612954
BANF1	49.1	98.3	86.6	614008
BAP1	111.5	84.4	83.0	614327
BAX	132.3	98.0	95.4	613065;114500
BBIP1	152.5	98.6	92.4	615995
BBS1	172.8	100.0	100.0	209900
BBS10	168.2	100.0	99.8	615987
BBS12	212.9	100.0	100.0	615989
BBS2	180.0	100.0	99.5	616562;615981
BBS4	127.5	99.9	99.3	615982
BBS5	113.0	99.0	93.9	615983
BBS7	173.7	98.7	95.5	615984
BBS9	131.5	99.7	97.6	615986
BCAP31	80.0	92.6	83.2	300475

BCHE	207.7	100.0	99.9	617936
BCKDHA	200.1	99.9	99.2	248600
BCKDHB	146.8	99.5	94.4	248600
BCKDK	215.7	100.0	100.0	614923
BCL10	149.9	100.0	100.0	616098;137245
BCL11A	147.3	99.8	98.1	617101
BCL11B	97.4	99.1	95.6	617237;618092
BCL2	200.1	100.0	100.0	-
BCL7A	173.2	100.0	100.0	-
BCO1	144.1	100.0	100.0	115300
BCOR	118.0	99.6	97.4	300166
BCORL1	167.0	99.6	97.9	301029
BCS1L	158.0	100.0	100.0	262000;256000;124000;603358
BDP1	131.0	98.8	95.3	618257
BEAN1	157.8	98.7	96.4	117210
BEST1	147.6	99.4	96.4	613194;611809;153700;193220
BFSP1	111.8	99.0	89.9	611391
BFSP2	94.5	99.8	97.6	611597
BGN	150.6	100.0	100.0	300989;300106
BHLHA9	21.3	70.9	50.4	609432;607539
BICD2	137.0	100.0	99.7	615290;618291
BIN1	119.1	99.6	95.7	255200
BLK	136.1	100.0	100.0	613375
BLM	133.4	99.8	98.3	210900
BLNK	105.4	97.1	95.5	613502
BLOC1S3	40.2	98.5	81.3	614077
BLOC1S6	117.5	99.9	97.1	614171
BLVRA	120.4	100.0	99.4	614156
BMP1	158.5	100.0	100.0	614856
BMP15	126.1	100.0	99.3	300510

BMP2	178.0	100.0	100.0	112600;617877
BMP4	178.6	100.0	100.0	600625;607932
BMPER	148.8	100.0	99.8	608022
BMPR1A	98.0	99.8	96.6	610069;174900
BMPR1B	174.0	100.0	99.9	112600;616849;609441
BMPR2	180.4	99.9	99.9	265450;178600
BMS1	92.1	66.7	66.4	107600
BNC2	149.8	99.1	99.1	618612
BOLA3	50.8	99.4	90.2	614299
BPGM	117.0	100.0	100.0	222800
BPTF	159.2	96.1	94.2	617755
BRAF	83.8	95.6	85.1	211980;613706;613707;115150
BRAT1	131.1	99.7	98.2	618056;614498
BRCA1	195.0	99.4	98.8	617883
BRCA2	119.2	99.8	98.5	194070;605724
BRDT	119.7	95.9	91.6	617644
BRF1	108.8	99.9	98.4	616202
BRIP1	151.0	99.9	99.0	609054
BRPF1	169.1	100.0	100.0	617333
BRWD3	130.3	99.3	97.2	300659
BSCL2	113.7	100.0	100.0	615924;269700;270685;600794
BSND	157.9	100.0	100.0	602522
BTD	155.8	100.0	99.9	253260
BTK	126.7	100.0	99.9	300755;307200
BUB1	156.0	99.8	98.8	114500
BUB1B	141.0	99.6	98.9	114500;257300
BVES	140.0	99.9	98.8	616812
C11orf70	97.8	99.3	95.9	618063
C11orf80	96.6	98.2	93.7	618432
C12orf4	156.2	100.0	99.3	618221

C12orf57	144.7	100.0	98.9	218340
C12orf65	122.8	99.8	98.5	613559;615035
C15orf41	141.5	100.0	99.8	615631
C19orf12	122.6	100.0	99.8	615043;614298
C19orf70	81.0	100.0	99.7	618329
C1GALT1C1	167.0	100.0	99.5	300622
C1QA	194.6	100.0	100.0	613652
C1QB	193.3	100.0	100.0	613652
C1QBP	76.2	86.9	77.3	617713
C1QC	200.1	100.0	99.2	613652
C1QTNF5	118.0	90.9	78.5	605670
C1R	207.1	100.0	100.0	130080
C1S	113.0	99.9	99.0	617174;613783
C2	140.1	100.0	100.0	217000
C21orf2	107.3	100.0	99.3	602271;617547
C21orf59	154.6	100.0	99.7	615500
C2CD3	140.4	95.8	95.6	615948
C2orf71	124.3	99.6	98.5	613428
C3	153.5	99.9	99.2	613779
C4A	86.0	98.4	95.1	614380
C4B	83.2	99.2	96.9	614379
C4orf26	279.7	100.0	100.0	614832
C5	151.8	99.9	98.5	609536
C5orf42	148.8	99.7	98.4	614615;277170
C6	174.7	100.0	99.7	612446
C7	138.5	100.0	98.9	610102
C7orf43	146.6	100.0	99.4	618351
C8A	124.3	100.0	99.6	613790
C8B	136.9	100.0	99.2	613789
C8orf37	152.0	100.0	99.4	614500;617406

C9	145.6	99.9	99.5	613825
C9orf72	113.5	99.9	98.3	105550
CA12	115.4	100.0	100.0	143860
CA2	172.2	100.0	100.0	259730
CA4	170.8	100.0	100.0	600852
CA5A	121.2	99.7	97.1	615751
CA8	126.5	99.6	97.3	613227
CABP2	77.7	75.9	68.0	614899
CABP4	165.3	100.0	99.9	610427
CACNA1A	97.0	95.1	91.9	108500;141500;183086;617106
CACNA1B	143.7	97.5	95.7	618497
CACNA1C	163.1	99.9	99.2	618447;601005;611875
CACNA1D	155.8	98.0	97.9	615474;614896
CACNA1E	142.9	100.0	99.9	618285
CACNA1F	98.4	99.7	97.5	300600;300476;300071
CACNA1G	151.8	100.0	99.6	618087;616795
CACNA1H	126.2	98.7	96.4	617027
CACNA1S	130.8	100.0	99.9	170400
CACNA2D2	136.9	94.0	93.2	618501
CACNA2D4	107.2	98.9	97.7	610478
CACNB2	159.8	100.0	100.0	611876
CACNB4	122.4	95.5	94.3	613855
CACNG2	123.8	100.0	100.0	614256
CAD	150.4	100.0	99.2	616457
CALM1	129.3	100.0	99.4	614916;616247
CALM2	52.1	67.8	65.1	616249
CALR	124.4	94.8	89.1	187950;254450
CAMK2A	130.8	100.0	99.6	617798;618095
CAMK2B	110.9	100.0	99.8	617799
CAMK2G	126.9	99.9	98.1	618522

CAMTA1	189.7	100.0	99.5	614756
CANT1	153.3	100.0	99.9	617719;251450
CAPN1	170.9	100.0	100.0	616907
CAPN3	120.9	100.0	99.3	253600;618129
CAPN5	155.8	100.0	100.0	193235
CARD11	150.3	100.0	99.9	616452;617638;615206
CARD14	126.0	100.0	99.1	602723;173200
CARD9	112.5	99.9	98.4	212050
CARMIL2	144.2	96.3	94.5	618131
CARS2	131.3	100.0	100.0	616672
CASK	106.8	99.6	96.8	300422;300749
CASP10	129.9	99.5	97.3	613659;605027;603909
CASP14	99.6	100.0	100.0	617320
CASP8	154.8	95.6	95.4	114550;607271
CASQ1	118.3	100.0	99.5	616231
CASQ2	150.7	100.0	100.0	611938
CASR	155.8	100.0	99.9	239200;601198;145980
CAST	132.6	98.3	95.4	616295
CAT	160.2	100.0	100.0	614097
CATSPER1	131.1	100.0	100.0	612997
CAV1	205.0	100.0	100.0	606721;615343;612526
CAV3	229.2	100.0	100.0	192600;611818;123320;614321;606072
CAVIN1	158.7	100.0	100.0	613327
CBL	152.5	97.3	97.1	607785;613563
CBS	124.5	99.8	98.3	236200
CBX2	148.2	100.0	99.8	613080
CC2D1A	151.6	100.0	99.3	608443
CC2D2A	133.1	99.7	97.7	612285;612284;216360
CCBE1	81.2	99.8	98.8	235510
CCDC103	137.0	100.0	100.0	614679

CCDC114	133.0	100.0	100.0	615067
CCDC115	91.3	95.3	90.0	616828
CCDC151	122.2	100.0	99.7	616037
CCDC174	140.4	99.5	97.1	616816
CCDC22	109.5	99.6	96.5	300963
CCDC39	103.8	99.5	96.5	613807
CCDC40	120.5	99.1	98.1	613808
CCDC47	189.0	99.4	97.5	618268
CCDC50	139.0	100.0	99.7	607453
CCDC65	92.8	99.6	97.1	615504
CCDC78	123.2	100.0	100.0	614807
CCDC8	174.4	100.0	100.0	614205
CCDC88A	108.8	98.9	95.4	617507
CCDC88C	111.2	100.0	99.3	616053;236600
CCM2	148.5	98.7	97.8	603284
CCND2	141.8	100.0	100.0	615938
CCNK	106.9	92.6	89.8	618147
CCNO	95.3	100.0	99.2	615872
CCT5	146.2	100.0	99.7	256840
CD151	141.6	100.0	100.0	609057
CD164	132.4	99.1	94.8	616969
CD19	127.3	100.0	100.0	613493
CD247	119.5	100.0	100.0	610163
CD27	103.3	99.9	96.9	615122
CD2AP	141.5	99.9	98.8	607832
CD320	107.7	100.0	99.8	613646
CD36	147.2	99.7	98.7	608404
CD3D	176.6	100.0	100.0	615617
CD3E	151.7	100.0	99.5	615615
CD3G	169.4	100.0	100.0	615607

CD4	154.7	100.0	99.9	613949
CD40	181.5	100.0	100.0	606843
CD40LG	132.0	97.3	88.1	308230
CD55	145.7	92.2	84.3	226300
CD59	189.6	95.1	86.6	612300
CD70	126.0	99.8	97.7	618261
CD79A	158.5	100.0	100.0	613501
CD79B	202.1	100.0	100.0	612692
CD81	145.2	100.0	99.9	613496
CD8A	146.6	100.0	99.8	608957
CD96	176.7	99.9	99.7	211750
CDAN1	120.4	100.0	99.6	224120
CDC14A	186.1	100.0	98.9	608653
CDC42	119.6	97.8	90.7	616737
CDC45	162.6	99.8	98.5	617063
CDC6	172.5	100.0	100.0	613805
CDC73	136.4	100.0	99.4	608266;145001;145000
CDCA7	138.0	100.0	99.6	616910
CDH1	126.7	99.2	99.1	137215;608089;119580;167000
CDH11	153.4	100.0	100.0	211380
CDH15	146.8	99.9	98.7	612580
CDH23	187.3	100.0	100.0	601386;601067
CDH3	158.6	100.0	99.5	601553;225280
CDHR1	162.2	99.2	98.1	613660
CDK10	124.8	100.0	99.9	617694
CDK13	146.0	98.0	92.7	617360
CDK5	133.7	100.0	100.0	616342
CDK5RAP2	130.3	99.8	98.9	604804
CDK6	111.3	100.0	99.6	616080
CDKL5	125.4	95.0	93.5	300672

CDKN1B	161.7	100.0	99.8	610755
CDKN1C	66.7	86.3	74.8	130650;614732
CDKN2A	96.9	92.3	92.1	606719;155755
CDON	132.5	100.0	99.6	614226
CDSN	146.4	100.0	100.0	146520;270300
CDT1	113.5	99.7	97.5	613804
CEACAM16	132.0	100.0	99.5	614614;618410
CEBPA	84.1	98.6	83.9	601626
CEBPE	100.3	100.0	100.0	245480
CEL	159.3	89.7	88.0	609812
CELA2A	174.8	98.3	95.5	618620
CENPE	87.1	98.2	92.2	616051
CENPF	145.1	99.8	98.5	243605
CENPJ	156.3	100.0	99.6	608393;613676
CEP104	131.5	100.0	99.2	616781
CEP120	170.6	100.0	99.5	617761;616300
CEP135	104.8	99.1	93.6	614673
CEP152	184.2	99.7	98.2	613823;614852
CEP164	102.8	99.9	98.3	614845
CEP19	231.4	100.0	100.0	615703
CEP250	102.9	100.0	99.2	618358
CEP290	97.0	96.1	90.0	610188;610189;611134;615991;611755
CEP41	92.6	99.8	97.4	614464
CEP55	138.6	100.0	99.8	236500
CEP57	99.8	99.2	93.0	614114
CEP63	150.1	99.3	96.5	614728
CEP78	130.5	99.7	97.6	617236
CEP83	133.1	99.8	97.4	615862
CERKL	124.1	99.5	96.9	608380
CERS1	61.1	75.4	63.7	616230

CERS3	114.6	99.9	98.9	615023
CES1	152.9	99.8	99.3	618057
CETP	126.7	100.0	99.9	143470
CFAP43	148.2	99.9	98.9	617592
CFAP44	130.4	99.8	98.9	617593
CFAP53	150.5	99.6	97.4	614779
CFAP69	82.6	98.7	93.5	617959
CFB	139.7	100.0	100.0	615561
CFC1	122.7	84.2	74.1	605376
CFD	87.7	89.3	83.7	613912
CFH	194.1	99.9	99.0	126700;609814
CFHR5	115.2	99.6	98.4	614809
CFI	169.4	99.2	96.8	610984
CFL2	167.1	100.0	99.6	610687
CFP	108.8	100.0	99.0	312060
CFTR	140.8	99.6	97.9	219700;277180
CHAMP1	200.3	100.0	100.0	616579
CHAT	127.1	93.5	85.7	254210
CHCHD10	25.2	59.1	43.9	616209;615048;615911
CHCHD2	76.6	98.4	83.8	616710
CHD1	137.5	99.3	94.9	617682
CHD2	151.3	99.4	99.2	615369
CHD3	111.7	94.8	92.6	618205
CHD4	134.0	100.0	99.9	617159
CHD7	158.7	100.0	99.5	612370;214800
CHEK2	112.6	85.0	81.5	609265;259500
CHKB	114.9	100.0	99.7	602541
CHM	113.9	98.5	94.5	303100
CHMP1A	131.9	100.0	99.8	614961
CHMP2B	94.7	99.7	96.7	614696;600795

CHMP4B	147.0	100.0	99.3	605387
CHN1	195.5	99.6	98.7	604356
CHP1	83.4	98.5	89.1	618438
CHRD1	111.5	100.0	99.8	309300
CHRM3	144.2	100.0	100.0	100100
CHRNA1	114.1	94.7	94.0	601462;608930;253290
CHRNA2	185.5	100.0	100.0	610353
CHRNA4	108.8	98.3	96.2	600513
CHRN1	163.0	100.0	99.4	616314;616313
CHRN2	137.0	99.3	96.0	605375
CHRNA	158.8	99.7	97.9	616321;616323;616322;253290
CHRNA	157.9	100.0	100.0	605809;616324;608931
CHRNA	149.9	100.0	100.0	265000;253290
CHST11	234.3	100.0	100.0	618167
CHST14	147.4	99.9	98.9	601776
CHST3	113.4	100.0	99.4	143095
CHST6	197.7	100.0	100.0	217800
CHST8	250.3	100.0	100.0	616265
CHSY1	147.1	97.2	95.7	605282
CHUK	155.6	100.0	99.1	613630
CIB1	131.3	97.3	93.6	618267
CIB2	203.3	99.7	97.0	614869;609439
CIC	71.6	63.3	63.3	617600
CIDEC	92.3	100.0	97.9	615238
CIITA	160.2	100.0	99.5	209920
CISD2	135.4	83.4	83.4	604928
CIT	127.8	100.0	99.4	617090
CITED2	111.9	99.2	99.0	614431;614433
CKAP2L	194.4	99.7	98.6	272440
CLCF1	78.2	100.0	99.4	610313

CLCN1	142.2	100.0	99.2	160800;;255700
CLCN2	124.4	100.0	99.5	615651;605635
CLCN4	117.3	99.9	98.9	300114
CLCN5	125.2	99.9	98.3	308990;300554;300009;310468
CLCN7	142.0	99.7	98.4	618541;611490;166600
CLCNKA	124.8	99.8	97.8	613090
CLCNKB	110.1	99.1	95.9	607364;613090
CLDN1	132.0	100.0	100.0	607626
CLDN10	156.6	100.0	100.0	617671
CLDN14	90.1	100.0	99.7	614035
CLDN16	162.9	100.0	100.0	248250
CLDN19	128.4	98.5	93.1	248190
CLEC7A	170.5	100.0	100.0	613108
CLIC2	74.3	99.9	96.5	300886
CLIC5	116.3	100.0	99.9	616042
CLMP	95.9	100.0	99.6	615237
CLN3	133.0	92.5	91.8	204200
CLN5	164.8	99.4	95.5	256731
CLN6	141.3	99.9	97.1	204300;601780
CLN8	173.9	83.5	83.5	610003;600143
CLP1	140.4	100.0	100.0	615803
CLPB	142.9	100.0	99.9	616271
CLPP	147.3	100.0	99.1	614129
CLPX	189.0	99.9	99.4	618015
CLRN1	168.2	100.0	99.8	614180;276902
CLTC	183.8	100.0	99.9	617854
CNBP	126.0	100.0	100.0	602668
CNGA1	129.3	91.7	86.3	613756
CNGA3	173.8	100.0	99.7	216900
CNGB1	121.0	99.4	97.5	613767

CNGB3	133.7	99.4	95.9	248200;262300
CNKS2	99.2	98.6	93.6	301008
CNNM2	198.1	100.0	100.0	616418;613882
CNNM4	176.3	99.8	98.9	217080
CNOT1	158.7	100.0	99.9	618500
CNOT2	155.0	99.9	99.5	618608
CNPY3	83.1	100.0	99.3	617929
CNTN1	143.1	99.9	98.9	612540
CNTN2	134.1	92.7	92.7	615400
CNTNAP1	173.7	100.0	99.8	618186;616286
CNTNAP2	154.0	100.0	99.8	610042
COA5	68.9	99.1	88.9	616500
COA6	106.3	99.9	98.4	616501
COA7	142.6	100.0	100.0	618387
COASY	181.4	100.0	100.0	618266;615643
COCH	191.3	100.0	99.9	618094;601369
COG1	121.9	100.0	100.0	611209
COG2	146.1	99.9	98.5	617395
COG4	110.3	100.0	99.9	618150;613489
COG5	154.6	99.7	97.6	613612
COG6	108.2	99.1	93.9	614576;615328
COG7	125.0	100.0	100.0	608779
COG8	147.5	100.0	99.6	611182
COL10A1	118.0	100.0	98.4	156500
COL11A1	116.2	99.2	95.7	228520;604841;618533;154780
COL11A2	126.7	100.0	99.5	601868;609706;215150;184840;614524
COL12A1	153.4	100.0	99.4	616471;616470
COL13A1	100.5	100.0	99.8	616720
COL17A1	120.5	98.7	96.8	122400;226650
COL18A1	123.2	98.1	95.6	267750

COL1A1	154.6	99.9	98.6	166220;114000;259420;166200;130060;166210
COL1A2	117.6	99.4	97.0	166220;225320;617821;259420;166210
COL25A1	155.4	99.5	99.1	616219
COL27A1	165.0	99.9	99.7	615155
COL2A1	125.9	100.0	99.7	616583;108300;183900;609162;184250;200610;150600;609508;271700;151210;608805;132450;604864;156550
COL3A1	120.8	99.6	97.6	618343;130050
COL4A1	115.6	98.7	97.4	611773;618564;175780;180000
COL4A2	121.2	100.0	99.6	614483
COL4A3	111.1	98.7	98.0	203780;141200;104200
COL4A3BP	150.5	99.6	96.5	616351
COL4A4	107.4	99.9	98.2	203780;141200
COL4A5	66.6	97.8	89.0	301050
COL4A6	95.6	97.5	93.3	300914
COL5A1	159.9	98.8	98.0	130000
COL5A2	121.3	100.0	99.5	130010
COL6A1	149.2	100.0	99.4	158810;254090
COL6A2	161.0	100.0	99.8	158810;255600;254090
COL6A3	171.8	100.0	99.8	158810;254090;616411
COL7A1	152.5	99.9	99.1	131750;132000;131850;607523;226600;604129;131705
COL8A2	89.1	99.9	97.9	136800;609140
COL9A1	159.8	100.0	99.2	614134;614135
COL9A2	103.5	99.9	99.0	600204;614284
COL9A3	109.1	98.7	95.5	600969
COLEC10	140.4	100.0	100.0	248340
COLEC11	178.1	100.0	100.0	265050
COLGALT1	181.2	93.3	89.0	618360
COLQ	113.9	100.0	99.2	603034
COMP	125.4	93.4	92.3	132400;177170
COPB2	169.7	99.9	99.3	617800
COQ2	113.1	98.0	95.3	607426

COQ4	98.8	90.9	89.3	616276
COQ6	143.6	99.9	98.4	614650
COQ7	161.7	100.0	99.8	616733
COQ8A	164.9	100.0	99.5	612016
COQ8B	102.1	100.0	99.3	615573
COQ9	79.4	100.0	97.9	614654
CORIN	167.5	100.0	99.9	614595
CORO1A	144.9	100.0	98.6	615401
COX10	211.4	100.0	100.0	220110;256000
COX14	115.3	100.0	100.0	220110
COX15	106.0	99.9	98.8	256000;615119
COX20	72.8	97.8	88.3	220110
COX4I2	127.4	100.0	100.0	612714
COX6A1	177.4	100.0	99.5	616039
COX6A2	51.6	99.2	93.7	220110
COX6B1	189.5	100.0	100.0	220110
COX7B	54.0	77.4	48.8	300887
COX8A	111.3	100.0	100.0	220110
CP	127.1	94.8	88.9	604290
CPA6	141.4	99.6	97.5	614417;614418
CPAMD8	105.4	95.8	92.8	617319
CPLX1	90.5	100.0	100.0	617976
CPN1	130.5	99.9	99.4	212070
CPOX	142.3	99.9	95.4	121300
CPS1	162.9	100.0	99.9	237300
CPT1A	158.3	100.0	98.9	255120
CPT1C	130.5	100.0	99.9	616282
CPT2	159.1	98.2	97.8	600649;255110;608836
CR2	165.8	100.0	99.8	614699
CRADD	122.8	99.5	96.3	614499

CRAT	126.1	100.0	99.8	617917
CRB1	194.4	100.0	99.9	600105;613835;172870
CRB2	103.1	98.5	93.0	616220;219730
CRBN	152.3	88.2	87.7	607417
CREB1	126.8	99.7	96.7	612160
CREB3L1	148.4	100.0	99.9	616229
CREBBP	124.1	99.7	98.5	618332;180849
CRELD1	103.8	99.9	95.0	606217
CRIPT	47.4	98.1	93.2	615789
CRLF1	127.7	91.0	89.8	272430
CRTAP	120.1	99.8	98.8	610682
CRTC1	160.9	99.8	99.7	-
CRX	215.1	100.0	100.0	120970;613829
CRYAA	121.9	99.9	97.5	604219
CRYAB	108.3	100.0	99.2	615184;613869;613763;608810
CRYBA1	134.4	100.0	99.4	600881
CRYBA2	163.0	100.0	100.0	115900
CRYBA4	126.8	100.0	100.0	610425
CRYBB1	129.8	100.0	100.0	611544
CRYBB2	149.9	100.0	100.0	601547
CRYBB3	168.8	100.0	100.0	609741
CRYGB	111.7	100.0	99.6	615188
CRYGC	137.6	99.8	96.9	604307
CRYGD	112.0	100.0	98.9	115700
CRYGS	109.8	94.1	86.6	116100
CRYM	92.9	100.0	99.6	616357
CSF1R	125.5	99.9	99.3	618476;221820
CSF2RA	60.8	89.9	87.5	300770
CSF2RB	139.8	100.0	99.0	614370
CSF3R	108.5	99.6	98.2	617014

CSNK1D	128.1	97.7	95.1	615224
CSNK2A1	133.8	95.9	92.2	617062
CSPP1	132.4	99.8	98.7	615636
CSRP3	120.0	100.0	99.0	607482;612124
CST3	73.2	93.4	66.0	105150
CST6	108.4	98.2	92.5	618535
CSTA	140.8	100.0	99.8	607936
CSTB	85.0	99.6	89.8	254800
CTBP1	96.7	93.2	86.9	617915
CTC1	128.0	100.0	99.6	612199
CTCF	150.1	100.0	99.3	615502
CTDP1	129.4	88.4	84.3	604168
CTH	167.0	100.0	100.0	219500
CTHRC1	122.5	93.8	87.5	614266
CTLA4	162.1	100.0	100.0	616100
CTNNA1	125.7	99.3	98.1	608970
CTNNA2	118.8	100.0	99.8	618174
CTNNA3	168.7	100.0	99.8	615616
CTNNB1	148.9	100.0	100.0	155255;114550;132600;615075;617572;114500;167000
CTNND1	150.1	100.0	100.0	617681
CTNS	127.4	100.0	99.8	219900;219800;219750
CTPS1	130.9	100.0	100.0	615897
CTSA	156.7	100.0	100.0	256540
CTSC	137.1	100.0	100.0	245000;245010;170650
CTSD	174.3	98.4	95.0	610127
CTSF	117.3	84.0	79.3	615362
CTSK	105.3	100.0	99.9	265800
CTU2	134.8	99.7	97.7	618142
CUBN	129.7	99.7	98.3	261100
CUL3	146.2	99.9	98.8	614496

CUL4B	93.0	98.0	90.9	300354
CUL7	140.4	100.0	99.3	273750
CUX1	130.3	96.4	94.8	618330
CUX2	133.0	99.9	99.1	618141
CWC27	105.7	99.3	96.5	250410
CWF19L1	126.8	100.0	99.8	616127
CXCR4	151.1	100.0	100.0	193670
CXorf56	92.3	99.8	96.7	301013
CYB561	157.4	92.8	92.6	618182
CYB5A	157.5	100.0	100.0	250790
CYB5R3	165.7	98.4	98.0	250800
CYBA	115.6	95.0	82.4	233690
CYBB	121.9	99.9	99.3	300645;306400
CYC1	163.2	97.5	89.2	615453
CYCS	78.6	99.1	94.9	612004
CYFIP2	137.7	100.0	99.4	618008
CYLD	127.1	99.8	98.0	605041;132700;601606
CYP11A1	129.8	99.3	96.1	613743
CYP11B1	146.2	100.0	100.0	202010;103900
CYP11B2	138.4	100.0	100.0	203400;610600
CYP17A1	120.3	100.0	99.5	202110
CYP19A1	162.3	98.8	96.8	139300;613546
CYP1B1	97.2	100.0	100.0	617315;231300
CYP21A2	101.0	97.8	88.4	201910
CYP24A1	203.6	100.0	99.9	143880
CYP26B1	148.9	100.0	99.9	614416
CYP26C1	85.8	99.7	97.1	614974
CYP27A1	180.7	98.9	96.7	213700
CYP27B1	133.7	99.9	99.3	264700
CYP2A6	147.9	100.0	99.9	122700

CYP2B6	124.2	99.9	98.2	614546
CYP2C19	182.2	100.0	98.9	609535
CYP2C9	197.6	99.9	98.4	122700
CYP2R1	147.8	99.4	95.6	600081
CYP2U1	160.0	94.8	91.5	615030
CYP4F22	126.6	100.0	99.4	604777
CYP4V2	163.7	99.9	98.4	210370
CYP7B1	131.5	98.0	92.8	613812;270800
D2HGDH	135.3	99.2	97.2	600721
DAB1	138.9	100.0	100.0	615945
DACT1	137.9	93.6	91.1	617466
DAG1	203.4	100.0	100.0	613818;616538
DARS	157.6	100.0	99.3	615281
DARS2	151.1	100.0	99.3	611105
DBH	167.2	100.0	100.0	223360
DBT	134.8	99.8	98.0	248600
DCAF17	107.3	98.9	93.3	241080
DCAF8	110.8	100.0	99.9	610100
DCC	147.1	100.0	100.0	157600;133239;617542;114500
DCDC2	174.2	100.0	99.9	610212;617394;616217
DCHS1	148.1	99.8	99.1	607829;601390
DCLRE1C	163.4	100.0	99.4	602450;603554
DCN	162.4	95.7	95.6	610048
DCPS	161.1	100.0	100.0	616459
DCTN1	126.0	100.0	98.8	607641;168605
DCX	114.9	100.0	99.9	300067
DDB2	165.3	99.6	97.5	278740
DDC	121.6	99.7	96.4	608643
DDHD1	164.0	97.9	95.8	609340
DDHD2	144.9	100.0	99.6	615033

DDOST	127.8	100.0	99.9	614507
DDR2	138.1	100.0	99.9	618175;271665
DDRGK1	104.4	100.0	99.9	602557
DDX11	108.7	85.2	80.7	613398
DDX3X	86.6	86.8	84.9	300958
DDX58	149.1	99.9	99.0	616298
DDX59	172.0	100.0	100.0	174300
DDX6	73.5	97.7	88.7	618653
DEAF1	114.7	97.3	88.8	615828;617171
DEGS1	165.2	100.0	100.0	618404
DENND5A	118.6	100.0	99.4	617281
DEPDC5	147.4	100.0	99.8	604364
DES	119.2	100.0	99.7	181400;601419;604765
DFNA5	105.5	100.0	99.2	600994
DFNB59	142.3	100.0	99.7	610220
DGAT1	146.5	91.9	87.6	615863
DGKE	130.4	99.8	98.1	615008
DGUOK	124.5	100.0	99.4	251880;617068;617070
DHCR24	169.6	100.0	100.0	602398
DHCR7	152.1	100.0	100.0	270400
DHDDS	93.1	99.0	95.0	613861;617836
DHFR	51.8	92.1	78.9	613839
DHH	140.3	100.0	100.0	233420;607080
DHODH	112.7	100.0	100.0	263750
DHPS	131.7	100.0	99.7	618480
DHTKD1	145.8	99.9	98.9	204750;615025
DHX30	163.6	100.0	99.9	617804
DHX38	120.3	100.0	99.3	618220
DIABLO	220.1	100.0	99.8	614152
DIAPH1	120.5	99.8	99.0	124900;616632

DIAPH2	77.3	95.9	87.6	300511
DIAPH3	96.5	99.6	97.0	609129
DICER1	179.1	99.8	99.0	618272;138800;601200;180295
DIP2B	155.4	100.0	99.3	136630
DIS3L2	164.4	100.0	99.8	267000
DKC1	108.6	99.8	98.7	305000
DLAT	111.4	100.0	99.7	245348
DLC1	186.3	100.0	99.9	114500
DLD	135.6	100.0	99.7	246900
DLG3	86.3	99.1	93.2	300850
DLL3	83.9	92.1	87.0	277300
DLL4	178.9	100.0	99.2	616589
DLST	97.1	96.7	90.3	618475
DLX3	135.0	99.9	98.4	104510;190320
DLX4	258.2	100.0	100.0	616788
DLX5	143.1	100.0	99.9	220600
DMD	133.1	99.6	98.6	310200;300376;302045
DMGDH	171.4	100.0	99.7	605850
DMP1	138.6	100.0	99.9	241520
DMPK	158.7	99.8	98.4	160900
DMXL2	183.8	99.9	99.1	616113;617605
DNA2	155.0	99.8	98.3	615807;615156
DNAAF1	135.5	100.0	99.8	613193
DNAAF2	111.9	99.9	98.9	612518
DNAAF3	122.1	99.5	96.1	606763
DNAAF4	104.8	99.8	97.0	615482
DNAAF5	107.4	84.6	78.6	614874
DNAH1	166.5	100.0	99.7	617577;617576
DNAH11	155.9	99.9	99.0	611884
DNAH17	139.1	100.0	99.6	618643

DNAH5	139.2	99.9	99.3	608644
DNAH9	132.7	99.5	98.3	618300
DNAI1	132.6	100.0	100.0	244400
DNAI2	182.7	98.6	96.2	612444
DNAJB11	128.6	100.0	99.5	618061
DNAJB13	139.4	100.0	100.0	617091
DNAJB2	139.8	100.0	100.0	614881
DNAJB6	68.6	96.5	88.5	603511
DNAJC12	188.9	87.4	87.4	617384
DNAJC19	139.7	98.9	96.2	610198
DNAJC21	146.2	99.9	99.0	617052
DNAJC3	148.3	100.0	99.7	616192
DNAJC5	228.0	100.0	100.0	162350
DNAJC6	161.6	100.0	99.4	615528
DNAL1	112.7	99.0	96.8	614017
DNAL4	80.8	100.0	98.9	616059
DNASE1L3	140.2	100.0	100.0	614420
DNM1	145.0	92.6	89.1	616346
DNM1L	139.3	99.9	98.5	610708;614388
DNM2	138.9	98.1	94.5	606482;615368;160150
DNMBP	163.7	100.0	99.7	618415
DNMT1	131.2	99.2	99.0	604121;614116
DNMT3A	134.9	99.8	98.6	615879;601626
DNMT3B	133.6	100.0	100.0	242860
DOCK2	140.8	100.0	99.6	616433
DOCK3	134.8	100.0	99.0	618292
DOCK6	122.2	99.3	98.9	614219
DOCK7	150.4	99.8	98.2	615859
DOCK8	135.8	100.0	99.6	243700
DOK7	105.0	94.1	91.3	618389;254300

DOLK	187.5	100.0	100.0	610768
DONSON	113.4	91.7	85.3	251230;617604
DPAGT1	90.7	100.0	100.0	608093;614750
DPF2	121.2	99.9	98.4	618027
DPH1	166.2	100.0	99.9	616901
DPM1	155.7	98.2	91.3	608799
DPM2	98.8	100.0	98.7	615042
DPM3	225.1	100.0	100.0	612937
DPP6	139.5	99.7	97.8	616311
DPY19L2	101.2	74.5	71.2	613958
DPYD	173.0	99.7	97.7	274270
DPYS	137.1	100.0	99.9	222748
DRAM2	158.7	100.0	99.9	616502
DRC1	102.4	100.0	99.5	615294
DRD4	88.2	93.8	81.8	-
DSC2	152.6	99.8	98.4	610476
DSC3	116.0	99.5	96.8	613102
DSE	99.1	99.0	96.1	615539
DSG1	168.0	99.3	97.5	615508;148700
DSG2	151.4	100.0	99.6	610193;612877
DSG4	191.9	100.0	99.2	607903
DSP	152.6	100.0	99.6	607450;612908;609638;605676;607655;615821
DSPP	67.8	96.8	86.1	125490;605594;125500;125420
DST	176.0	99.9	99.4	614653;615425
DSTYK	138.0	99.9	99.2	610805;270750
DTNA	151.7	100.0	99.9	604169
DTNBP1	126.7	99.8	98.7	614076
DUOX2	137.9	96.7	94.7	607200
DUOXA2	149.7	100.0	100.0	274900
DUSP6	157.9	100.0	100.0	615269

DVL1	137.3	97.2	95.0	616331
DVL3	192.3	100.0	100.0	616894
DYM	122.2	97.4	96.5	607326;223800
DYNC1H1	157.5	99.9	99.4	158600;614563;614228
DYNC1I2	61.8	84.4	68.8	618492
DYNC2H1	122.7	98.8	95.5	613091
DYNC2LI1	121.3	99.7	97.6	617088
DYRK1A	158.8	100.0	100.0	614104
DYRK1B	111.1	98.4	94.0	615812
DYSF	149.9	100.0	99.9	253601;254130;606768
DZIP1L	105.7	99.9	99.0	617610
EARS2	105.9	99.8	97.7	614924
EBF3	151.9	100.0	100.0	617330
EBP	73.3	99.7	95.8	300960;302960
ECE1	163.6	98.3	97.9	613870
ECEL1	99.8	95.4	90.0	615065
ECHS1	108.6	99.9	99.0	616277
ECM1	195.7	100.0	99.6	247100
EDA	102.9	98.1	91.6	313500;305100
EDAR	148.4	100.0	99.9	129490;224900
EDARADD	101.9	99.9	98.8	614940;614941
EDC3	134.3	100.0	99.9	616460
EDN1	166.4	100.0	100.0	612798;615706
EDN3	144.3	100.0	99.9	209880;613265
EDNRA	196.2	100.0	100.0	616367
EDNRB	135.9	98.0	93.8	600501;277580
EED	91.4	99.1	95.9	617561
EEF1A2	189.2	100.0	100.0	616409;616393
EEF2	164.4	100.0	99.9	609306
EFEMP1	163.7	100.0	99.9	126600

EFEMP2	138.6	100.0	100.0	614437
EFL1	178.2	99.6	98.5	617941
EFNB1	142.1	100.0	100.0	304110
EFTUD2	123.9	100.0	99.8	610536
EGF	129.4	99.9	99.7	611718
EGFR	166.1	100.0	100.0	211980;616069
EGLN1	78.2	89.3	82.2	609820
EGR2	152.7	100.0	100.0	145900;605253;607678
EHHADH	164.6	100.0	100.0	615605
EHMT1	138.6	94.5	93.7	610253
EIF2AK3	174.6	97.2	94.5	226980
EIF2AK4	144.0	99.8	98.6	234810
EIF2B1	143.6	100.0	100.0	603896
EIF2B2	133.4	99.9	99.5	603896
EIF2B3	179.6	100.0	100.0	603896
EIF2B4	138.7	100.0	99.9	603896
EIF2B5	119.9	100.0	99.0	603896
EIF2S3	91.9	95.4	89.1	300148
EIF3F	76.0	96.8	84.1	618295
EIF4A3	106.3	100.0	99.5	268305
ELAC2	124.7	100.0	99.7	615440
ELANE	143.2	99.7	97.4	162800;202700
ELMO2	108.5	99.9	99.0	606893
ELMOD3	159.6	100.0	99.8	615429
ELN	118.7	99.8	97.8	123700;185500
ELOVL1	94.0	99.8	97.6	618527
ELOVL4	122.7	100.0	99.5	133190;600110;614457
ELOVL5	130.0	100.0	99.8	615957
ELP1	149.3	99.8	99.0	223900
ELP2	136.8	99.9	98.8	617270

ELP4	61.3	72.8	70.2	617141
EMC1	133.6	100.0	99.3	616875
EMD	150.1	99.9	98.4	310300
EMG1	136.5	100.0	100.0	211180
EML1	154.3	99.7	98.4	600348
EMP2	88.6	99.9	96.7	615861
EMX2	159.0	100.0	100.0	269160
ENAM	166.6	100.0	100.0	204650;104500
ENG	130.6	99.6	96.0	187300
ENO3	186.4	100.0	99.9	612932
ENPP1	149.8	96.4	91.2	208000;615522;613312
ENTPD1	160.7	100.0	100.0	615683
EOGT	125.8	79.4	78.4	615297
EP300	192.0	99.8	99.0	618333;114500;613684
EPAS1	160.7	99.7	98.1	611783
EPB41	138.3	99.4	97.8	611804
EPB41L1	138.9	99.6	95.8	614257
EPB42	147.1	100.0	99.5	612690
EPCAM	93.7	98.6	90.3	613217;613244
EPG5	137.8	99.5	98.5	242840
EPHA2	158.5	100.0	99.5	116600
EPHB2	200.8	98.1	98.1	618462
EPHB4	173.8	100.0	99.7	618196;617300
EPHX1	137.1	99.9	98.8	607748
EPM2A	138.3	94.2	91.5	254780
EPO	102.8	99.9	97.6	617907;617911
EPRS	173.6	100.0	99.6	617951
EPS8	145.3	100.0	99.1	615974
EPS8L2	140.2	96.1	93.7	617637
ERAL1	173.9	100.0	99.7	617565

ERBB2	154.6	98.4	97.1	613659;211980;137800
ERBB3	132.9	100.0	99.8	607598
ERBB4	157.2	100.0	99.5	615515
ERCC1	88.2	100.0	99.3	610758
ERCC2	135.5	100.0	99.7	278730;601675;610756
ERCC3	111.3	100.0	99.4	610651;616390
ERCC4	141.7	100.0	99.9	615272;278760;610965
ERCC5	139.0	100.0	99.6	616570;278780
ERCC6	197.0	100.0	100.0	616946;133540;278800;214150;600630
ERCC6L2	141.4	100.0	99.4	615715
ERCC8	103.0	99.5	95.8	216400;614621
ERF	144.8	99.9	98.5	617180;600775
ERGIC1	216.0	95.2	94.6	208100
ERLIN1	177.6	100.0	100.0	615681
ERLIN2	140.9	100.0	99.9	611225
ERMARD	142.6	99.9	99.0	615544
ESCO2	139.5	98.7	95.2	268300;269000
ESPN	26.9	44.6	35.8	609006;618632
ESR1	136.4	100.0	99.8	114480;615363
ESR2	122.2	100.0	99.7	618187
ESRP1	122.5	99.9	98.9	618013
ESRRB	116.3	99.9	98.0	608565
ETFFA	160.1	100.0	100.0	231680
ETFB	122.5	100.0	99.8	231680
ETFDH	141.8	100.0	99.8	231680
ETHE1	96.2	99.9	97.4	602473
ETV6	185.3	100.0	99.9	601626;616216
EVC	121.9	93.9	88.6	225500;193530
EVC2	135.9	97.7	96.1	225500;193530
EWSR1	79.0	92.3	85.3	612219

EXOC6B	132.0	99.1	97.6	618395
EXOSC2	117.6	100.0	100.0	617763
EXOSC3	125.9	99.5	94.9	614678
EXOSC8	91.0	97.9	91.2	616081
EXOSC9	173.4	99.7	97.2	618065
EXPH5	189.5	100.0	100.0	615028
EXT1	114.3	99.9	98.4	215300;133700
EXT2	145.0	100.0	99.3	133701;616682
EXTL3	199.3	100.0	100.0	617425
EYA1	145.8	99.9	99.7	166780;113650;602588
EYA4	155.3	100.0	99.7	601316;605362
EYS	159.0	99.7	98.2	602772
EZH2	171.4	100.0	99.5	277590
F10	194.4	99.8	99.1	227600
F11	157.7	100.0	100.0	612416
F12	127.6	99.9	98.8	234000;610618
F13A1	144.6	100.0	100.0	613225
F13B	131.0	98.7	93.5	613235
F2	133.6	99.9	97.9	613679;188050
F5	172.8	99.4	98.5	227400;188055
F7	168.7	100.0	100.0	227500
F8	126.1	99.5	98.3	306700
F9	130.9	99.6	97.6	306900;300807
FA2H	96.4	92.0	83.1	612319
FADD	147.2	100.0	100.0	613759
FAH	135.8	100.0	100.0	276700
FAM111A	254.4	99.9	99.3	602361;127000
FAM111B	193.6	100.0	99.9	615704
FAM126A	146.4	100.0	99.4	610532
FAM161A	167.2	100.0	99.7	606068

FAM20A	113.3	99.6	94.7	204690
FAM20C	132.4	100.0	100.0	259775
FAM46A	176.8	100.0	99.7	617952
FAM58A	52.3	83.1	78.5	300707
FAM83H	89.4	99.0	95.0	130900
FAM92A	98.9	90.6	86.0	618219
FAN1	155.8	100.0	99.8	614817
FANCA	124.7	100.0	99.4	227650
FANCB	88.6	98.6	94.1	300514
FANCC	121.7	99.9	99.3	227645
FANCD2	139.2	99.5	97.5	227646
FANCE	134.6	89.8	85.1	600901
FANCF	268.5	100.0	100.0	603467
FANCG	161.0	100.0	99.9	614082
FANCI	166.6	99.9	99.2	609053
FANCL	126.2	100.0	98.6	614083
FANCM	112.9	99.6	97.3	618096;618086
FAR1	84.8	97.6	92.8	616154
FARS2	206.7	100.0	100.0	614946;617046
FARSB	94.2	98.8	94.6	613658
FAS	262.8	100.0	99.6	601859
FASLG	98.0	100.0	99.6	601859
FASTKD2	141.3	99.8	98.9	220110
FAT2	154.4	100.0	99.8	617769
FAT4	227.1	100.0	100.0	616006;615546
FBLN5	121.2	91.8	91.8	608895;219100;614434
FBN1	169.7	100.0	99.9	616914;102370;604308;614185;129600;154700;184900;608328
FBN2	171.3	100.0	99.9	616118;121050
FBP1	108.1	100.0	99.5	229700
FBXL3	236.9	100.0	100.0	606220

FBXL4	200.7	100.0	100.0	615471
FBXO11	101.5	96.9	92.7	618089
FBXO31	112.4	96.0	93.1	615979
FBXO38	188.8	99.9	99.3	615575
FBXO7	206.2	99.8	97.9	260300
FCGR3A	196.4	99.0	97.1	615707
FCGR3B	141.0	99.4	98.2	-
FCN3	143.9	100.0	100.0	613860
FDFT1	147.8	97.7	96.0	618156
FDPS	69.6	99.1	93.5	616631
FDX2	137.1	100.0	100.0	251900
FDXR	126.5	100.0	99.3	617717
FECH	120.3	100.0	100.0	177000
FERMT1	111.8	99.9	97.9	173650
FERMT3	142.1	100.0	100.0	612840
FEZF1	172.6	100.0	99.9	616030
FGA	169.3	99.1	97.2	105200;616004;202400
FGB	165.0	99.8	99.1	616004;202400
FGD1	91.2	97.3	92.8	305400
FGD4	120.6	99.9	99.4	609311
FGF10	155.3	100.0	99.8	180920;149730
FGF12	124.7	99.9	98.1	617166
FGF14	225.7	100.0	100.0	609307
FGF16	134.8	100.0	99.8	309630
FGF17	150.4	100.0	100.0	615270
FGF20	153.8	97.5	87.6	615721
FGF23	130.1	99.6	97.5	617993;193100
FGF3	110.3	99.8	95.1	610706
FGF5	182.1	100.0	100.0	190330
FGF8	127.7	98.2	88.9	612702

FGF9	225.5	100.0	100.0	612961
FGFR1	137.7	100.0	99.9	166250;147950;615465;613001;101600;123150;190440
FGFR2	134.0	97.7	97.1	613659;614592;123500;101200;149730;123790;207410;101400;609579;101600;123150
FGFR3	122.6	99.8	97.7	162900;109800;616482;603956;602849;114500;149730;187600;187601;146000;612247;610474;273300;100800
FGG	175.8	99.7	98.2	616004;202400
FH	147.0	92.1	88.3	150800;606812
FHL1	67.0	99.7	95.8	300696;300280;300717;300718;300695
FIBP	143.5	100.0	100.0	617107
FIG4	190.3	100.0	99.8	612577;216340;612691;611228
FIGLA	96.0	99.7	96.0	612310
FITM2	160.1	100.0	100.0	618635
FKBP10	177.4	98.8	97.2	610968;259450
FKBP14	102.2	100.0	99.9	614557
FKRP	124.4	100.0	100.0	607155;613153;606612
FKTN	128.6	99.7	97.0	611588;613152;611615;253800
FLAD1	190.8	100.0	99.8	255100
FLCN	173.1	100.0	100.0	144700;173600;114500;135150
FLG	171.7	100.0	99.9	146700
FLG2	383.9	100.0	100.0	618084
FLI1	198.2	99.5	98.2	617443
FLNA	138.5	100.0	99.9	311300;300049;300048;309350;305620;304120;314400;300321;300244
FLNB	140.5	99.5	98.8	108720;272460;108721;112310;150250
FLNC	158.4	100.0	99.6	617047;614065;609524
FLRT3	199.1	100.0	100.0	615271
FLT3	136.7	99.9	98.9	601626;613065
FLT4	154.8	99.2	98.3	153100;602089
FLVCR1	153.2	100.0	98.9	609033
FLVCR2	140.7	100.0	100.0	225790
FMN2	106.8	85.5	82.5	616193
FMO3	168.0	99.9	99.7	602079

FMR1	96.0	96.1	92.1	300623;300624;311360
FN1	129.8	100.0	99.3	601894;184255
FOLR1	130.7	100.0	100.0	613068
FOXC1	55.4	98.0	89.6	602482;601631
FOXC2	99.8	100.0	96.7	153400
FOXE1	42.5	96.9	78.5	241850
FOXE3	46.0	82.6	72.0	610256;612968
FOXF1	126.6	99.9	98.8	265380
FOXG1	144.6	88.6	82.1	613454
FOXI1	223.4	100.0	100.0	600791
FOXL2	68.7	99.7	95.5	110100;608996
FOXN1	149.9	100.0	99.6	601705
FOXO1	121.1	99.5	93.9	268220
FOXP1	144.0	100.0	99.8	613670
FOXP2	153.9	99.5	99.2	602081
FOXP3	129.5	99.2	95.5	304790
FOXRED1	136.0	100.0	99.9	618241
FRAS1	140.3	100.0	99.4	219000
FREM1	135.0	99.9	99.1	248450;608980;614485
FREM2	167.6	100.0	99.3	617666;123570
FRMD4A	129.4	90.7	87.3	616819
FRMD7	115.7	99.9	99.1	310700
FRMPD4	122.3	99.8	98.5	300983
FRRS1L	134.6	79.7	69.1	616981
FSCN2	147.5	100.0	100.0	607921
FSHB	115.6	100.0	100.0	229070
FSHR	91.9	99.5	97.2	276400;608115;233300
FSIP2	102.2	99.6	98.2	618153
FTCD	101.3	95.7	91.0	229100
FTH1	78.3	94.0	76.6	615517

FTL	144.1	98.5	89.4	600886;615604;606159
FTO	115.2	83.8	83.7	612938
FTSJ1	132.0	98.0	93.8	309549
FUCA1	132.6	100.0	99.9	230000
FUK	98.1	97.7	95.4	618324
FUS	135.1	99.2	96.4	614782;608030
FUT6	147.5	100.0	100.0	613852
FUT8	150.1	100.0	99.2	618005
FXN	72.3	95.5	80.1	229300
FXYD2	131.5	100.0	100.0	154020
FYB1	120.7	99.4	97.0	273900
FYCO1	124.7	100.0	99.9	610019
FZD2	145.0	99.9	98.2	164745
FZD4	188.5	100.0	100.0	133780
FZD6	212.0	100.0	100.0	614157
G6PC	185.9	100.0	100.0	232200
G6PC3	113.2	100.0	99.9	612541
G6PD	115.6	99.3	98.1	300908
GAA	156.2	100.0	99.9	232300
GAB1	196.0	100.0	99.4	605428
GABBR2	127.4	96.2	92.0	617903;617904
GABRA1	197.0	100.0	100.0	615744
GABRA2	180.5	99.7	98.6	618557
GABRA5	169.2	100.0	99.9	618559
GABRB1	204.2	100.0	100.0	617153
GABRB2	157.0	100.0	99.9	617829
GABRB3	147.9	99.6	98.2	617113
GABRG2	166.9	90.8	90.2	618396;607681
GAD1	141.6	100.0	99.9	603513
GAL	194.1	100.0	99.8	616461

GALC	117.3	99.8	98.3	245200
GALE	149.9	100.0	100.0	230350
GALK1	142.1	100.0	99.1	230200
GALNS	115.7	100.0	99.8	253000
GALNT3	149.7	99.8	99.0	211900
GALT	167.6	100.0	99.7	230400
GAMT	113.1	93.1	82.7	612736
GAN	177.4	100.0	99.6	256850
GANAB	129.4	99.9	99.0	600666
GARS	154.4	99.9	99.1	601472;600794
GAS2L2	172.1	100.0	100.0	618449
GAS8	136.3	99.9	99.3	616726
GATA1	108.4	99.8	98.4	300367;300835;314050;190685
GATA2	119.1	100.0	98.3	614172;614038
GATA3	254.6	100.0	100.0	146255
GATA4	80.9	84.1	74.5	614429;615542;614430;187500;607941
GATA5	57.8	99.7	93.7	617912
GATA6	94.1	89.8	83.0	614474;614475;187500;217095;600001
GATAD1	150.6	99.9	97.9	614672
GATAD2B	120.2	100.0	100.0	615074
GATM	156.2	100.0	100.0	612718
GBA	202.3	100.0	100.0	608013;231005;231000;230900;230800
GBA2	165.1	100.0	99.7	614409
GBE1	200.1	100.0	99.6	263570;232500
GCDH	158.1	100.0	99.2	231670
GCH1	80.7	99.9	95.5	128230;233910
GCK	132.1	100.0	100.0	125853;125851;606176;602485
GCLC	169.3	99.8	98.0	230450
GCM2	153.4	100.0	100.0	617343;146200
GCNT2	180.0	99.5	99.5	116700;110800

GCSH	33.4	75.7	68.9	605899
GDAP1	185.1	99.8	99.3	214400;607706;608340;607831
GDAP2	130.1	100.0	99.2	618369
GDF1	28.8	73.9	54.0	208530;613854
GDF2	149.2	100.0	100.0	615506
GDF3	138.9	100.0	100.0	613702;613703;613704
GDF5	156.1	100.0	100.0	615072;112600;615298;201250;200700;113100;228900;610017
GDF6	116.8	100.0	99.9	615360;613703;118100;613094;617898
GDF9	171.0	100.0	100.0	618014
GDI1	157.7	99.8	98.7	300849
GDNF	204.6	100.0	100.0	209880
GEMIN4	169.0	100.0	99.5	617913
GFAP	104.1	91.8	89.7	203450
GFER	91.5	99.6	93.9	613076
GFI1	88.3	100.0	99.2	613107;607847
GFI1B	171.2	98.5	96.7	187900
GFM1	131.2	99.9	99.4	609060
GFM2	137.5	98.9	95.2	618397
GFPT1	190.8	100.0	99.4	610542
GGCX	119.0	100.0	99.9	277450;610842
GGT1	13.7	19.9	18.4	231950
GH1	176.4	100.0	100.0	262650;262400;612781;173100
GHR	174.1	99.6	99.5	604271;262500
GHRHR	127.5	96.4	96.1	618157
GHSR	160.0	98.5	95.8	615925
GIF	135.1	100.0	99.7	261000
GINS1	140.2	99.3	94.9	617827
GIPC3	122.4	97.5	94.2	601869
GJA1	187.7	100.0	100.0	218400;600309;104100;241550;257850;186100;617525;164200
GJA3	147.7	100.0	99.7	601885

GJA5	229.0	100.0	100.0	108770;614049
GJA8	173.4	100.0	100.0	116200
GJB1	169.1	100.0	100.0	302800
GJB2	135.4	100.0	100.0	220290;124500;149200;148210;602540;148350;601544
GJB3	250.6	100.0	100.0	612644;;220290;133200
GJB4	245.8	100.0	100.0	617524
GJB6	145.5	100.0	100.0	220290;612643;129500;612645
GJC2	37.0	78.2	58.8	613206;613480;608804
GK	56.7	88.9	70.4	307030
GLA	89.6	99.8	96.6	301500
GLB1	89.8	99.9	97.4	230600;230500;230650;253010
GLDC	70.9	89.9	82.0	605899
GLDN	114.0	94.6	91.0	617194
GLE1	103.6	100.0	100.0	611890;253310
GLI1	136.8	100.0	99.8	618123;174400
GLI2	155.7	99.1	97.4	615849;610829
GLI3	142.9	100.0	99.5	146510;175700;174700;174200
GLIS2	136.6	100.0	99.8	611498
GLIS3	138.0	100.0	99.6	610199
GLMN	81.4	99.3	94.7	138000
GLRA1	116.2	100.0	99.8	149400
GLRB	119.9	99.2	95.1	614619
GLRX5	129.2	97.3	89.1	616859;616860
GLS	95.2	96.3	87.2	618412;618339;618328
GLUD1	72.8	94.2	82.9	606762
GLUL	102.9	99.9	98.2	610015
GLYCTK	155.6	98.8	97.3	220120
GM2A	131.5	100.0	100.0	272750
GMNN	147.4	99.8	97.4	616835
GMPPA	169.3	100.0	100.0	615510

GMPPB	245.6	100.0	100.0	615351;615350;615352
GNA11	172.7	99.9	95.0	145981;615361
GNAI2	133.8	100.0	100.0	192605
GNAI3	108.8	99.3	95.2	602483
GNAL	135.5	96.8	93.4	615073
GNAO1	173.0	93.8	93.8	617493;615473
GNAQ	69.6	84.3	74.9	163000;185300
GNAS	206.6	100.0	99.9	103580;219080;166350;612463;612462;174800;617686;603233
GNAS-AS1				603233
GNAT1	161.6	100.0	100.0	610444;616389
GNAT2	119.6	99.9	99.0	613856
GNB1	183.7	100.0	100.0	613065;616973
GNB3	153.9	100.0	100.0	617024
GNB4	194.6	100.0	100.0	615185
GNB5	132.5	100.0	98.8	617173;617182
GNE	132.7	100.0	99.7	269921;605820
GNMT	134.7	100.0	100.0	606664
GNPAT	154.0	99.7	97.3	222765
GNPTAB	167.2	100.0	99.9	252500;252600
GNPTG	156.0	99.1	94.3	252605
GNRH1	100.9	100.0	93.7	614841
GNRHR	156.3	100.0	100.0	146110
GNS	111.6	98.4	94.8	252940
GORAB	188.3	100.0	99.1	231070
GOSR2	149.4	95.9	94.6	614018
GOT1	126.4	100.0	99.3	614419
GP1BA	169.1	98.6	95.9	153670;231200;177820
GP1BB	32.0	72.9	59.6	231200
GP6	149.1	100.0	100.0	614201
GP9	122.0	96.5	89.3	231200

GPAA1	111.5	98.9	95.9	617810
GPC3	90.4	99.1	94.7	194070;312870
GPC4	119.6	100.0	99.6	301026
GPC6	150.0	100.0	100.0	258315
GPD1	107.5	100.0	100.0	614480
GPD1L	143.0	100.0	99.8	611777
GPHN	175.6	100.0	99.5	615501
GPI	163.9	100.0	100.0	613470
GPIHBP1	155.0	100.0	100.0	615947
GPNMB	194.5	100.0	100.0	617920
GPR101	112.8	100.0	100.0	300943
GPR143	65.2	85.8	76.4	300500;300814
GPR179	158.0	100.0	100.0	614565
GPR68	138.4	99.5	96.7	617217
GPR88	78.0	99.4	95.1	616939
GPRASP2	80.4	100.0	99.7	301018
GPSM2	146.8	99.9	99.2	604213
GPT2	136.1	99.2	93.6	616281
GPX4	154.5	90.5	85.8	250220
GRAP	83.7	82.8	78.3	618456
GREB1L	153.1	100.0	99.9	617805
GREM2	145.4	100.0	100.0	617275
GRHL2	139.4	100.0	100.0	608641;618031;616029
GRHL3	156.5	100.0	100.0	606713
GRHPR	108.1	84.2	81.3	260000
GRIA3	101.2	99.7	96.1	300699
GRIA4	153.1	99.8	99.0	617864
GRID2	179.2	100.0	99.8	616204
GRIK2	156.0	96.2	95.4	611092
GRIN1	164.3	100.0	100.0	617820;614254

GRIN2A	161.2	100.0	100.0	245570
GRIN2B	174.2	99.8	99.2	613970;616139
GRIN2D	76.2	79.8	65.4	617162
GRIP1	137.0	100.0	99.7	617667
GRK1	159.5	100.0	100.0	613411
GRM1	170.5	100.0	99.7	617691;614831
GRM6	137.8	90.2	80.6	257270
GRN	166.2	100.0	100.0	614706;607485
GRXCR1	185.8	100.0	99.8	613285
GRXCR2	135.0	100.0	100.0	615837
GSC	103.3	99.2	92.4	602471
GSN	117.2	95.8	93.5	105120
GSS	106.1	100.0	99.9	231900;266130
GSX2	150.3	100.0	100.0	618646
GTF2E2	111.2	100.0	99.8	616943
GTF2H5	104.5	100.0	99.6	616395
GTPBP2	140.5	100.0	99.3	617988
GTPBP3	163.2	100.0	99.8	616198
GUCA1A	177.2	100.0	100.0	602093
GUCA1B	139.5	100.0	100.0	613827
GUCY1A3	188.5	100.0	99.8	615750
GUCY2C	148.0	100.0	99.6	614616;614665
GUCY2D	100.0	99.6	96.2	601777;215500;204000;618555
GUF1	114.9	99.7	97.8	617065
GULOP				-
GUSB	111.3	92.9	91.7	253220
GYG1	151.7	99.9	99.2	613507;616199
GYS1	131.5	100.0	98.6	611556
GYS2	155.0	99.8	99.0	240600
GZF1	179.1	100.0	99.6	617662

H19				180860;130650;194071
H6PD	190.9	99.0	99.0	604931
HAAO	102.2	100.0	99.8	617660
HACE1	171.9	100.0	99.3	616756
HADH	127.1	99.0	97.5	231530;609975
HADHA	87.5	97.1	91.3	609015;609016
HADHB	90.7	98.8	89.7	609015
HAMP	192.7	100.0	100.0	613313
HARS	152.0	100.0	100.0	614504;616625
HARS2	149.6	100.0	100.0	614926
HAVCR2	141.9	100.0	100.0	618398
HAX1	166.6	100.0	100.0	610738
HBA1	103.6	100.0	99.8	613978;617981;604131;140700;617973
HBA2	94.1	98.9	93.1	613978;617981;604131;140700
HBB	150.5	100.0	100.0	603902;603903;617971;617980;140700;613985;141749
HBD	197.7	100.0	100.0	-
HBG1	152.2	97.7	94.9	141749
HBG2	255.0	100.0	100.0	613977;141749
HCCS	110.5	99.8	97.6	309801
HCFC1	97.0	98.3	93.6	309541
HCN1	153.5	100.0	99.7	618482;615871
HCN4	82.4	100.0	99.3	163800;613123
HCRT	80.7	89.8	81.1	161400
HDAC6	120.6	99.5	97.4	300863
HDAC8	130.8	100.0	99.8	300882
HECW2	130.9	100.0	99.1	617268
HELLS	131.6	97.8	92.1	616911
HEPACAM	126.4	86.0	78.9	613925;613926
HEPHL1	128.0	100.0	99.9	261990
HERC1	172.1	100.0	100.0	617011

HERC2	115.2	79.9	77.2	615516
HES7	48.8	84.4	53.9	613686
HESX1	80.5	99.7	97.3	182230
HEXA	108.9	93.8	93.3	272800
HEXB	187.8	99.6	96.9	268800
HFE	127.9	100.0	99.7	235200
HFE2	156.1	100.0	100.0	602390
HFM1	60.8	96.3	89.6	615724
HGD	119.5	100.0	100.0	203500
HGF	168.8	100.0	99.4	608265
HGSNAT	125.5	86.4	86.3	252930;616544
HIBCH	83.8	98.2	88.5	250620
HIKESHI	64.9	98.2	90.4	616881
HINT1	62.4	98.3	89.3	137200
HIST1H1E	101.8	100.0	100.0	617537
HIVEP2	189.8	100.0	100.0	616977
HK1	140.2	100.0	100.0	617460;605285;618547;235700
HLCS	179.3	100.0	100.0	253270
HMBS	103.3	99.9	99.4	176000
HMGB3	46.6	78.6	67.2	300915
HMGCL	129.1	100.0	99.8	246450
HMGCS2	122.6	100.0	99.6	605911
HMOX1	137.4	98.4	89.9	614034
HMX1	22.5	62.4	42.9	612109
HNF1A	171.3	100.0	99.8	142330;612520;144700;600496
HNF1B	133.8	99.3	96.1	125853;137920
HNF4A	143.0	99.9	99.0	616026;125850
HNMT	176.7	100.0	99.8	616739
HNRNPA1	76.3	98.8	90.0	615424;615426
HNRNPA2B1	173.5	99.9	99.4	615422

HNRNPDL	101.3	97.3	88.4	609115
HNRNPH2	145.6	100.0	100.0	300986
HNRNPK	77.1	91.5	82.8	616580
HNRNPU	170.5	99.9	98.9	617391
HOGA1	156.5	100.0	96.4	613616
HOMER2	139.8	99.5	99.4	616707
HOXA1	167.5	100.0	100.0	601536
HOXA11	95.6	97.1	87.5	605432
HOXA13	66.0	77.7	69.0	140000;176305
HOXA2	86.8	100.0	99.9	612290
HOXB1	158.6	100.0	100.0	614744
HOXC13	144.6	100.0	99.9	614931
HOXD10	166.0	100.0	100.0	192950
HOXD13	157.0	99.9	98.6	113300;113200;610713;186000;186300
HPCA	276.9	100.0	100.0	224500
HPD	174.6	100.0	100.0	140350;276710
HPGD	95.5	100.0	98.9	119900;259100
HPRT1	74.2	99.3	91.8	300322;300323
HPS1	123.1	100.0	100.0	203300
HPS3	165.7	99.7	97.5	614072
HPS4	142.1	100.0	100.0	614073
HPS5	142.5	100.0	99.7	614074
HPS6	172.2	97.1	89.0	614075
HPSE2	125.0	100.0	99.9	236730
HR	109.8	98.5	95.6	209500;146550;203655
HRAS	177.9	100.0	100.0	188470;162900;109800;163200;218040;137550
HRG	152.5	95.0	94.2	613116
HS6ST2	149.5	97.6	96.6	301025
HSD11B1	126.6	100.0	99.6	614662
HSD11B2	167.3	86.0	82.7	218030

HSD17B10	109.8	100.0	99.1	300438
HSD17B3	145.3	100.0	100.0	264300
HSD17B4	130.8	96.0	93.7	233400;261515
HSD3B2	151.4	100.0	99.7	201810
HSD3B7	142.9	99.1	95.5	607765
HSF4	131.0	99.6	97.2	116800
HSPA9	97.6	88.5	84.5	182170;616854
HSPB1	55.8	98.8	91.6	606595;608634
HSPB3	275.4	100.0	100.0	613376
HSPB8	187.6	100.0	100.0	608673;158590
HSPD1	91.9	98.8	93.7	612233;605280
HSPG2	122.2	99.2	97.7	255800;224410
HTR1A	159.4	100.0	100.0	614674
HTRA1	101.9	83.9	80.0	600142;616779
HTRA2	138.0	100.0	99.9	617248
HTT	146.0	97.8	96.6	143100;617435
HUWE1	94.5	99.2	95.8	309590
HYAL1	115.0	100.0	100.0	601492
HYDIN	130.9	99.9	99.3	608647
HYLS1	183.5	100.0	100.0	236680
HYOU1	152.9	100.0	99.5	233600
IARS	150.2	100.0	99.6	617093
IARS2	170.4	100.0	99.9	616007
IBA57	117.3	93.7	90.1	616451;615330
ICK	133.5	99.9	98.7	612651
ICOS	184.9	99.9	99.8	607594
IDH2	111.5	99.7	97.4	613657
IDH3B	150.2	95.4	95.4	612572
IDS	110.5	99.9	98.0	309900
IDUA	128.6	93.7	86.8	607015;607014;607016

IER3IP1	102.4	91.9	82.6	614231
IFIH1	137.3	99.7	98.4	615846;182250
IFITM5	86.1	99.3	95.6	610967
IFNAR2	160.2	100.0	99.7	616669
IFNGR1	169.2	100.0	99.4	615978;209950
IFNGR2	164.4	93.3	93.2	614889
IFT122	140.5	100.0	99.6	218330
IFT140	124.5	99.8	98.8	266920;617781
IFT172	107.8	99.9	99.1	616394;615630
IFT27	135.3	100.0	100.0	615996
IFT43	134.3	100.0	100.0	617871;614099;617866
IFT52	148.5	100.0	99.9	617102
IFT57	147.3	99.9	99.1	617927
IFT74	95.2	98.4	93.9	617119
IFT80	78.3	97.6	88.2	611263
IFT81	108.2	93.5	90.1	617895
IGBP1	111.3	99.5	96.2	300472
IGF1	102.5	100.0	99.9	608747
IGF1R	128.7	100.0	99.9	270450
IGF2	119.6	100.0	100.0	616489
IGF2R	133.6	98.9	97.3	114550
IGFALS	83.8	99.9	99.6	615961
IGFBP7	73.4	92.7	87.2	614224
IGHG2	26.2	68.8	49.6	-
IGHM	170.9	100.0	100.0	601495
IGHMBP2	118.2	98.8	95.1	604320;616155
IGKC	127.4	100.0	100.0	614102
IGLL1	91.1	99.9	96.9	613500
IGSF1	88.4	99.5	96.3	300888
IGSF3	101.6	95.4	94.0	149700

IHH	150.3	100.0	100.0	112500;607778
IKBKB	130.7	99.7	96.5	615592;618204
IKBKG	62.9	84.1	77.2	300301;300636;300291;300584;308300;300640
IKZF1	189.4	100.0	100.0	616873
IL10RA	151.8	100.0	100.0	613148
IL10RB	157.2	99.8	98.0	612567
IL11RA	155.5	100.0	99.9	614188
IL12B	118.2	100.0	99.3	614890
IL12RB1	121.8	98.9	96.3	614891
IL17F	88.7	99.9	97.2	613956
IL17RA	129.6	100.0	99.4	613953
IL17RC	121.0	100.0	99.9	616445
IL17RD	145.4	99.9	99.1	615267
IL1RAPL1	126.0	99.8	98.6	300143
IL1RN	154.6	100.0	100.0	612852
IL21	77.0	99.4	95.7	615767
IL21R	145.0	100.0	100.0	615207
IL2RA	122.3	100.0	99.7	606367
IL2RB	117.9	100.0	99.7	618495
IL2RG	71.1	99.8	97.1	312863;300400
IL31RA	141.1	99.9	99.9	613955
IL36RN	104.4	100.0	100.0	614204
IL6ST	112.4	96.4	90.3	618523
IL7R	147.7	100.0	99.8	608971
ILDR1	119.6	99.9	98.5	609646
IMPA1	84.0	97.0	87.0	617323
IMPAD1	157.7	100.0	100.0	614078
IMPDH1	57.5	87.9	80.2	613837;180105
IMPG1	110.6	99.7	98.5	616151
IMPG2	150.2	99.8	98.4	616152;613581

INF2	89.3	86.7	83.8	614455;613237
ING1	142.9	100.0	99.9	275355
INPP5E	107.5	97.1	92.7	610156;213300
INPP5K	109.2	100.0	100.0	617404
INPPL1	131.0	98.4	94.5	258480
INS	62.1	99.9	97.9	613370;125852;606176;616214
INSL3	54.5	80.6	78.3	219050
INSR	138.2	97.8	94.7	246200;609968;262190;610549
INTS1	119.2	99.8	98.5	618571
INTS8	135.0	99.9	98.8	618572
INTU	141.9	99.7	98.1	617925;617926
INVS	163.7	100.0	100.0	602088
IQCB1	113.4	93.9	85.0	609254
IQCE	140.0	99.9	98.8	617642
IQSEC2	72.4	96.8	88.6	309530
IRAK4	116.9	99.8	97.7	607676;610799
IREB2	154.2	100.0	99.8	618451
IRF1	150.4	100.0	100.0	613659;211980
IRF2BP2	79.7	93.9	77.7	617765
IRF2BPL	160.3	99.5	95.0	618088
IRF6	91.7	99.6	95.9	119300;119500
IRF7	126.8	100.0	99.9	616345
IRF8	113.2	99.0	95.7	226990;614893
IRF9	138.5	100.0	100.0	618648
IRS4	147.0	100.0	100.0	301035
IRX5	101.5	99.9	98.2	611174
ISCA1	54.5	94.2	85.9	617613
ISCA2	126.3	100.0	98.8	616370
ISCU	135.3	100.0	100.0	255125
ISG15	150.7	100.0	100.0	616126

ISPD	122.2	98.5	94.8	616052;614643
ITCH	139.3	95.4	95.2	613385
ITGA2B	133.0	99.7	97.8	187800;273800
ITGA3	162.2	99.5	97.4	614748
ITGA6	162.0	99.9	98.9	226730
ITGA7	142.3	99.6	98.0	613204
ITGA8	140.2	99.9	99.7	191830
ITGB2	165.0	100.0	100.0	116920
ITGB3	122.8	100.0	99.4	187800;273800
ITGB4	156.1	98.4	96.2	226730;226650;131800
ITGB6	158.3	97.2	95.8	616221
ITK	126.2	100.0	98.9	613011
ITM2B	155.2	100.0	99.8	117300;616079;176500
ITPA	149.2	100.0	100.0	616647
ITPR1	152.5	100.0	99.9	606658;117360;206700
ITPR2	156.8	99.9	99.3	106190
IVD	101.1	100.0	100.0	243500
IYD	130.5	99.5	95.7	274800
JAG1	147.4	97.7	96.8	617992;187500;118450
JAGN1	124.1	100.0	100.0	616022
JAK2	127.4	98.1	95.8	601626;133100;263300;254450;614521
JAK3	127.9	99.9	98.7	600802
JAM3	149.8	100.0	99.9	613730
JPH1	164.8	100.0	99.9	607831
JPH2	82.5	95.5	80.3	613873
JPH3	159.7	100.0	99.8	606438
JUP	128.4	100.0	99.5	611528;601214
KANK1	140.7	100.0	100.0	612900
KANK2	154.4	100.0	100.0	616099;617783
KANSL1	179.7	99.9	99.2	610443

KARS	133.2	100.0	99.9	613916;613641
KAT6A	176.3	100.0	99.8	616268
KAT6B	172.8	99.9	99.0	603736;606170
KATNB1	136.6	100.0	99.9	616212
KBTBD13	102.9	99.8	95.8	609273
KCNA1	166.8	100.0	99.9	160120
KCNA2	160.9	100.0	99.6	616366
KCNA4	148.6	100.0	100.0	618284
KCNA5	150.1	100.0	98.5	612240
KCNB1	157.0	100.0	99.6	616056
KCNC1	157.1	100.0	100.0	616187
KCNC3	119.6	81.1	69.4	605259
KCND3	170.8	100.0	99.4	616399;607346
KCNE1	438.4	100.0	100.0	612347;613695
KCNE2	165.4	100.0	97.2	611493;613693
KCNE3	166.8	100.0	100.0	613119
KCNH1	173.4	98.7	98.7	135500;611816
KCNH2	109.5	95.8	91.9	609620;613688
KCNJ1	175.9	100.0	100.0	241200
KCNJ10	157.5	89.3	89.0	612780;600791
KCNJ11	177.3	100.0	100.0	610582;606176;616329;601820
KCNJ13	155.0	100.0	100.0	614186;193230
KCNJ2	183.9	100.0	100.0	609622;613980;170390
KCNJ5	182.6	100.0	100.0	613485;613677
KCNJ6	191.5	100.0	100.0	614098
KCNK3	126.0	97.5	95.0	615344
KCNK4	182.7	99.1	97.4	618381
KCNK9	157.3	100.0	100.0	612292
KCNMA1	122.3	94.4	93.6	609446;617643
KCNN3	127.8	100.0	99.7	618658

KCNN4	152.8	100.0	99.4	616689
KCNQ1	139.7	95.5	94.2	609621;192500;607554;220400
KCNQ1OT1				130650
KCNQ2	113.6	91.3	89.8	121200;613720
KCNQ3	123.9	100.0	99.4	121201
KCNQ4	156.2	97.0	95.7	600101
KCNQ5	164.4	97.8	95.5	617601
KCNT1	129.7	96.0	95.2	614959;615005
KCNT2	125.0	99.4	97.1	617771
KCNV2	111.4	100.0	99.9	610356
KCTD1	108.9	100.0	99.7	181270
KCTD17	104.8	100.0	99.0	616398
KCTD7	163.6	95.0	95.0	611726
KDF1	111.2	100.0	99.8	617337
KDM1A	149.4	98.2	95.2	616728
KDM5B	146.4	99.5	97.9	618109
KDM5C	109.2	99.8	97.9	300534
KDM6A	114.8	96.1	88.7	300867
KDM6B	161.3	98.8	97.9	618505
KDR	143.5	100.0	99.8	602089
KDSR	182.9	100.0	99.5	617526
KERA	204.3	100.0	100.0	217300
KHDC3L	180.3	100.0	99.8	614293
KIAA0556	142.8	100.0	99.9	616784
KIAA0586	143.8	97.3	93.1	616490;616546
KIAA0753	148.6	100.0	99.3	617127
KIAA0825	130.4	99.4	97.7	618498
KIAA1109	170.5	99.8	99.2	617822
KIAA1161	188.1	100.0	100.0	618317
KIAA1549	133.5	97.9	96.4	618613

KIDINS220	167.4	100.0	100.0	617296
KIF11	105.2	97.6	94.8	152950
KIF14	143.1	99.6	97.7	617914;616258
KIF1A	117.9	99.4	97.1	614255;614213;610357
KIF1B	167.4	100.0	99.6	171300;118210
KIF1BP	176.1	96.1	96.1	609460
KIF1C	157.4	100.0	100.0	611302
KIF21A	147.7	99.9	99.3	135700
KIF22	188.3	100.0	100.0	603546
KIF2A	121.1	99.6	95.6	615411
KIF4A	94.1	99.4	95.7	300923
KIF5A	141.4	100.0	99.9	604187;617235
KIF5C	123.5	99.9	98.8	615282
KIF7	100.0	93.6	90.6	607131;200990;614120
KISS1	62.5	100.0	98.3	614842
KISS1R	109.4	100.0	99.5	614837;176400
KIT	163.2	100.0	99.6	172800;601626;273300;154800;606764
KITLG	101.9	100.0	98.5	616697;145250
KIZ	170.2	100.0	99.2	615780
KL	169.3	98.2	97.2	617994
KLC2	129.2	99.2	97.9	609541
KLF1	87.9	100.0	97.8	613673;111150
KLF11	202.6	100.0	99.4	610508
KLF6	154.4	100.0	100.0	613659;176807
KLHL10	170.8	100.0	100.0	615081
KLHL15	173.9	100.0	99.7	300982
KLHL24	204.2	100.0	100.0	617294
KLHL3	131.0	100.0	99.3	614495
KLHL40	134.3	100.0	100.0	615348
KLHL41	218.5	100.0	99.9	615731

KLHL7	137.3	99.9	99.8	617055;612943
KLK4	182.0	100.0	100.0	204700
KLKB1	157.5	100.0	99.5	612423
KLLN	122.3	100.0	100.0	615107
KMT2A	154.8	100.0	99.9	605130
KMT2B	146.9	95.8	94.0	617284
KMT2C	167.6	92.2	91.0	617768
KMT2D	142.1	100.0	99.4	147920
KMT2E	189.3	99.8	98.5	618512
KMT5B	201.9	99.9	99.1	617788
KNL1	121.0	99.2	98.1	604321
KPTN	143.1	100.0	100.0	615637
KRAS	84.3	99.5	96.9	601626;109800;260350;614470;211980;137215;615278;108010;163200;114480;609942;600268
KREMEN1	162.3	97.7	94.4	617392
KRIT1	119.1	100.0	99.3	116860
KRT1	110.4	98.7	95.6	113800;144200;607602;146590;607654;600962
KRT10	129.9	100.0	99.3	113800;609165;607602
KRT12	167.0	99.7	97.8	122100
KRT13	147.6	100.0	100.0	615785
KRT14	46.0	89.0	81.9	131760;161000;131900;131800;125595;601001
KRT16	36.5	74.2	56.5	167200;613000
KRT17	16.6	39.8	22.8	184500;167210
KRT18	38.8	86.7	70.9	215600
KRT2	139.0	100.0	99.8	146800
KRT25	149.4	100.0	100.0	616760
KRT3	129.0	100.0	100.0	122100
KRT4	150.6	100.0	99.7	193900
KRT5	130.9	100.0	100.0	131760;609352;131960;131900;131800;601001;179850
KRT6A	132.5	92.3	87.7	615726
KRT6B	121.3	93.6	88.6	615728

KRT6C	115.5	88.3	81.3	615735
KRT71	139.8	100.0	100.0	615896
KRT74	153.1	100.0	100.0	614929;613981;194300
KRT8	38.9	90.6	69.6	215600
KRT81	87.2	99.2	94.2	158000
KRT83	61.2	96.6	84.4	617756;158000
KRT85	90.0	99.0	93.6	602032
KRT86	76.2	99.7	96.3	158000
KRT9	60.5	99.2	95.0	144200
KY	113.2	100.0	99.7	617114
KYNU	131.5	99.6	97.1	617661;236800
L1CAM	134.8	99.9	99.1	307000;304100;303350
L2HGDH	145.2	99.0	97.2	236792
LAGE3	64.5	95.9	85.1	301006
LAMA1	142.0	100.0	99.7	615960
LAMA2	155.8	100.0	99.6	607855;618138
LAMA3	147.3	100.0	99.7	226650;245660;226700
LAMA4	146.1	100.0	99.9	615235
LAMB1	171.8	100.0	99.9	615191
LAMB2	171.7	100.0	99.7	609049;614199
LAMB3	124.1	100.0	99.6	104530;226650;226700
LAMC2	114.1	99.8	98.0	226650;226700
LAMC3	151.4	98.6	97.1	614115
LAMP2	108.9	99.2	95.6	300257
LAMTOR2	189.2	100.0	99.7	610798
LARGE1	129.6	100.0	99.6	608840;613154
LARP7	78.1	88.5	78.4	615071
LARS	164.6	99.8	98.4	615438
LARS2	143.2	100.0	100.0	617021;615300
LAS1L	93.0	99.7	97.3	309585

LAT	120.5	100.0	99.2	617514
LBR	127.8	99.4	94.5	169400;613471;618019;215140
LCA5	162.9	99.9	99.2	604537
LCAT	117.2	99.0	93.8	245900;136120
LCK	166.5	98.9	96.6	615758
LCT	134.2	99.8	98.5	223000
LDB3	149.7	95.4	94.7	601493;609452
LDHA	79.1	95.0	91.7	612933
LDHD	134.4	100.0	99.5	245450
LDLR	179.3	100.0	99.3	143890
LDLRAP1	153.1	98.8	94.2	603813
LEF1	127.8	100.0	100.0	-
LEMD2	89.6	98.7	92.0	212500
LEMD3	147.6	99.9	98.7	166700
LEP	198.4	99.9	97.3	614962
LEPR	128.3	94.3	92.6	614963
LFNG	107.3	87.9	86.4	609813
LGI1	170.5	98.5	97.5	600512
LGI4	93.7	99.9	97.9	617468
LHB	21.0	90.4	38.9	228300
LHCGR	142.3	94.1	92.3	238320;176410
LHFPL5	253.3	100.0	100.0	610265
LHX3	86.2	96.6	96.5	221750
LHX4	153.9	100.0	100.0	262700
LIAS	151.6	100.0	99.1	614462
LIFR	136.7	99.7	98.0	601559
LIG4	222.9	100.0	99.9	606593
LIM2	120.6	100.0	100.0	615277
LIMS2	118.6	93.0	92.7	616827
LINGO1	167.5	100.0	100.0	618103

LINS1	139.8	100.0	99.1	614340
LIPA	131.2	99.2	95.2	278000
LIPC	115.4	100.0	99.4	614025
LIPE	128.5	100.0	99.0	615980
LIPH	147.2	100.0	99.8	604379
LIPN	136.0	100.0	98.9	613943
LIPT1	227.5	100.0	99.9	616299
LIPT2	70.0	94.9	75.2	617668
LITAF	130.2	98.2	92.7	601098
LMAN1	166.8	99.8	99.2	227300
LMAN2L	139.2	100.0	99.7	616887
LMBR1	137.1	98.1	96.2	186200;135750;174500;200500;188740
LMBRD1	119.2	98.5	93.9	277380
LMF1	139.9	100.0	99.6	246650
LMNA	97.4	97.4	91.9	176670;275210;212112;115200;610140;605588;151660;181350;616516;613205;248370
LMNB1	116.4	99.9	98.9	169500
LMNB2	125.7	97.5	94.3	616540
LMOD3	159.8	100.0	99.7	616165
LMX1B	146.2	99.6	96.3	161200
LNPK	103.6	98.4	92.8	618090
LONP1	141.9	100.0	99.8	600373
LOR	29.1	99.0	80.8	604117
LOX	136.4	100.0	99.6	617168
LOXHD1	131.1	100.0	99.7	613079
LPAR6	106.9	99.6	97.8	278150
LPIN1	147.0	99.6	97.3	268200
LPIN2	119.0	100.0	100.0	609628
LPL	154.1	100.0	100.0	238600;144250
LPP	126.6	100.0	100.0	601626
LRAT	283.9	100.0	100.0	613341

LRBA	154.3	99.9	99.6	614700
LRIG2	147.5	99.6	98.8	615112
LRIT3	116.1	93.9	91.9	615058
LRMDA	143.3	96.8	95.6	615179
LRP1	182.5	99.7	98.9	604093
LRP12	208.6	100.0	99.8	164310
LRP2	171.0	100.0	99.9	222448
LRP4	143.1	99.1	98.8	212780;616304;614305
LRP5	179.9	98.5	98.1	601813;144750;617875;607634;259770;607636
LRP6	171.7	100.0	99.9	616724
LRPAP1	121.2	100.0	100.0	615431
LRPPRC	151.5	99.9	99.1	220111
LRRC56	126.9	100.0	99.0	618254
LRRC6	181.6	99.2	96.3	614935
LRRC8A	247.1	100.0	99.8	613506
LRSAM1	139.4	100.0	99.9	614436
LRTOMT	138.3	99.3	94.2	611451
LSS	138.4	100.0	99.9	618275;616509
LTBP2	112.8	99.9	99.0	251750;613086;614819
LTBP3	132.5	99.6	98.1	601216;617809
LTBP4	141.2	99.9	97.5	613177
LYRM4	107.2	68.5	66.2	615595
LYRM7	76.8	95.9	86.2	615838
LYST	169.3	99.6	98.3	214500
LYZ	163.5	100.0	100.0	105200
LZTFL1	132.0	99.9	99.2	615994
LZTR1	136.8	100.0	99.9	605275;616564
LZTS1	129.4	100.0	99.8	133239
MAB21L1	192.1	100.0	100.0	618479
MAB21L2	181.5	100.0	100.0	615877

MACF1	143.6	100.0	99.6	618325
MAD1L1	112.3	100.0	97.6	176807
MAD2L2	151.7	100.0	99.9	617243
MAF	79.2	83.5	78.0	610202;601088
MAFA	38.2	93.6	71.5	147630
MAFB	83.5	100.0	99.4	617041;166300
MAG	161.0	100.0	100.0	616680
MAGED2	81.7	99.8	97.7	300971
MAGEL2	115.9	93.0	87.2	615547
MAGI2	111.9	94.5	92.4	617609
MAGT1	124.5	98.5	96.5	300853;301031
MAK	174.4	98.7	96.8	614181
MALT1	154.0	91.2	89.4	615468
MAML2	123.6	100.0	99.6	-
MAMLD1	125.4	99.8	98.2	300758
MAN1B1	129.3	100.0	99.7	614202
MAN2B1	142.3	99.8	97.9	248500
MANBA	146.4	99.8	98.4	248510
MAOA	119.7	100.0	99.7	300615
MAP2K1	111.1	99.8	97.1	615279
MAP2K2	123.0	98.5	95.1	615280
MAP3K1	162.9	96.1	91.6	613762
MAP3K20	132.4	100.0	99.5	616890;617760
MAP3K7	144.4	100.0	99.6	157800;617137
MAP3K8	168.5	100.0	99.9	211980
MAPK8IP3	163.6	100.0	99.6	618443
MAPKAPK3	97.0	100.0	99.6	617111
MAPKBP1	142.5	100.0	100.0	617271
MAPRE2	184.9	100.0	99.3	616734
MAPT	166.5	100.0	99.5	260540;172700;600274;601104

MARCH6	139.5	99.9	98.4	613608
MARK3	150.2	99.9	98.8	618283
MARS	114.4	99.7	97.4	615486;616280
MARS2	170.6	100.0	100.0	616430;611390
MARVELD2	186.4	99.2	96.1	610153
MASP1	146.6	100.0	99.9	257920
MASP2	137.2	100.0	99.6	613791
MAST1	155.4	100.0	99.5	618273
MAT1A	158.1	99.7	97.7	250850
MATN3	112.2	84.7	84.6	607078;608728
MATR3	100.4	97.0	93.4	606070
MBD5	170.1	99.9	99.9	156200
MBOAT7	108.6	100.0	99.5	617188
MBTPS1	140.9	99.6	98.4	618392
MBTPS2	133.0	100.0	99.0	308800;308205;301014;300918
MC2R	183.7	99.9	98.3	202200
MC4R	225.6	100.0	100.0	618406
MCC	127.2	100.0	99.7	114500
MCCC1	175.5	100.0	99.8	210200
MCCC2	140.4	99.9	98.4	210210
MCEE	155.7	100.0	100.0	251120
MCFD2	85.7	99.5	96.9	613625
MCM2	158.8	100.0	100.0	616968
MCM3AP	149.9	99.9	99.1	618124
MCM4	147.5	100.0	99.5	609981
MCM5	125.8	100.0	99.7	617564
MCM6	158.8	100.0	100.0	223100
MCM8	136.8	100.0	99.6	612885
MCM9	153.0	99.9	99.8	616185
MCOLN1	159.0	99.8	98.4	252650

MCPH1	149.5	100.0	99.4	251200
MDH2	116.9	98.0	97.9	617339
MECOM	157.3	100.0	99.9	616738
MECP2	149.7	100.0	98.7	300260;300673;300055;312750
MECR	115.4	100.0	98.9	617282
MED12	101.2	99.8	96.7	309520;300895;305450
MED13L	136.8	100.0	99.8	608808;616789
MED17	147.7	96.3	93.5	613668
MED23	162.0	100.0	99.7	614249
MED25	143.3	100.0	99.8	605589;616449
MEF2C	163.5	99.9	96.0	613443
MEFV	141.6	99.9	98.6	249100;134610
MEGF10	147.8	100.0	100.0	614399
MEGF8	138.3	99.9	99.0	614976
MEI1	114.9	100.0	99.3	618431
MEIOB	115.4	100.0	98.6	617706
MEIS2	149.4	100.0	100.0	600987
MEN1	141.0	99.9	99.1	131100
MEOX1	113.3	100.0	98.9	214300
MERTK	159.6	99.5	98.8	613862
MESD	129.7	100.0	99.9	618644
MESP2	89.7	93.9	86.9	608681
MET	178.5	100.0	99.5	616705;605074;114550
METTLL13	122.1	99.9	99.3	605429
METTLL23	138.7	100.0	100.0	615942
MFAP5	133.5	99.9	97.6	616166
MFF	101.3	94.3	89.9	617086
MFN2	138.2	100.0	99.9	617087;601152;609260
MFRP	139.4	100.0	100.0	611040;609549
MFSD2A	140.6	99.7	98.5	616486

MFSD8	143.3	100.0	99.7	616170;610951
MGAT2	156.4	100.0	100.0	212066
MGME1	183.0	100.0	100.0	615084
MGP	159.6	98.7	95.1	245150
MIB1	143.3	100.0	99.9	615092
MICU1	126.1	98.9	95.2	615673
MID1	159.2	99.8	98.7	300000
MID2	121.2	99.8	98.7	300928
MIP	114.2	100.0	98.9	615274
MIPEP	118.5	99.2	96.5	617228
MIR140				618618
MIR17HG				614326
MIR184				614303
MIR204				616722
MIR96				613074
MITF	160.6	100.0	99.9	103470;193510;103500;617306
MKKS	193.6	83.2	83.2	605231;236700
MKL1	114.8	98.5	97.2	-
MKRN3	149.4	100.0	100.0	615346
MKS1	104.7	99.8	97.9	249000;617121;615990
MLC1	103.0	100.0	99.0	604004
MLH1	166.0	100.0	99.9	276300;609310;158320
MLH3	168.4	100.0	100.0	614385;114500
MLLT10	151.3	96.8	95.5	601626
MLPH	106.3	100.0	98.8	609227
MLYCD	92.6	96.0	90.4	248360
MMAA	210.3	100.0	100.0	251100
MMAB	110.4	100.0	99.6	251110
MMACHC	227.1	100.0	100.0	277400
MMADHC	101.0	94.4	83.5	277410

MME	138.2	99.8	98.7	617018;617017
MMP1	168.5	100.0	98.9	606963
MMP13	139.3	95.2	92.2	250400;602111
MMP14	179.2	100.0	98.9	277950
MMP19	142.1	100.0	99.5	611543
MMP2	162.5	100.0	100.0	259600
MMP20	118.4	100.0	100.0	612529
MMP21	110.1	99.9	98.8	616749
MMP9	147.7	99.1	96.1	613073
MN1	108.4	100.0	99.3	607174
MNX1	41.2	68.2	58.3	176450
MOCOS	178.8	99.8	97.7	603592
MOCS1	94.4	99.2	95.4	252150
MOCS2	166.1	99.6	99.5	252160
MOG	101.3	100.0	99.5	614250
MOGS	146.7	100.0	99.9	606056
MORC2	141.7	100.0	99.8	616688
MPC1	164.8	100.0	99.6	614741
MPDU1	112.0	100.0	100.0	609180
MPDZ	159.6	99.8	98.8	615219
MPI	123.7	100.0	99.9	602579
MPIG6B	144.5	100.0	100.0	617441
MPL	140.2	100.0	99.5	601977;254450;604498
MPLKIP	106.4	100.0	99.4	234050
MPO	163.5	100.0	99.9	254600
MPV17	97.4	100.0	97.2	256810;618400
MPZ	139.2	100.0	100.0	118200;607791;618184;145900;180800;607677;607736
MPZL2	113.0	100.0	99.9	618145
MRAP	180.8	100.0	100.0	607398
MRAS	110.8	100.0	99.6	618499

MRE11	64.1	98.9	93.3	604391
MRM2	134.7	100.0	99.5	618567
MRPL3	76.1	93.2	87.2	614582
MRPL44	140.0	99.9	98.7	615395
MRPS14	208.4	100.0	100.0	618378
MRPS16	151.3	100.0	99.6	610498
MRPS2	167.5	99.6	96.9	617950
MRPS22	153.4	99.8	99.1	611719;618117
MRPS34	133.8	97.6	92.0	617664
MRPS7	167.3	100.0	100.0	617872
MS4A1	140.8	99.8	98.8	613495
MSH2	142.5	99.8	97.7	276300;120435;158320
MSH3	163.2	100.0	99.2	617100;608089
MSH5	113.7	100.0	100.0	617442
MSH6	179.9	100.0	99.8	276300;614350
MSL3	89.7	97.0	88.3	301032
MSMO1	57.0	96.3	88.9	616834
MSN	80.9	99.0	95.7	300988
MSR1	175.9	99.9	99.5	614266
MSRB3	151.5	100.0	99.4	613718
MSTN	203.2	100.0	100.0	614160
MSTO1	119.3	99.6	96.7	617675
MSX1	96.5	96.9	89.3	608874;106600;189500
MSX2	90.4	100.0	99.4	168500;604757;168550
MTAP	108.3	99.1	93.5	112250
MTFMT	165.4	100.0	99.8	614947;618248
MTHFD1	137.6	100.0	99.5	617780
MTHFR	117.2	97.3	96.0	236250
MTHFS	103.3	75.0	74.9	618367
MTM1	95.6	99.0	93.3	310400

MTMR2	120.1	100.0	99.0	601382
MTO1	165.3	91.3	90.4	614702
MTOR	131.9	100.0	99.5	607341;616638
MTPAP	151.0	99.5	96.1	613672
MTR	163.3	100.0	100.0	250940
MTRR	156.8	100.0	99.6	236270
MTTP	134.7	100.0	99.6	200100
MUC1	70.6	92.4	83.6	174000
MUSK	155.4	100.0	99.9	208150;616325
MUT	166.1	99.8	98.3	251000
MUTYH	154.3	100.0	100.0	613659;608456;132600
MVD	122.1	99.9	98.3	614714
MVK	120.8	90.9	90.5	610377;175900;260920
MXI1	129.1	98.6	95.3	176807
MYBPC1	151.6	99.9	99.5	614915;618524;614335
MYBPC3	147.5	99.9	97.6	115197;615396
MYC	154.1	65.9	64.4	113970
MYCN	140.2	100.0	99.9	164280
MYD88	179.6	100.0	100.0	153600;612260
MYF5	167.7	100.0	100.0	618155
MYH11	138.0	100.0	100.0	132900
MYH14	114.1	98.4	94.0	614369;600652
MYH2	130.0	99.9	99.4	605637
MYH3	113.3	99.9	99.0	178110;193700;618469;618436
MYH6	108.4	99.4	97.1	613251;613252;614089
MYH7	103.2	99.6	97.3	613426;192600;160500;608358;181430;255160
MYH8	136.9	100.0	99.6	608837;158300
MYH9	134.9	100.0	99.3	155100;603622
MYL1	121.8	100.0	99.7	618414
MYL2	159.6	100.0	99.8	608758

MYL3	100.4	100.0	100.0	608751
MYL4	153.9	100.0	100.0	617280
MYLK	145.9	100.0	99.9	249210;613780
MYLK2	141.9	100.0	100.0	192600
MYMK	141.0	100.0	100.0	254940
MYO15A	141.6	98.8	97.0	600316
MYO18B	132.6	100.0	99.1	616549
MYO1E	155.1	99.9	99.5	614131
MYO3A	126.0	99.6	96.6	607101
MYO5A	136.2	99.8	98.9	214450
MYO5B	125.2	99.1	96.2	251850
MYO6	115.6	99.5	96.6	607821;606346
MYO7A	137.0	99.3	97.4	601317;600060;276900
MYO9A	168.8	99.9	99.1	618198
MYOC	161.9	100.0	98.6	137750
MYOT	174.8	100.0	99.6	182920;609200
MYOZ2	189.8	100.0	100.0	613838
MYPN	157.0	100.0	99.7	617336;615248
MYRF	146.9	99.3	98.5	618113;618280
MYSM1	135.3	100.0	99.1	618116
MYT1L	158.9	99.8	99.0	616521
NAA10	116.8	99.7	98.5	300855;309800
NAA15	105.4	95.8	91.0	617787
NACC1	153.1	100.0	99.8	617393
NADK2	199.4	99.9	97.2	616034
NAGA	152.2	100.0	100.0	609241;609242
NAGLU	118.0	92.9	89.9	616491;252920
NAGS	85.0	99.7	95.0	237310
NALCN	138.9	100.0	99.5	615419;616266
NANOS1	65.2	99.6	95.1	615413

NANS	114.3	100.0	99.9	610442
NARS2	145.9	98.3	97.4	618434;616239
NAT8L	82.1	99.5	94.2	614063
NAXD	142.8	100.0	100.0	618321
NAXE	85.1	100.0	99.8	617186
NBAS	169.2	100.0	99.6	616483;614800
NBEAL2	166.7	99.4	99.3	139090
NBN	109.6	99.9	98.6	609135;613065;251260
NCAPD2	137.5	100.0	99.7	617983
NCAPD3	122.4	99.9	98.9	617984
NCAPG2	149.4	99.9	99.2	618460
NCAPH	146.8	100.0	100.0	617985
NCF1	25.8	26.0	25.8	233700
NCF2	145.7	99.9	98.3	233710
NCF4	168.1	100.0	100.0	613960
NCSTN	106.7	100.0	99.8	142690
NDE1	107.6	100.0	100.0	605013;614019
NDN	96.6	98.7	89.1	176270
NDP	89.0	100.0	99.7	310600;305390
NDRG1	133.0	100.0	100.0	601455
NDST1	190.5	100.0	100.0	616116
NDUFA1	196.4	99.9	99.3	301020
NDUFA10	145.3	99.8	98.6	618243
NDUFA11	117.9	100.0	100.0	618236
NDUFA12	198.9	100.0	100.0	618244
NDUFA13	122.5	92.2	89.2	618249
NDUFA2	127.1	100.0	100.0	618235
NDUFA6	206.0	100.0	100.0	618253
NDUFA9	115.5	99.9	96.5	618247
NDUFAF1	135.8	100.0	100.0	618234

NDUFAF2	63.6	95.0	83.4	618233
NDUFAF3	129.2	100.0	99.9	618240
NDUFAF4	141.6	99.8	98.2	618237
NDUFAF5	139.0	100.0	99.5	618238
NDUFAF6	106.2	100.0	96.8	618239
NDUFB11	108.7	99.5	96.5	300952;301021
NDUFB3	34.6	95.8	80.5	618246
NDUFB8	114.9	100.0	99.9	618252
NDUFB9	120.3	98.4	95.5	618245
NDUFS1	178.7	100.0	99.5	618226
NDUFS2	118.5	100.0	100.0	618228
NDUFS3	141.3	90.7	90.6	618230
NDUFS4	190.8	100.0	99.4	252010
NDUFS6	138.2	100.0	99.9	618232
NDUFS7	125.4	100.0	99.2	618224
NDUFS8	134.0	100.0	99.4	618222
NDUFV1	158.4	98.0	96.1	618225
NDUFV2	84.9	86.9	76.9	618229
NEB	125.5	83.0	82.6	256030
NECAP1	124.2	100.0	100.0	615833
NECTIN1	135.3	100.0	99.9	225060
NECTIN4	130.4	100.0	100.0	613573
NEDD4L	116.7	72.0	71.5	617201
NEFH	108.0	93.4	84.5	616924;105400
NEFL	153.5	99.9	98.2	617882;607684;607734
NEK1	141.3	99.8	98.0	263520
NEK2	96.6	99.7	95.5	615565
NEK8	158.1	100.0	99.9	613824;615415
NEK9	131.3	100.0	99.6	617022;614262;617025
NEU1	146.4	99.7	97.7	256550

NEUROD1	152.8	100.0	99.1	606394
NEUROD2	98.0	100.0	99.9	618374
NEUROG3	128.8	100.0	100.0	610370
NEXMIF	153.1	100.0	99.5	300912
NEXN	85.0	92.0	77.5	613122;613876
NF1	131.8	92.6	90.2	193520;607785;162200;162210;601321
NF2	119.7	100.0	99.9	607174;162091;101000
NFASC	139.4	100.0	99.9	618356
NFE2L2	199.9	100.0	99.9	617744
NFIA	190.3	100.0	99.6	613735
NFIB	132.1	97.4	96.5	618286
NFIX	177.4	100.0	99.5	614753;602535
NFKB1	113.7	100.0	99.4	616576
NFKB2	134.6	98.8	95.6	615577
NFKBIA	132.6	95.2	88.0	612132
NFU1	72.1	98.8	90.8	605711
NGF	224.8	100.0	100.0	608654
NGLY1	166.1	100.0	99.8	615273
NHEJ1	65.6	100.0	96.2	611291
NHLRC1	150.9	100.0	98.7	254780
NHLRC2	134.2	99.6	98.2	618278
NHP2	146.1	100.0	100.0	613987
NHS	128.1	95.4	93.9	302350;302200
NIN	156.6	100.0	99.5	614851
NIPA1	191.5	100.0	100.0	600363
NIPAL4	141.2	100.0	99.1	612281
NIPBL	142.8	98.9	97.0	122470
NKX2-1	57.4	98.6	85.6	118700;610978
NKX2-5	86.7	100.0	99.7	225250;187500;614432;217095;108900;614435
NKX2-6	128.9	100.0	99.5	217095

NKX3-2	99.1	99.8	97.0	613330
NKX6-2	81.3	89.0	81.8	617560
NLGN4X	159.3	99.9	98.9	300495
NLRC4	191.9	100.0	100.0	616050;616115
NLRP1	131.6	99.6	98.0	617388;615225
NLRP12	176.9	100.0	99.9	611762
NLRP3	153.5	100.0	99.9	617772;120100;191900;148200;607115
NLRP7	128.2	100.0	99.6	231090
NME8	120.6	99.2	95.3	610852
NMNAT1	131.6	100.0	99.2	608553
NNT	149.8	100.0	99.4	614736
NOBOX	106.1	99.9	98.4	611548
NOD2	126.1	100.0	99.9	186580
NODAL	167.9	100.0	100.0	270100
NOG	175.6	100.0	100.0	185800;611377;186570;184460;186500
NOL3	87.7	93.7	84.2	614937
NONO	97.5	100.0	98.4	300967
NOP10	147.4	100.0	99.8	224230
NOP56	137.8	99.8	98.6	614153
NOTCH1	121.7	99.2	97.2	109730;616028
NOTCH2	146.6	100.0	99.5	102500;610205
NOTCH3	97.6	94.0	90.2	615293;130720;125310
NPC1	136.4	99.6	98.7	257220
NPC2	160.5	100.0	99.6	607625
NPHP1	152.0	100.0	99.0	266900;609583;256100
NPHP3	143.4	99.7	98.4	208540;267010;604387
NPHP4	137.8	100.0	99.8	606996;606966
NPHS1	117.2	99.8	99.1	256300
NPHS2	115.0	100.0	99.5	600995
NPM1	90.1	98.2	85.3	601626

NPPA	192.4	100.0	100.0	612201;615745
NPR2	157.3	100.0	99.6	615923;616255;602875
NPRL2	157.9	100.0	100.0	617116
NPRL3	131.1	100.0	99.6	617118
NR0B1	132.2	100.0	99.5	300018;300200
NR0B2	114.7	100.0	99.3	601665
NR1H4	147.9	99.8	98.5	617049
NR2E3	103.9	100.0	99.6	611131;268100
NR2F1	182.5	100.0	100.0	615722
NR2F2	221.5	100.0	98.5	615779
NR3C1	164.1	100.0	99.9	615962
NR3C2	156.4	100.0	99.7	177735;605115
NR4A3	123.3	99.9	98.0	612237
NR5A1	84.4	100.0	100.0	617480;613957;612965;612964
NRAS	185.6	100.0	100.0	188470;162900;614470;249400;114500;163200;613224;137550
NRIP1	222.0	100.0	100.0	618270
NRL	93.0	99.5	94.8	613750
NRXN1	161.3	97.4	96.9	614325
NSD1	175.3	100.0	99.9	117550
NSDHL	148.1	100.0	98.7	300831;308050
NSMCE2	93.9	99.7	98.2	617253
NSMCE3	213.0	100.0	100.0	617241
NSMF	105.0	96.1	95.6	614838
NSUN2	118.3	96.0	95.1	611091
NT5C2	148.0	98.0	96.5	613162
NT5C3A	80.6	97.9	88.3	266120
NT5E	165.5	100.0	99.9	211800
NTF4	142.3	99.6	93.0	613100
NTHL1	111.0	100.0	99.8	616415
NTN1	157.7	100.0	99.7	618264

NTRK1	138.9	99.8	98.2	256800;155240
NTRK2	166.6	100.0	99.9	617830;613886
NUBPL	111.9	99.7	98.4	618242
NUMA1	125.9	100.0	99.8	612376
NUP107	156.3	99.8	98.5	618078;618348;616730
NUP133	145.0	99.7	98.3	618177;618349
NUP155	141.0	99.2	97.4	615770
NUP160	163.0	100.0	99.9	618178
NUP205	161.3	99.9	99.4	616893
NUP214	179.6	100.0	99.7	601626;613065
NUP37	201.4	100.0	100.0	618179
NUP62	116.6	100.0	100.0	271930
NUP85	141.1	100.0	100.0	618176
NUP88	162.2	100.0	100.0	618393
NUP93	137.0	98.0	94.2	616892
NUS1	62.4	60.0	44.5	617831;617082
NUTM2B-AS1				618637
NXN	123.8	100.0	100.0	618529
NYX	95.7	96.3	94.1	310500
OAT	87.0	85.2	76.3	258870
OBSL1	149.3	100.0	99.3	612921
OCA2	128.6	99.9	98.7	203200
OCLN	204.3	100.0	100.0	251290
OCRL	127.1	99.9	98.6	300555;309000
OFD1	61.2	88.0	73.7	300424;300209;300804;311200
OGG1	133.1	100.0	99.8	144700
OGT	134.5	99.9	99.0	300997
OPA1	153.3	99.7	97.6	210000;165500;616896;125250
OPA3	124.4	100.0	99.0	258501;165300
OPCML	157.6	99.6	99.6	167000

OPHN1	104.2	99.5	97.6	300486
OPLAH	136.3	100.0	99.8	260005
OPN1LW	77.1	67.2	60.6	303900;303700
OPN1MW	68.2	66.3	58.5	303800;303700
OPN1SW	112.2	100.0	100.0	190900
OPTN	119.9	100.0	99.9	137760;613435
ORA11	185.5	95.8	92.8	612782;615883
ORC1	110.6	100.0	99.4	224690
ORC4	88.1	98.7	93.6	613800
ORC6	128.0	100.0	99.9	613803
OSBPL2	154.4	100.0	100.0	616340
OSGEP	107.3	100.0	99.4	617729
OSMR	155.1	100.0	99.7	105250
OSTM1	95.7	98.6	94.0	259720
OTC	134.9	100.0	100.0	311250
OTOA	116.2	99.4	97.6	607039
OTOF	145.9	100.0	99.9	601071
OTOG	138.9	99.4	98.6	614945
OTOGL	127.5	99.5	97.4	614944
OTUD6B	122.6	99.9	98.8	617452
OTULIN	148.9	92.6	86.5	617099
OTX2	152.3	100.0	99.7	610125;613986
OVOL2	111.0	95.7	89.5	122000
OXCT1	154.2	99.8	98.1	245050
P2RX2	186.6	100.0	100.0	608224
P2RY12	243.0	100.0	100.0	609821
P3H1	137.2	100.0	100.0	610915
P3H2	110.8	99.8	98.0	614292
P4HA2	138.5	100.0	99.2	617238
P4HB	119.0	94.6	94.0	112240

P4HTM	155.2	99.0	97.4	618493
PABPN1	91.8	66.3	56.9	164300
PACS1	116.2	98.8	96.9	615009
PACS2	155.5	99.3	96.2	618067
PADI3	147.1	100.0	100.0	191480
PADI6	111.7	100.0	99.6	617234
PAFAH1B1	102.1	94.1	87.1	607432
PAH	157.4	100.0	100.0	261600
PAK1	133.3	100.0	99.6	618158
PAK3	95.4	99.3	95.9	300558
PALB2	182.1	100.0	100.0	610832
PAM16	63.8	65.3	65.2	613320
PANK2	185.6	100.0	99.3	234200;607236
PANX1	148.9	100.0	100.0	618550
PAPSS2	125.9	100.0	99.5	612847
PARK7	110.5	100.0	100.0	606324
PARN	165.2	100.0	99.9	616371;616353
PARS2	188.8	100.0	100.0	618437
PATL2	104.5	100.0	99.0	617743
PAX1	165.8	92.4	87.9	615560
PAX2	201.8	100.0	99.9	120330;616002
PAX3	114.5	100.0	99.9	193500;148820;268220;122880
PAX4	86.8	100.0	99.8	612225;125853
PAX6	141.4	100.0	100.0	106210;120430;120200;148190;136520;604229;165550
PAX7	135.1	100.0	100.0	268220;618578
PAX8	101.7	100.0	99.8	218700
PAX9	210.3	99.7	99.6	604625
PBX1	146.9	100.0	99.4	617641
PC	161.8	99.8	97.3	266150
PCBD1	112.5	100.0	99.6	264070

PCCA	115.9	99.5	96.7	606054
PCCB	133.2	97.9	96.0	606054
PCDH12	208.4	100.0	100.0	251280
PCDH15	169.5	98.6	97.5	602083;609533;601067
PCDH19	175.8	100.0	98.9	300088
PCGF2	114.4	100.0	99.5	618371
PCK1	136.1	100.0	100.0	261680
PCLO	162.9	99.7	98.7	608027
PCNA	100.3	100.0	98.4	615919
PCNT	114.0	99.6	97.1	210720
PCSK1	175.2	100.0	99.5	600955
PCSK9	97.0	95.0	91.9	603776
PCYT1A	113.2	98.9	95.5	608940
PDCD10	132.4	99.9	98.9	603285
PDE10A	134.7	81.2	80.5	616921;616922
PDE11A	175.4	99.9	99.7	610475
PDE1C	132.6	100.0	99.6	618140
PDE3A	128.2	99.9	99.4	112410
PDE4D	124.7	95.7	93.5	614613
PDE6A	120.4	100.0	99.6	613810
PDE6B	155.9	100.0	99.9	613801;163500
PDE6C	136.5	99.9	97.8	613093
PDE6D	128.7	100.0	100.0	615665
PDE6G	140.0	100.0	99.7	613582
PDE6H	73.7	100.0	97.9	610024
PDE8B	110.4	99.9	99.7	609161;614190
PDGFB	121.4	100.0	99.3	607907;607174;615483
PDGFRA	153.6	100.0	100.0	607685;175510
PDGFRB	147.6	99.2	97.5	616592;601812;228550;615007
PDGFRL	151.8	100.0	100.0	114550;114500

PDHA1	102.0	99.4	97.1	312170
PDHB	132.1	99.1	97.5	614111
PDHX	159.4	99.9	99.4	245349
PDK3	122.5	99.5	97.2	300905
PDP1	151.0	100.0	100.0	608782
PDSS1	129.8	94.7	87.6	614651
PDSS2	125.9	99.8	97.1	614652
PDX1	59.1	93.0	82.4	260370;606392
PDXK	122.8	79.3	76.6	618511
PDYN	138.2	100.0	100.0	610245
PDZD7	90.4	98.8	96.3	618003;605472
PEPD	109.7	100.0	98.8	170100
PER2	106.0	100.0	99.9	604348
PER3	175.0	99.9	98.8	616882
PET100	107.1	100.0	99.6	220110
PEX1	155.5	99.9	99.4	214100;234580;601539
PEX10	101.8	96.8	89.7	614870;614871
PEX11B	109.0	100.0	99.6	614920
PEX12	150.7	100.0	100.0	614859;266510
PEX13	208.9	100.0	100.0	614883;614885
PEX14	132.7	96.7	90.8	614887
PEX16	158.6	97.9	94.2	614876;614877
PEX19	103.7	99.9	98.5	614886
PEX2	158.8	100.0	100.0	614867;614866
PEX26	94.0	100.0	100.0	614872;614873
PEX3	125.7	100.0	99.3	617370;614882
PEX5	124.0	99.9	99.0	616716;202370;214110
PEX6	113.0	94.5	86.7	616617;614862;614863
PEX7	135.9	87.8	80.7	614879;215100
PFKM	137.2	100.0	99.5	232800

PFN1	176.9	100.0	100.0	614808
PGAM2	168.8	100.0	100.0	261670
PGAP1	129.1	99.0	94.4	615802
PGAP2	157.8	100.0	99.9	614207
PGAP3	70.6	63.5	59.6	615716
PGK1	50.7	92.8	79.3	300653
PGM1	156.7	100.0	100.0	614921
PGM3	176.0	100.0	99.8	615816
PHACTR1	118.9	100.0	99.7	618298
PHC1	201.9	99.9	99.2	615414
PHEX	131.6	100.0	99.6	307800
PHF6	68.5	97.8	88.3	301900
PHF8	90.9	99.7	96.8	300263
PHGDH	116.1	99.9	98.8	601815;256520
PHIP	154.6	98.6	96.1	617991
PHKA1	113.5	99.2	95.3	300559
PHKA2	112.3	100.0	99.7	306000
PHKB	151.1	99.9	99.2	261750
PHKG2	169.5	100.0	99.9	613027
PHOX2A	36.9	91.6	72.7	602078
PHOX2B	117.2	100.0	99.7	209880;613013
PHYH	89.1	100.0	99.6	266500
PI4KA	108.1	92.6	88.8	616531
PIBF1	82.1	99.5	96.2	617767
PICALM	117.1	99.5	96.2	601626
PIEZO1	131.8	99.9	98.8	194380;616843
PIEZO2	121.6	100.0	99.5	108145;617146;114300;248700
PIGA	85.7	93.8	86.7	300868;300818
PIGB	115.0	99.9	97.8	618580
PIGC	103.7	99.2	90.9	617816

PIGG	175.5	100.0	99.7	616917
PIGH	84.0	82.1	68.1	618010
PIGL	141.3	100.0	100.0	280000
PIGM	158.5	100.0	100.0	610293
PIGN	117.3	93.8	91.5	614080
PIGO	156.3	100.0	99.9	614749
PIGP	96.9	95.8	87.3	617599
PIGQ	132.0	92.8	90.8	618548
PIGS	102.2	100.0	100.0	618143
PIGT	174.8	98.1	98.1	615399;615398
PIGU	104.5	100.0	99.1	618590
PIGV	147.5	100.0	100.0	239300
PIGW	177.8	100.0	99.8	616025
PIGY	95.5	100.0	99.9	616809
PIH1D3	83.8	99.1	92.5	300991
PIK3C2A	154.7	99.2	96.9	618440
PIK3CA	154.5	100.0	99.8	162900;211980;155500;612918;114500;613089;167000;615108;182000;114480;613659;114550;602501
PIK3CD	160.8	98.8	96.9	615513
PIK3R1	148.2	99.8	99.0	615214;616005;269880
PIK3R2	105.2	90.7	89.6	603387
PIK3R5	126.8	100.0	99.9	615217
PIKFYVE	164.2	99.9	99.4	121850
PINK1	91.4	90.7	86.9	605909
PIP5K1C	138.1	98.0	95.8	611369
PITPNM3	128.4	99.5	98.7	600977
PITX1	137.2	96.7	92.0	119800
PITX2	158.5	99.9	97.7	137600;180500;180550
PITX3	59.0	100.0	98.4	610623;107250
PKD1	27.3	39.2	30.0	173900
PKD1L1	130.3	100.0	99.8	617205

PKD2	108.4	95.5	91.1	613095
PKHD1	154.2	100.0	99.6	263200
PKLR	183.1	100.0	99.2	266200;102900
PKP1	130.6	100.0	99.1	604536
PKP2	110.1	95.4	88.6	609040
PLA2G4A	147.3	99.9	99.4	618372
PLA2G6	120.6	99.9	98.3	256600;610217;612953
PLA2G7	151.3	99.9	99.0	614278
PLAA	187.9	100.0	99.2	617527
PLAG1	213.4	100.0	100.0	181030
PLAU	114.2	100.0	99.8	601709
PLCB1	160.9	100.0	99.8	613722
PLCB4	117.7	99.9	98.8	614669
PLCD1	124.5	99.9	97.8	151600
PLCE1	149.9	99.9	99.3	610725
PLCG2	125.6	100.0	99.8	614878;614468
PLCZ1	83.4	99.9	96.9	617214
PLD1	142.7	100.0	99.6	212093
PLD3	189.9	99.9	99.1	617770
PLEC	115.2	100.0	99.8	613723;612138;226670;131950;616487
PLEKHG2	163.8	100.0	99.3	616763
PLEKHG5	101.0	98.9	94.6	611067;615376
PLEKHM1	129.9	100.0	99.8	611497;618107
PLG	117.3	87.8	87.5	217090
PLIN1	85.0	99.6	94.9	613877
PLK4	178.1	99.9	98.2	616171
PLN	214.0	100.0	100.0	609909;613874
PLOD1	147.6	100.0	98.4	225400
PLOD2	148.2	99.3	97.3	609220
PLOD3	113.0	99.8	98.0	612394

PLP1	141.7	100.0	99.2	312920;312080
PLPBP	111.9	98.2	90.1	617290
PLPP6	163.3	99.2	93.7	611666
PLS3	141.8	97.7	96.1	300910
PLVAP	159.2	100.0	100.0	618183
PMFBP1	125.0	99.9	99.3	618112
PML	148.4	100.0	99.8	-
PMM2	145.4	100.0	100.0	212065
PMP2	149.0	100.0	100.0	618279
PMP22	107.9	99.2	95.2	139393;118300;118220;145900;162500;180800
PMPCA	123.2	97.7	94.2	213200
PMPCB	145.8	100.0	99.7	617954
PMS2	125.2	84.3	82.8	276300;614337
PMVK	128.8	100.0	100.0	175800
PNKD	147.4	100.0	99.9	118800
PNKP	112.0	100.0	100.0	616267;613402
PNLIP	172.3	100.0	99.8	614338
PNP	124.6	99.8	98.9	613179
PNPLA1	192.5	100.0	100.0	615024
PNPLA2	128.9	99.7	96.1	610717
PNPLA6	139.7	100.0	99.7	275400;612020;215470;245800
PNPLA8	140.1	100.0	99.8	251950
PNPO	78.4	99.9	97.7	610090
PNPT1	63.9	97.7	89.7	614934;614932
POC1A	133.2	100.0	100.0	614813
POC1B	96.6	99.8	98.8	615973
POF1B	90.5	95.6	86.9	300604
POFUT1	150.4	100.0	99.0	615327
POGLUT1	123.6	99.4	94.6	617232;615696
POGZ	142.2	99.4	99.0	616364

POLA1	123.1	99.3	95.4	301030;301220
POLD1	121.7	98.5	95.2	615381
POLE	140.6	100.0	99.8	618336;615139
POLG	111.6	100.0	99.3	607459;613662;203700;157640;258450
POLG2	235.4	99.6	98.0	610131;618528
POLH	136.9	100.0	99.6	278750
POLR1A	124.0	100.0	99.4	616462
POLR1C	112.8	99.3	95.5	616494;248390
POLR1D	210.1	91.6	91.6	613717
POLR2A	182.8	100.0	100.0	618603
POLR3A	136.9	100.0	99.7	264090;607694
POLR3B	157.1	99.9	98.6	614381
POMC	114.0	100.0	100.0	609734
POMGNT1	131.5	100.0	99.9	613151;617123;613157;253280
POMGNT2	186.0	100.0	100.0	618135;614830
POMK	180.7	100.0	100.0	616094;615249
POMP	160.3	100.0	99.1	618048;601952
POMT1	150.5	99.3	97.5	236670;609308;613155
POMT2	110.7	99.4	96.4	613150;613156;613158
POP1	134.2	100.0	99.7	617396
POR	175.0	99.8	98.6	201750;613571
PORCN	121.0	100.0	99.1	305600
POU1F1	137.5	100.0	99.2	613038
POU3F3	32.2	73.2	59.6	618604
POU3F4	134.5	100.0	100.0	304400
POU4F3	242.5	100.0	100.0	602459
PPA2	94.4	98.7	94.0	617223;617222
PPARG	179.2	100.0	100.0	604367;609338;601665
PPCS	139.9	99.8	99.5	618189
PPIB	116.0	100.0	100.0	259440

PPIP5K2	106.6	98.9	95.2	618422
PPM1D	177.8	100.0	99.9	114480;617450
PPM1K	159.6	100.0	100.0	615135
PPOX	109.9	99.7	96.8	176200
PPP1CB	127.9	99.9	99.3	617506
PPP1R15B	135.5	100.0	99.6	616817
PPP1R3A	173.7	99.7	99.2	125853
PPP2CA	186.4	100.0	100.0	618354
PPP2R1A	136.5	91.6	91.5	616362
PPP2R1B	166.3	100.0	99.9	211980
PPP2R2B	153.5	100.0	99.4	604326
PPP2R3C	111.6	99.6	94.9	618420;618419
PPP2R5D	177.6	100.0	100.0	616355
PPP3CA	143.4	99.8	98.4	618265;617711
PPT1	164.4	90.3	90.3	256730
PQBP1	137.8	100.0	100.0	309500
PRCC	175.6	99.9	98.5	605074
PRCD	125.0	100.0	100.0	610599
PRDM12	123.7	90.8	88.0	616488
PRDM16	230.0	99.8	99.1	615373
PRDM5	162.7	99.9	99.2	614170
PRDM6	113.4	95.8	87.8	617039
PRDM8	107.9	92.9	88.6	616640
PRDX1	119.0	100.0	100.0	277400
PREPL	132.5	99.8	98.2	616224
PRF1	114.3	91.2	90.8	609135;603553;605027
PRG4	117.0	87.4	80.9	208250
PRICKLE1	118.6	100.0	100.0	612437
PRIMPOL	138.1	97.5	94.6	615420
PRKACA	122.7	80.1	79.3	615830

PRKACG	191.9	100.0	99.9	616176
PRKAG2	158.0	99.1	97.5	261740;600858;194200
PRKAR1A	94.5	99.3	93.5	255960;160980;610489;101800
PRKCA	159.9	100.0	100.0	-
PRKCD	175.0	100.0	100.0	615559
PRKCG	153.1	99.9	98.4	605361
PRKCSH	160.1	99.8	95.4	174050
PRKD1	159.8	99.6	98.7	617364
PRKDC	118.8	99.7	98.0	615966
PRKG1	145.2	99.8	98.3	615436
PRKN	97.4	79.8	78.8	600116;211980;167000
PRKRA	175.9	100.0	99.4	612067
PRLR	167.7	99.9	99.8	615555;615554
PRMT7	129.3	100.0	99.9	617157
PRNP	133.8	100.0	100.0	603218;123400;600072;606688;137440
PROC	143.2	100.0	100.0	176860;612304
PRODH	89.3	85.0	80.6	239500
PROK2	136.2	99.9	98.5	610628
PROKR2	228.4	100.0	100.0	244200
PROM1	133.3	97.2	96.1	612095;608051;603786;612657
PROP1	98.8	92.6	82.6	262600
PROS1	119.1	98.8	96.1	612336;614514
PRPF3	90.5	98.8	95.3	601414
PRPF31	133.4	100.0	98.7	600138
PRPF4	148.3	100.0	99.8	615922
PRPF6	123.4	100.0	99.8	613983
PRPF8	122.4	100.0	99.3	600059
PRPH2	242.9	100.0	100.0	608133;169150;136880;608161;613105
PRPS1	137.0	100.0	100.0	301835;311070;304500;300661
PRRT2	122.5	100.0	99.6	128200;602066;605751

PRRX1	110.0	100.0	99.7	202650
PRSS1	181.1	100.0	100.0	167800
PRSS12	160.0	100.0	99.9	249500
PRSS56	76.9	99.9	96.4	613517
PRUNE1	149.2	100.0	99.9	617481
PRX	151.2	100.0	100.0	145900;614895
PSAP	112.4	100.0	100.0	610539;249900;611722;611721
PSAT1	52.6	95.3	81.6	610992;616038
PSEN1	175.0	100.0	100.0	613737;172700;607822;600274;613694
PSEN2	122.8	100.0	100.0	613697;606889
PSENEEN	103.3	100.0	100.0	613736
PSMB4	127.4	100.0	100.0	617591
PSMB8	132.9	99.9	98.5	256040
PSMB9	102.1	99.9	97.7	617591
PSMC3IP	116.0	100.0	100.0	614324
PSMD12	94.7	98.6	92.9	617516
PSPH	147.3	100.0	100.0	614023
PSTPIP1	98.5	100.0	99.1	604416
PTCH1	127.2	99.2	97.6	109400;605462;610828
PTCH2	118.2	99.9	99.0	155255;109400;605462
PTDSS1	140.5	100.0	100.0	151050
PTEN	166.6	99.5	97.0	176807;605309;158350
PTF1A	87.0	95.8	85.6	609069;615935
PTGIS	125.5	98.2	95.1	145500
PTH	110.2	99.7	97.0	146200
PTH1R	104.5	100.0	98.7	156400;215045;125350;600002
PTHLH	186.8	99.7	98.4	613382
PTPN11	100.3	99.1	93.7	607785;163950;156250;151100
PTPN12	169.3	99.1	96.8	114500
PTPN14	158.3	99.7	97.4	613611

PTPRC	122.1	99.0	95.1	608971
PTPRF	161.3	100.0	99.7	616001
PTPRJ	168.2	97.7	97.2	114500
PTPRO	152.7	99.9	99.4	614196
PTPRQ	122.9	94.6	92.5	613391;617663
PTRH2	259.0	100.0	100.0	616263
PTS	118.8	99.9	99.1	261640
PUF60	184.4	100.0	99.3	615583
PUM1	148.2	100.0	99.9	617931
PURA	147.0	99.0	95.2	616158
PUS1	118.0	100.0	99.5	600462
PUS3	192.1	100.0	100.0	617051
PUS7	177.0	100.0	99.8	618342
PXDN	150.6	100.0	99.6	269400
PYCR1	94.2	99.9	97.7	614438;612940
PYCR2	118.2	100.0	99.1	616420
PYGL	146.6	100.0	100.0	232700
PYGM	138.7	100.0	99.9	232600
PYROXD1	56.6	95.2	83.9	617258
QARS	151.2	100.0	100.0	615760
QDPR	112.9	100.0	99.7	261630
QRICH1	151.6	100.0	99.9	617982
QRICH2	115.9	94.3	93.5	618341
RAB11B	201.5	100.0	100.0	617807
RAB18	94.9	99.5	97.4	614222
RAB23	130.8	100.0	99.5	201000
RAB27A	163.4	100.0	100.0	607624
RAB28	80.2	99.7	96.0	615374
RAB33B	225.1	100.0	100.0	615222
RAB39B	109.8	100.0	100.0	311510;300271

RAB3GAP1	136.8	99.4	98.9	600118
RAB3GAP2	108.0	99.5	97.0	614225;212720
RAB7A	151.4	100.0	99.9	600882
RAC1	140.3	99.9	96.2	617751
RAC2	104.2	99.9	98.3	608203
RAC3	113.3	97.3	94.4	618577
RAD21	103.0	99.2	96.6	611376;614701
RAD50	118.2	97.5	91.6	613078
RAD51	113.0	89.4	89.4	614508;617244
RAD51C	162.8	100.0	99.8	613390
RAD54B	142.2	99.7	97.3	605027;114500
RAD54L	119.4	100.0	98.9	605027
RAF1	125.8	100.0	100.0	611554;611553;615916
RAG1	169.0	100.0	100.0	233650;603554;601457;609889
RAG2	223.3	100.0	100.0	233650;603554;601457
RAI1	187.6	100.0	100.0	182290
RAP1GDS1	111.6	99.8	96.8	-
RAPGEF2	169.8	99.8	99.1	618075
RAPSN	162.4	100.0	99.7	618388;616326
RARB	109.5	100.0	100.0	615524
RARS	114.8	94.2	91.6	616140
RARS2	122.7	100.0	99.8	611523
RASA1	126.3	98.8	96.3	608354;605462
RASGRP1	129.8	100.0	99.6	618534
RASGRP2	105.0	99.7	97.3	615888
RAX	96.0	96.0	87.0	611038
RAX2	76.5	100.0	92.3	613757;610381
RB1	102.8	98.5	93.7	180200;109800;182280;259500
RB1CC1	130.2	99.6	96.7	114480
RBBP8	147.2	100.0	99.7	251255;;606744

RBCK1	105.6	99.9	98.2	615895
RBM10	121.7	99.5	97.1	311900
RBM20	193.7	100.0	99.9	613172
RBM28	154.8	100.0	100.0	612079
RBM8A	109.3	99.8	97.9	274000
RBMX	51.8	94.6	84.0	300238
RBP3	150.0	100.0	100.0	615233
RBP4	140.5	99.9	97.7	615147;616428
RBPJ	89.9	98.4	92.8	614814
RCBTB1	119.9	99.9	99.5	617175
RD3	147.5	100.0	100.0	610612
RDH11	107.7	100.0	99.0	616108
RDH12	102.1	100.0	98.6	612712
RDH5	162.8	100.0	99.9	136880
RDX	47.1	89.1	71.5	611022
RECQL4	149.8	99.8	98.1	218600;268400;266280
REEP1	82.5	78.7	76.1	610250;614751
REEP2	184.3	99.9	98.6	615625
REEP6	193.7	100.0	100.0	617304
RELA	110.1	99.6	98.8	618287
RELB	115.2	98.8	88.7	617585
RELN	158.0	100.0	99.8	257320
RELT	132.1	100.0	99.9	618386
REN	150.7	100.0	100.0	613092;267430
REPS1	147.5	99.6	97.5	617916
RERE	85.8	96.3	91.4	616975
REST	119.0	98.5	98.2	612431;617626
RET	139.5	99.9	99.1	171400;171300;209880;162300;155240
RETREG1	141.2	98.8	95.1	613115
RFC1	157.7	99.9	98.9	614575

RFT1	126.6	99.8	99.6	612015
RFWD3	128.7	100.0	99.8	617784
RFX5	119.8	99.7	98.1	209920
RFX6	177.2	100.0	99.6	615710
RFXANK	130.0	100.0	99.5	209920
RFXAP	116.2	99.3	97.0	209920
RGR	145.9	100.0	99.1	613769
RGS9	121.1	98.5	97.1	608415
RGS9BP	94.3	99.6	95.0	608415
RHAG	154.3	100.0	99.7	185000;268150
RHBDF2	101.4	99.9	98.6	148500
RHCE	167.3	98.1	98.1	617970
RHO	172.6	100.0	100.0	136880;613731;610445
RHOBTB2	213.7	100.0	100.0	618004
RIMS1	138.1	99.8	97.7	603649
RIN2	144.9	100.0	100.0	613075
RINT1	195.2	99.9	98.6	618641
RIPK1	118.2	100.0	99.0	618108
RIPK4	144.6	100.0	99.9	263650;214350
RIPOR2	133.3	100.0	99.8	616515
RIPPLY2	73.0	100.0	97.9	616566
RIT1	178.7	100.0	100.0	615355
RLBP1	133.4	100.0	99.9	607476;607475;136880
RLIM	123.1	100.0	99.0	300978
RMND1	166.3	100.0	98.6	614922
RMRP				250460;250250;607095
RNASEH1	109.0	98.5	95.3	616479
RNASEH2A	150.5	100.0	100.0	610333
RNASEH2B	126.7	96.0	92.5	610181
RNASEH2C	279.8	100.0	99.5	610329

RNASEL	157.0	100.0	99.8	601518
RNASET2	115.4	97.4	93.1	612951
RNF113A	142.2	100.0	100.0	300953
RNF125	210.6	99.9	99.2	616260
RNF13	95.4	95.2	81.6	618379
RNF139	189.8	100.0	100.0	144700
RNF168	202.2	100.0	99.8	611943
RNF170	146.5	99.6	97.6	608984
RNF212	132.2	100.0	99.6	612042
RNF216	153.0	99.8	98.7	212840
RNF43	155.2	99.9	99.1	617108
RNF6	158.2	100.0	99.7	133239
RNPC3	45.7	91.5	70.7	618160
RNU4ATAC				616651;210710
ROBO2	155.8	99.4	97.8	610878
ROBO3	105.8	98.9	96.1	607313
ROBO4	114.9	99.9	98.6	618496
ROGDI	103.5	98.4	95.2	226750
ROM1	115.6	100.0	99.9	608133
ROR1	172.5	97.0	96.8	617654
ROR2	168.7	100.0	99.9	113000;268310
RORA	117.7	96.7	90.2	618060
RORC	123.9	100.0	100.0	616622
RP1	124.0	91.5	90.6	180100
RP1L1	135.3	100.0	100.0	613587
RP2	177.8	100.0	99.8	312600
RP9	67.9	80.8	75.9	180104
RPE65	153.2	99.8	97.8	204100;613794
RPGR	76.0	77.3	72.7	300455;304020;300834;300029
RPGRIP1	146.2	100.0	99.9	613826;608194

RPGRIP1L	155.5	96.7	95.7	611561;611560;216360
RPIA	109.4	98.6	94.9	608611
RPL10	79.1	97.4	89.1	300998
RPL11	111.0	100.0	100.0	612562
RPL15	35.2	86.8	78.0	615550
RPL18	106.9	100.0	100.0	618310
RPL21	64.8	88.8	71.7	615885
RPL26	42.3	97.2	84.4	614900
RPL27	33.7	73.6	56.5	617408
RPL35	63.9	86.4	75.0	618312
RPL35A	94.5	97.1	88.7	612528
RPL5	42.2	86.2	70.0	612561
RPS10	109.9	97.7	91.7	613308
RPS14	130.5	98.8	95.0	153550
RPS15A	68.5	96.9	86.7	618313
RPS17	43.8	84.2	69.8	612527
RPS19	92.9	100.0	99.6	105650
RPS23	61.8	87.8	80.1	617412
RPS24	98.4	98.5	93.4	610629
RPS26	92.6	95.7	84.9	613309
RPS27	39.4	89.3	60.9	617409
RPS28	57.7	100.0	94.8	606164
RPS29	113.4	100.0	98.2	615909
RPS6KA3	105.3	98.4	94.4	303600;300844
RPS7	112.0	80.0	68.7	612563
RPSA	75.7	100.0	99.8	271400
RRAS2	89.9	96.8	88.7	618624
RRM2B	163.8	100.0	99.7	613077;612075
RS1	60.6	99.8	93.9	312700
RSPH1	167.1	100.0	100.0	615481

RSPH3	148.7	99.9	98.8	616481
RSPH4A	171.2	98.1	95.6	612649
RSPH9	135.9	99.9	97.9	612650
RSPO1	96.2	100.0	99.9	610644
RSPO2	167.0	97.1	90.7	618021;618022
RSPO4	121.1	100.0	100.0	206800
RSPRY1	173.0	100.0	100.0	616723
RSRC1	80.0	99.8	96.8	618402
RTEL1	127.7	99.5	96.8	616373;615190
RTN2	138.7	100.0	99.2	604805
RTN4IP1	96.9	99.9	98.7	616732
RTTN	138.7	98.9	98.0	614833
RUBCN	114.6	99.4	97.5	615705
RUNX1	85.5	99.3	94.9	601626;601399
RUNX2	113.5	72.2	72.2	156510;119600
RUSC2	181.0	100.0	100.0	617773
RYR1	126.2	96.9	93.9	117000;145600;255320
RYR2	150.9	99.9	99.0	600996;604772
S1PR2	169.3	99.4	96.9	610419
SACS	175.2	100.0	100.0	270550
SAG	150.1	100.0	100.0	613758;258100
SALL1	133.4	99.9	99.0	107480
SALL2	135.6	100.0	100.0	216820
SALL4	136.9	98.6	96.7	607323;147750
SAMD12	186.1	100.0	100.0	601068
SAMD9	185.7	100.0	99.8	610455;617053
SAMD9L	192.5	100.0	100.0	159550
SAMHD1	164.2	100.0	99.6	612952;614415
SAR1B	158.3	97.0	89.7	246700
SARS	131.6	100.0	99.3	617709

SARS2	118.3	95.8	94.6	613845
SASH1	182.1	99.9	98.7	618373;127500
SASS6	91.0	99.9	98.5	616402
SATB2	126.5	99.7	97.4	612313
SBDS	197.8	100.0	100.0	260400
SBF1	130.0	99.0	97.7	615284
SBF2	130.5	99.9	99.4	604563
SC5D	192.4	100.0	99.5	607330
SCAPER	177.8	99.7	98.2	618195
SCARB2	121.3	100.0	99.8	254900
SCARF2	74.5	95.4	86.3	600920
SCN10A	149.4	100.0	99.7	615551
SCN11A	144.6	99.8	98.3	615552;615548
SCN1A	143.7	99.9	99.5	609634;607208;604403
SCN1B	178.3	98.0	96.4	617350;615377;612838;604233
SCN2A	165.0	99.6	97.6	607745;613721
SCN2B	219.0	100.0	100.0	615378
SCN3A	173.7	99.9	99.3	617938;617935
SCN3B	151.4	100.0	100.0	613120
SCN4A	187.3	100.0	99.6	170500;168300;614198;608390;613345
SCN4B	82.6	100.0	99.6	611819
SCN5A	159.4	99.0	99.0	603829;614022;601154;601144;608567;603830;113900
SCN8A	189.5	100.0	99.8	614306;618364;617080;614558
SCN9A	162.8	99.3	97.8	167400;133020;243000;613863
SCNN1A	131.4	99.7	98.2	613021;618126;264350
SCNN1B	146.2	100.0	99.7	211400;264350;177200
SCNN1G	164.6	99.8	98.3	613071;618114;264350
SCO1	115.4	97.1	93.8	220110
SCO2	107.3	100.0	100.0	608908;604377
SCP2	130.8	100.0	99.2	613724

SCYL1	155.2	100.0	100.0	616719
SDCCAG8	138.0	100.0	99.9	613615;615993
SDHA	100.0	85.8	80.4	252011;614165;256000;613642
SDHAF1	40.4	99.9	93.2	252011
SDHAF2	139.9	94.6	94.2	601650
SDHB	146.3	100.0	100.0	171300;115310;606864;606764
SDHC	107.5	100.0	99.3	605373;606864;606764
SDHD	48.5	54.0	51.6	171300;252011;606864;168000
SDR9C7	200.1	100.0	100.0	617574
SEC23A	154.5	99.7	98.2	607812
SEC23B	156.2	99.9	99.3	616858;224100
SEC24D	160.3	100.0	99.7	616294
SEC31A	134.2	99.3	97.1	618651
SEC61A1	148.0	100.0	100.0	617056
SEC63	99.2	91.2	83.3	617004
SECISBP2	136.4	99.8	97.4	609698
SELENBP1	136.9	100.0	100.0	618148
SELENON	141.2	84.5	84.0	255310;602771
SEMA3E	159.3	100.0	99.6	214800
SEMA4A	134.8	100.0	99.8	610283;610282
SEPSECS	192.2	100.0	100.0	613811
SEPT12	118.9	100.0	98.8	614822
SEPT9	154.2	100.0	99.9	162100
SERAC1	134.1	99.9	99.5	614739
SERPINA1	110.7	100.0	100.0	613490
SERPINA3	130.6	100.0	100.0	-
SERPINA6	146.4	100.0	100.0	611489
SERPINB6	162.0	95.9	95.9	613453
SERPINB7	161.1	100.0	99.9	615598
SERPINB8	157.9	95.0	95.0	617115

SERPINC1	142.2	100.0	100.0	613118
SERPIND1	161.9	100.0	100.0	612356
SERPINE1	151.7	100.0	100.0	613329
SERPINF1	134.0	100.0	100.0	613982
SERPINF2	174.0	100.0	99.8	262850
SERPING1	98.8	99.7	97.5	106100;120790
SERPINH1	179.6	100.0	98.3	613848
SERPINI1	119.3	99.9	99.0	604218
SET	65.9	98.3	90.5	618106
SETBP1	141.2	99.9	98.7	269150;616078
SETD2	159.0	100.0	99.9	616831
SETD5	171.9	100.0	99.8	615761
SETX	182.3	100.0	99.8	606002;602433
SF3B1	158.2	99.7	98.6	614286
SF3B4	69.4	99.9	97.3	154400
SFRP4	127.4	100.0	99.8	265900
SFTPA2	154.1	100.0	100.0	178500
SFTPBB	87.2	99.5	96.8	265120
SFTPC	104.3	99.2	95.7	610913
SFXN4	128.8	99.9	98.9	615578
SGCA	159.4	100.0	99.9	608099
SGCB	184.2	97.7	96.5	604286
SGCD	88.5	100.0	98.9	606685;601287
SGCE	120.2	98.7	94.0	159900
SGCG	137.6	100.0	99.2	253700
SGMS2	186.4	100.0	100.0	126550
SGO1	137.6	99.9	98.9	616201
SGPL1	159.8	100.0	100.0	617575
SGSH	149.1	94.4	94.1	252900
SH2B3	106.6	99.4	95.1	133100;187950;254450

SH2D1A	122.6	97.2	94.0	308240
SH3BP2	152.8	91.4	91.2	118400
SH3KBP1	106.6	99.7	95.9	300310
SH3PXD2B	179.7	100.0	100.0	249420
SH3TC2	107.9	100.0	99.7	613353;601596
SHANK3	111.9	92.2	82.1	606232
SHH	128.7	100.0	99.5	269160;611638;147250;142945
SHOC2	164.2	99.9	99.4	607721
SHOX	31.8	70.0	59.7	249700;127300;300582
SHROOM4	103.4	100.0	99.0	300434
SI	146.2	99.2	96.1	222900
SIGMAR1	134.5	100.0	100.0	605726;614373
SIK1	115.7	98.7	94.4	616341
SIK3	106.8	99.8	98.7	618162
SIL1	157.6	99.2	96.7	248800
SIN3A	137.3	100.0	99.0	613406
SIPA1L3	171.8	99.9	98.9	616851
SIX1	137.0	100.0	99.2	608389;605192
SIX3	154.3	99.9	98.6	269160;157170
SIX5	67.0	95.4	88.2	610896
SIX6	263.6	100.0	100.0	212550
SKI	101.8	99.3	94.9	182212
SKIV2L	155.8	100.0	99.8	614602
SLC10A2	156.9	100.0	100.0	613291
SLC10A7	130.8	99.7	98.0	618363
SLC11A2	114.0	100.0	99.9	206100
SLC12A1	174.0	100.0	99.9	601678
SLC12A3	152.8	100.0	99.9	263800
SLC12A5	116.3	83.9	83.8	616645
SLC12A6	146.8	100.0	100.0	218000

SLC13A3	100.7	99.4	97.5	618384
SLC13A5	156.9	100.0	99.9	615905
SLC16A1	162.9	100.0	99.3	616095;610021;245340
SLC16A12	152.1	100.0	99.9	612018
SLC16A2	71.9	99.2	93.7	300523
SLC17A5	153.4	99.6	97.0	269920;604369
SLC17A8	158.6	100.0	100.0	605583
SLC17A9	129.0	96.3	95.4	616063
SLC18A2	124.9	100.0	99.7	618049
SLC18A3	191.2	100.0	100.0	617239
SLC19A2	110.3	100.0	99.7	249270
SLC19A3	160.1	100.0	99.8	607483
SLC1A1	163.8	99.9	99.6	222730
SLC1A2	121.9	100.0	99.3	617105
SLC1A3	120.2	100.0	99.9	612656
SLC1A4	149.2	99.0	95.8	616657
SLC20A2	121.1	100.0	99.2	213600
SLC22A12	113.2	100.0	99.8	220150
SLC22A18	114.2	100.0	98.1	114480;211980;268210
SLC22A5	145.5	100.0	100.0	212140
SLC24A1	169.3	100.0	99.9	613830
SLC24A4	123.9	100.0	99.8	615887
SLC24A5	113.8	99.9	99.1	113750
SLC25A1	97.8	95.8	88.6	618197;615182
SLC25A11	181.9	100.0	100.0	618464
SLC25A12	187.5	99.9	99.5	612949
SLC25A13	146.4	100.0	99.7	605814;603471
SLC25A15	176.5	99.8	98.1	238970
SLC25A19	94.0	100.0	98.5	607196;613710
SLC25A20	106.4	100.0	100.0	212138

SLC25A22	115.0	98.6	95.8	609304
SLC25A24	146.3	99.4	99.3	612289
SLC25A26	116.6	100.0	99.5	616794
SLC25A3	138.4	99.8	98.0	610773
SLC25A32	145.3	100.0	100.0	616839
SLC25A38	114.5	99.7	97.1	205950
SLC25A4	144.8	100.0	100.0	615418;617184;609283
SLC25A42	131.7	96.5	93.2	618416
SLC25A46	199.3	99.7	97.3	616505
SLC26A1	106.8	100.0	99.6	167030
SLC26A2	234.0	100.0	100.0	256050;222600;600972;226900
SLC26A3	160.5	100.0	99.5	214700
SLC26A4	141.0	100.0	99.7	274600;600791
SLC26A5	160.1	99.1	96.8	613865
SLC26A8	137.2	100.0	99.6	606766
SLC27A4	161.3	100.0	99.8	608649
SLC29A3	192.3	100.0	99.6	602782
SLC2A1	164.9	92.8	92.8	612126;608885;601042;606777
SLC2A10	158.1	97.7	97.7	208050
SLC2A2	183.6	100.0	100.0	227810
SLC2A9	122.5	99.8	96.1	612076
SLC30A10	168.1	100.0	100.0	613280
SLC30A2	133.8	100.0	99.0	608118
SLC30A9	102.9	98.8	94.2	617595
SLC33A1	156.2	99.9	98.9	614482;612539
SLC34A1	143.4	99.9	99.1	612286;616963;613388
SLC34A2	162.3	100.0	100.0	265100
SLC34A3	139.6	100.0	99.4	241530
SLC35A1	150.9	100.0	99.7	603585
SLC35A2	115.7	99.9	98.4	300896

SLC35A3	85.2	80.7	78.6	615553
SLC35C1	162.1	99.9	98.7	266265
SLC35D1	135.3	100.0	97.7	269250
SLC36A2	123.4	100.0	100.0	242600;138500
SLC37A4	124.2	100.0	99.2	232240;232220
SLC38A8	84.4	99.9	97.3	609218
SLC39A13	141.5	99.8	98.2	612350
SLC39A14	109.2	100.0	99.4	144755;617013
SLC39A4	100.1	99.5	95.5	201100
SLC39A5	145.3	99.9	99.0	615946
SLC39A8	145.0	100.0	99.7	616721
SLC3A1	161.7	100.0	99.8	220100
SLC40A1	134.9	100.0	99.5	606069
SLC44A4	138.3	100.0	99.5	617606
SLC45A1	172.2	100.0	99.6	617532
SLC45A2	137.7	100.0	99.9	606574
SLC46A1	116.3	99.9	98.5	229050
SLC4A1	157.1	100.0	99.8	612653;166900;611590;179800;185020
SLC4A11	174.2	100.0	99.9	217700;217400;613268
SLC4A4	139.5	99.8	99.2	604278
SLC52A1	205.9	100.0	100.0	615026
SLC52A2	170.8	100.0	100.0	614707
SLC52A3	125.5	100.0	100.0	211500;211530
SLC5A1	143.0	100.0	100.0	606824
SLC5A2	131.5	100.0	100.0	233100
SLC5A5	109.5	100.0	99.8	274400
SLC5A7	118.9	100.0	99.9	617143;158580
SLC6A1	146.8	100.0	100.0	616421
SLC6A17	183.0	100.0	100.0	616269
SLC6A19	134.7	100.0	100.0	242600;138500;234500

SLC6A2	138.8	100.0	99.9	604715
SLC6A20	158.9	100.0	99.9	242600;138500
SLC6A3	147.6	100.0	100.0	613135
SLC6A5	135.3	100.0	100.0	614618
SLC6A8	56.3	93.5	81.6	300352
SLC6A9	155.4	100.0	100.0	617301
SLC7A14	157.5	100.0	100.0	615725
SLC7A7	126.7	100.0	99.9	222700
SLC7A9	145.8	100.0	99.9	220100
SLC9A1	164.0	100.0	100.0	616291
SLC9A3	146.4	100.0	99.7	616868
SLC9A3R1	134.6	100.0	98.7	612287
SLC9A6	123.7	99.3	95.5	300243
SLC9A7	90.8	97.6	90.3	301024
SLCO1B1	63.6	99.2	93.7	237450
SLCO1B3	57.8	98.8	90.8	237450
SLCO2A1	108.1	100.0	99.4	614441
SLFN14	222.4	100.0	100.0	616913
SLITRK1	155.0	100.0	100.0	613229;137580
SLITRK6	197.2	100.0	100.0	221200
SLURP1	93.6	100.0	99.3	248300
SLX4	130.9	100.0	99.8	613951
SMAD3	144.4	99.9	99.0	613795
SMAD4	127.2	100.0	99.9	175050;260350;174900;139210
SMAD6	149.8	90.9	81.0	614823
SMAD9	118.3	100.0	99.9	615342
SMARCA2	125.9	96.7	96.2	601358
SMARCA4	157.4	99.9	99.0	614609
SMARCAD1	103.4	99.3	95.8	129200;181600;136000
SMARCAL1	130.9	100.0	99.9	242900

SMARCB1	210.4	100.0	100.0	609322;614608
SMARCC2	114.5	99.0	96.6	618362
SMARCD2	102.9	87.0	85.9	617475
SMARCE1	81.3	96.1	88.1	616938
SMC1A	102.0	100.0	98.7	300590
SMC3	91.6	95.2	91.0	610759
SMCHD1	116.5	99.5	96.3	158901;603457
SMG9	112.3	100.0	100.0	616920
SMN1	112.1	99.5	94.7	271150;253400;253550;253300
SMO	139.7	97.8	94.7	601707;605462
SMOC1	132.3	99.9	98.4	206920
SMOC2	101.2	77.0	76.7	125400
SMPD1	171.4	100.0	100.0	257200;607616
SMPD4	96.2	99.4	94.2	618622
SMPX	76.2	100.0	97.6	300066
SMS	80.6	91.5	78.5	309583
SNAI2	115.6	100.0	99.1	172800;608890
SNAP25	138.6	100.0	99.9	616330
SNAP29	140.2	100.0	100.0	609528
SNCA	124.1	100.0	100.0	168601;127750;605543
SNCB	103.7	100.0	99.9	127750
SNIP1	174.0	98.9	97.1	614501
SNORD118				614561
SNRNP200	139.0	99.9	99.1	610359
SNRPB	93.2	100.0	99.3	117650
SNRPE	101.5	99.5	92.6	615059
SNRPN	107.0	100.0	97.0	176270
SNTA1	94.9	87.0	78.8	612955
SNX10	159.9	96.2	95.7	615085
SNX14	95.2	99.6	95.9	616354

SOBP	193.9	97.5	92.9	613671
SOD1	144.8	100.0	99.9	105400;618598
SOHLH1	117.4	99.7	96.5	617690;618115
SON	126.1	98.8	94.9	617140
SOS1	123.6	99.8	98.4	135300;610733
SOS2	123.5	100.0	99.2	616559
SOST	102.6	100.0	99.5	239100;122860;269500
SOX10	70.3	99.9	97.9	609136;611584;613266
SOX11	181.0	100.0	100.0	615866
SOX17	71.9	100.0	99.5	613674
SOX18	32.7	70.7	55.2	137940;607823
SOX2	207.1	100.0	100.0	206900
SOX3	60.2	91.4	75.2	300123;312000
SOX4	83.8	97.3	90.9	618506
SOX5	112.9	99.9	98.9	616803
SOX9	161.0	100.0	98.6	114290
SP110	134.6	100.0	100.0	235550
SP7	150.5	100.0	99.8	613849
SPAG1	112.6	99.3	95.8	615505
SPARC	166.2	100.0	100.0	616507
SPART	153.2	99.7	96.8	275900
SPAST	111.5	99.8	98.7	182601
SPATA16	162.2	100.0	99.5	102530
SPATA5	167.7	100.0	99.7	616577
SPATA7	138.4	99.8	98.2	604232
SPECC1L	141.4	100.0	99.6	145410;145420;600251
SPEG	127.0	96.4	89.5	615959
SPG11	135.0	100.0	99.3	604360;602099;616668
SPG21	152.3	99.4	96.8	248900
SPG7	124.3	94.9	92.6	607259

SPINK1	101.3	100.0	99.3	608189;167800
SPINK2	115.6	99.3	99.1	618091
SPINK5	142.1	99.9	99.5	256500
SPINT2	77.3	98.5	83.8	270420
SPNS2	141.8	92.1	89.3	618457
SPR	170.3	99.8	96.3	612716
SPRED1	171.2	100.0	98.9	611431
SPRTN	185.3	100.0	100.0	616200
SPRY4	153.2	100.0	100.0	615266
SPTA1	129.8	99.9	99.2	270970;130600;266140
SPTAN1	126.6	99.1	98.6	613477
SPTB	148.4	100.0	100.0	616649;617948
SPTBN2	120.5	100.0	99.3	615386;600224
SPTBN4	91.4	97.3	91.0	617519
SPTLC1	132.2	99.2	95.4	162400
SPTLC2	158.5	100.0	100.0	613640
SQSTM1	125.7	98.8	95.5	617145;617158;167250;616437
SRC	121.9	100.0	99.8	616937;114500
SRCAP	168.1	99.4	98.9	136140
SRD5A2	82.1	99.9	99.0	264600
SRD5A3	140.7	99.9	99.1	612379;612713
SRP72	81.8	97.6	89.7	614675
SRPX2	76.9	99.8	96.5	300643
SRY	35.5	50.0	50.0	400044
SSR4	111.5	100.0	99.7	300934
SSTR5	143.5	100.0	99.9	-
SSX1	114.5	82.2	82.0	300813
SSX2	72.6	65.3	62.6	300813
ST14	163.6	99.9	98.6	602400
ST3GAL3	151.5	100.0	99.8	615006;611090

ST3GAL5	117.5	85.0	84.2	609056
STAC3	132.6	100.0	100.0	255995
STAG1	137.0	99.6	97.3	617635
STAG2	86.1	97.6	89.4	301022
STAG3	121.4	93.5	93.2	615723
STAMPB	118.1	100.0	99.4	614261
STAR	148.9	100.0	100.0	201710
STARD7	114.2	98.2	93.1	607876
STAT1	149.4	99.9	98.8	614162;614892;613796
STAT2	116.3	100.0	99.9	616636
STAT3	129.0	100.0	99.8	147060;615952
STAT5B	136.2	100.0	98.5	102578;245590
STEAP3	162.7	100.0	99.7	615234
STIL	192.4	100.0	99.8	612703
STIM1	126.2	99.8	98.0	185070;160565;612783
STK11	128.8	100.0	99.3	260350;273300;175200
STK4	138.1	100.0	99.8	614868
STN1	102.9	100.0	100.0	617341
STOX1	162.2	89.6	89.6	609404
STRA6	130.5	100.0	99.8	601186
STRADA	132.7	100.0	98.9	611087
STRC	107.4	99.9	98.0	603720
STS	100.9	99.7	98.1	308100
STT3A	160.4	100.0	100.0	615596
STT3B	150.6	100.0	99.6	615597
STUB1	152.7	100.0	98.7	615768;618093
STX11	275.0	100.0	100.0	603552
STX16	126.7	100.0	98.6	603233
STX1B	163.2	100.0	100.0	616172
STXBP1	120.1	96.8	96.5	612164

STXBP2	104.1	82.1	79.7	613101
SUCLA2	66.1	94.3	86.6	612073
SUCLG1	122.6	99.9	99.8	245400
SUFU	153.1	100.0	100.0	155255;109400;617757
SUGCT	162.0	99.9	98.5	231690
SULT2B1	142.5	100.0	100.0	617571
SUMF1	104.0	97.5	90.8	272200
SUMO1	23.7	67.2	49.9	613705
SUN5	118.8	100.0	99.8	617187
SUOX	189.7	100.0	100.0	272300
SURF1	94.9	89.4	88.2	616684;256000
SVBP	142.9	100.0	100.0	618569
SYCE1	114.0	100.0	98.6	616947;616950
SYCP3	101.2	99.7	98.2	270960
SYN1	69.2	81.9	73.2	300491
SYNE1	146.5	98.3	98.0	618484;612998;610743
SYNE2	124.3	99.7	98.2	612999
SYNE4	88.0	99.7	97.0	615540
SYNGAP1	167.5	99.4	98.1	612621
SYNJ1	157.8	99.9	99.4	617389;615530
SYP	72.5	99.9	96.7	300802
SYT1	176.0	99.8	98.5	618218
SYT14	121.0	61.9	58.9	614229
SYT2	98.5	99.9	99.0	616040
SZT2	153.3	99.6	99.5	615476
T	138.6	99.4	96.9	615709
TAB2	212.6	100.0	99.7	614980
TAC3	79.3	100.0	99.6	614839
TACO1	96.1	98.4	93.0	220110
TACR3	150.3	100.0	100.0	614840

TACSTD2	214.8	99.0	96.4	204870
TAF1	108.9	99.8	97.7	300966;314250
TAF13	105.8	100.0	100.0	617432
TAF2	137.6	99.9	98.6	615599
TAF4B	142.6	97.4	93.1	615841
TAF6	141.1	99.8	98.9	617126
TAL1	54.1	87.1	73.1	613065
TAL2	146.0	100.0	100.0	613065
TALDO1	151.8	100.0	97.9	606003
TANGO2	133.1	100.0	99.3	616878
TAP1	108.6	100.0	99.2	604571
TAP2	108.6	99.9	99.3	604571
TAPBP	121.8	96.5	95.5	604571
TAPT1	111.4	91.7	86.9	616897
TARDBP	150.0	100.0	100.0	612069
TARS	129.2	99.9	98.1	618546
TARS2	107.1	100.0	99.3	615918
TAT	136.4	100.0	100.0	276600
TAZ	105.9	99.2	96.5	302060
TBC1D20	127.7	94.2	94.2	615663
TBC1D23	113.4	99.7	97.2	617695
TBC1D24	172.2	100.0	100.0	614617;616044;605021;608105;220500;615338
TBC1D7	127.2	100.0	99.3	248000
TBC1D8B	109.5	98.5	93.2	301028
TBCD	147.0	96.2	94.4	617193
TBCE	148.9	99.8	97.3	241410;244460;617207
TBCK	125.7	99.1	96.8	616900
TBK1	121.6	99.7	97.2	616439
TBL1X	123.1	97.5	92.1	301033
TBL1XR1	75.4	96.5	84.9	602342;616944

TBL1Y	41.6	49.4	45.3	400047
TBP	114.6	100.0	99.9	607136
TBR1	138.4	99.9	97.9	606053
TBX1	92.1	86.9	79.5	187500;217095;192430;188400
TBX15	113.0	100.0	99.9	260660
TBX18	99.5	99.5	97.1	143400
TBX19	185.4	100.0	100.0	201400
TBX2	132.9	99.9	97.5	618223
TBX20	120.7	100.0	99.7	611363
TBX21	108.2	95.4	86.6	208550
TBX22	142.6	99.2	95.7	302905;303400
TBX3	105.8	99.2	96.8	181450
TBX4	220.5	97.6	95.1	147891
TBX5	141.7	100.0	100.0	142900
TBX6	129.5	99.5	95.4	122600
TBXAS1	151.1	100.0	100.0	231095
TCAP	88.8	100.0	100.0	601954;607487
TCF12	155.4	100.0	99.9	615314
TCF20	152.7	100.0	100.0	618430
TCF3	96.2	97.1	94.0	616941
TCF4	132.4	100.0	99.8	613267;610954
TCHH	143.0	100.0	98.8	617252
TCIRG1	116.3	97.6	90.1	259700
TCN2	178.3	100.0	100.0	275350
TCOF1	123.4	99.7	98.6	154500
TCTEX1D2	140.7	100.0	100.0	617405
TCTN1	114.9	96.7	93.0	614173
TCTN2	149.2	100.0	99.5	616654;613885
TCTN3	136.4	100.0	100.0	614815;258860
TDGF1	157.7	99.9	96.7	-

TDP1	123.5	99.9	99.5	607250
TDP2	198.6	100.0	99.4	616949
TDRD7	162.3	99.9	99.1	613887
TDRD9	130.5	99.3	98.2	618110
TEAD1	157.5	100.0	99.9	108985
TECPR2	151.5	100.0	100.0	615031
TECR	121.5	100.0	98.9	614020
TECRL	91.2	96.3	89.3	614021
TECTA	179.6	100.0	99.9	603629;601543
TEK	191.8	100.0	100.0	617272;600195
TELO2	112.4	99.7	96.2	616954
TENM3	175.3	100.0	99.7	615145
TENM4	128.3	100.0	99.6	616736
TERC				127550
TET2	201.7	100.0	100.0	614286
TEX11	89.3	93.8	88.2	309120
TEX14	121.6	99.9	98.9	617707
TEX15	140.3	100.0	99.7	617960
TF	128.4	100.0	100.0	209300
TFAM	86.0	97.5	83.5	617156
TFAP2A	119.1	99.4	94.3	113620
TFAP2B	166.7	99.9	98.6	617035;169100
TFE3	92.4	99.3	94.2	300854
TFG	139.5	96.9	96.3	604484;615658
TFR2	120.0	99.1	97.8	604250
TFRC	166.7	100.0	99.8	616740
TG	137.4	100.0	99.4	274700
TGDS	108.6	99.4	96.8	616145
TGFB1	89.2	100.0	99.9	618213;131300
TGFB2	204.5	100.0	100.0	614816

TGFB3	160.1	100.0	100.0	107970;615582
TGFBI	134.7	99.5	94.6	602082;121820;608471;122200;607541;608470;121900
TGFBR1	181.8	93.7	93.6	609192
TGFBR2	171.6	100.0	100.0	610168;133239;614331
TGIF1	160.4	100.0	100.0	142946
TGM1	165.4	100.0	99.9	242300
TGM3	172.5	100.0	99.7	617251
TGM5	172.6	100.0	99.7	609796
TGM6	140.8	99.7	97.3	613908
TH	88.5	99.3	96.1	605407
THAP1	182.6	100.0	100.0	602629
THBD	139.3	100.0	99.7	614486
THOC2	98.9	98.8	93.7	300957
THOC6	259.4	100.0	100.0	613680
THPO	104.3	100.0	99.5	187950
THRA	180.7	100.0	99.6	614450
THRB	182.7	100.0	99.7	188570;274300;145650
TIA1	157.2	99.7	97.8	604454
TIMM50	129.7	98.3	94.4	617698
TIMM8A	58.8	98.0	90.1	304700
TIMMDC1	189.0	100.0	100.0	618251
TIMP3	145.1	100.0	100.0	136900
TINF2	187.5	100.0	100.0	613990;268130
TJP2	119.0	94.0	93.6	607748;615878
TK2	119.9	99.2	96.3	609560;617069
TKT	122.7	98.7	97.8	617044
TLE6	117.5	100.0	98.8	616814
TLK2	108.4	99.1	95.1	618050
TLL1	160.1	100.0	100.0	613087
TMC1	136.6	99.7	97.1	600974;606705

TMC6	90.0	100.0	99.3	226400
TMC8	125.7	100.0	98.7	618231
TMCO1	86.2	88.0	87.4	213980
TMEM106B	148.7	99.9	98.8	617964
TMEM107	155.1	100.0	100.0	617562;617563
TMEM126A	125.2	96.3	84.4	612989
TMEM126B	100.8	99.8	97.4	618250
TMEM132E	117.8	96.9	93.5	618481
TMEM138	95.1	100.0	99.1	614465
TMEM165	133.8	100.0	100.0	614727
TMEM173	115.6	99.7	95.3	615934
TMEM199	118.1	100.0	99.9	616829
TMEM216	114.4	99.9	98.1	603194;608091
TMEM231	106.4	100.0	99.6	615397;614970
TMEM237	141.7	100.0	99.9	614424
TMEM240	125.3	100.0	100.0	607454
TMEM260	139.5	97.5	93.4	617478
TMEM38B	112.2	100.0	99.9	615066
TMEM43	137.7	99.9	98.9	604400;614302
TMEM5	168.9	99.5	96.8	615041
TMEM67	96.9	99.5	95.0	607361;602152;613550;216360;610688
TMEM70	130.2	98.0	93.9	614052
TMEM94	174.3	100.0	100.0	618316
TMEM98	140.7	99.3	97.8	615972
TMIE	116.5	99.2	95.1	600971
TMPRSS15	127.9	98.5	95.2	226200
TMPRSS3	116.6	100.0	99.9	601072
TMPRSS6	113.0	99.9	99.1	206200
TMTC3	110.7	99.6	96.5	617255
TNC	158.0	100.0	99.8	615629

TNFAIP3	176.4	100.0	100.0	616744
TNFRSF10B	132.0	100.0	100.0	275355
TNFRSF11A	141.5	94.6	93.3	612301;174810
TNFRSF11B	229.1	100.0	100.0	239000
TNFRSF13B	106.3	100.0	100.0	240500;609529
TNFRSF13C	97.5	80.1	75.4	613494
TNFRSF1A	95.0	90.6	87.6	142680
TNFRSF4	66.3	99.4	95.4	615593
TNFSF11	156.7	100.0	99.9	259710
TNIK	136.4	100.0	99.3	617028
TNNC1	194.0	100.0	100.0	613243;611879
TNNI2	130.3	100.0	99.7	601680
TNNI3	139.2	99.7	95.2	115210;613690;611880;613286
TNNI3K	128.4	100.0	99.4	616117
TNNT1	107.6	99.9	97.6	605355
TNNT2	130.4	100.0	100.0	115195;612422;601494
TNNT3	150.9	100.0	99.7	618435
TNPO3	134.4	100.0	99.9	608423
TNRC6A	147.8	99.9	99.3	618074
TNXB	105.2	99.6	95.1	606408;615963
TOE1	170.4	100.0	100.0	614969
TONSL	108.8	99.8	97.8	271510
TOP1	106.1	99.9	98.6	-
TOP2A	146.1	100.0	99.3	-
TOP3A	132.1	100.0	98.7	618098;618097
TOPORS	202.2	100.0	100.0	609923
TOR1A	166.2	100.0	99.9	128100
TOR1AIP1	130.7	99.9	98.0	617072
TP53	113.9	99.9	97.7	114480;618165;260350;114550;151623;607107
TP53RK	50.7	92.5	79.6	617730

TP63	188.5	100.0	100.0	103285;604292;129400;603543;605289;618149;106260
TPI1	112.9	99.8	97.5	615512
TPK1	121.5	99.8	99.0	614458
TPM1	123.4	100.0	99.4	115196;611878
TPM2	110.8	100.0	100.0	609285;108120
TPM3	85.5	89.2	87.2	255310;609284
TPO	147.4	99.9	98.2	274500
TPP1	146.7	100.0	100.0	204500;609270
TPRKB	81.1	81.1	75.9	617731
TPRN	93.4	87.9	79.3	613307
TRAC	142.3	100.0	100.0	615387
TRAF3IP1	91.1	99.6	97.6	616629
TRAF3IP2	127.7	100.0	99.3	615527
TRAF7	162.0	100.0	99.8	618164
TRAIP	132.6	100.0	100.0	616777
TRAK1	169.7	100.0	99.6	618201
TRAPPC11	151.1	100.0	99.2	615356
TRAPPC12	162.6	100.0	99.6	617669
TRAPPC2	65.1	89.7	69.6	313400
TRAPPC2L	213.9	100.0	100.0	618331
TRAPPC6B	97.2	99.9	98.0	617862
TRAPPC9	144.1	100.0	99.6	613192
TRDN	92.1	96.2	86.6	615441
TREH	148.0	96.9	92.1	612119
TREM2	127.3	100.0	99.8	618193
TREX1	244.5	100.0	100.0	192315;225750;610448
TRHR	226.8	100.0	99.2	618573
TRIM2	164.9	93.9	93.3	615490
TRIM32	131.1	100.0	100.0	254110;615988
TRIM36	176.3	100.0	99.2	206500

TRIM37	141.7	98.6	98.1	253250
TRIM44	109.7	99.8	96.3	617142
TRIO	136.2	99.2	97.5	617061
TRIOBP	184.6	97.8	96.1	609823
TRIP11	94.5	98.4	94.0	184260;200600
TRIP12	166.8	99.9	99.2	617752
TRIP13	165.0	100.0	100.0	617598
TRIP4	124.2	100.0	99.1	617066;616866
TRIT1	133.0	100.0	100.0	617873
TRMT1	131.4	99.4	96.2	618302
TRMT10A	157.5	100.0	99.7	616033
TRMT10C	157.4	100.0	100.0	616974
TRMT5	217.7	100.0	99.3	616539
TRMU	103.5	100.0	100.0	613070
TRNT1	108.4	99.5	96.5	616084;616959
TRPA1	99.7	96.1	89.8	615040
TRPC3	146.8	99.7	98.0	616410
TRPC6	109.9	98.2	96.1	603965
TRPM1	151.0	100.0	99.8	613216
TRPM4	140.1	100.0	99.5	618531;604559
TRPM6	154.4	99.9	99.5	602014
TRPS1	190.7	100.0	99.9	190351;190350
TRPV3	137.8	99.8	98.5	614594;616400
TRPV4	158.6	100.0	99.9	168400;156530;617383;184095;113500;181405;600175;184252;606835;606071
TRPV6	156.4	100.0	99.5	618188
TRRAP	159.0	99.9	99.5	618454
TSC1	136.7	99.8	98.7	607341;606690;191100
TSC2	140.9	100.0	99.6	607341;606690;613254
TSEN15	96.7	99.8	97.5	617026
TSEN2	119.0	100.0	99.6	612389

TSEN34	74.9	90.8	86.4	612390
TSEN54	113.9	96.3	94.3	277470;225753;610204
TSFM	139.8	100.0	99.5	610505
TSGA10	142.2	99.9	99.1	617961
TSHB	285.2	100.0	100.0	275100
TSHR	179.3	99.9	99.3	275200;603373;609152
TSHZ1	155.0	98.8	98.8	607842
TSPAN12	164.0	100.0	99.8	613310
TSPAN7	134.2	100.0	100.0	300210
TSPEAR	159.3	100.0	99.2	614861;618180
TSPYL1	147.6	100.0	100.0	608800
TSR2	87.3	100.0	100.0	300946
TTBK2	134.6	99.8	97.6	604432
TTC19	89.7	81.5	73.8	615157
TTC21A	140.0	100.0	100.0	618429
TTC21B	148.8	99.9	99.3	613819;613820
TTC25	92.2	100.0	100.0	617092
TTC37	165.8	100.0	99.3	222470
TTC7A	121.3	99.3	95.4	243150
TTC8	135.1	99.6	98.1	613464;615985
TTI2	117.2	100.0	100.0	615541
TTLL5	167.0	100.0	99.7	615860
TTN	198.1	98.6	98.1	608807;611705;604145;603689;613765;600334
TTPA	129.1	94.7	87.1	277460
TTR	151.6	94.6	94.6	105210;115430
TUB	111.7	99.4	97.1	616188
TUBA1A	77.0	99.9	97.0	611603
TUBA3D	114.9	100.0	99.2	617928
TUBA4A	170.9	100.0	100.0	616208
TUBA8	154.8	99.9	99.5	613180

TUBB	125.1	97.3	93.9	156610;615771
TUBB1	163.4	100.0	100.0	613112
TUBB2A	65.8	97.0	95.7	615763
TUBB2B	65.7	100.0	99.5	610031
TUBB3	113.8	98.3	96.9	600638;614039
TUBB4A	76.9	95.9	94.0	128101;612438
TUBB4B	81.1	99.9	96.9	617879
TUBB6	76.8	90.6	90.1	617732
TUBB8	23.5	83.0	55.3	616780
TUBG1	178.8	100.0	100.0	615412
TUBGCP4	123.4	99.2	96.4	616335
TUBGCP6	157.8	100.0	99.3	251270
TUFM	158.0	100.0	99.0	610678
TULP1	134.3	100.0	99.5	600132;613843
TUSC3	190.4	100.0	99.5	611093
TWIST1	96.4	100.0	98.9	180750;123100;101400;617746
TWIST2	92.7	100.0	100.0	200110;227260;209885
TWNK	202.8	100.0	100.0	609286;271245;616138
TXN2	74.6	100.0	100.0	616811
TXNL4A	104.3	100.0	99.4	608572
TXNRD2	121.2	96.8	95.9	617825
TYK2	133.3	99.9	99.0	611521
TYMP	97.1	100.0	97.0	603041
TYR	164.5	100.0	100.0	103470;203100;606952
TYROBP	98.7	100.0	100.0	221770
TYRP1	183.7	100.0	99.8	203290
UBA1	142.9	99.4	98.2	301830
UBA5	93.7	97.8	86.8	617133;617132
UBAP1	151.0	98.8	93.4	618418
UBE2A	127.5	99.7	96.0	300860

UBE2T	109.4	100.0	99.9	616435
UBE3A	95.8	99.1	94.8	105830
UBE3B	133.5	100.0	99.9	244450
UBIAD1	250.0	99.5	96.0	121800
UBQLN2	123.7	100.0	99.4	300857
UBR1	143.8	99.9	99.1	243800
UBTF	129.1	100.0	99.4	617672
UCHL1	117.1	99.8	92.5	615491
UFC1	137.3	100.0	100.0	618076
UFM1	144.5	74.0	69.4	617899
UFSP2	173.0	100.0	99.6	617974;142669
UGT1A1	227.3	100.0	100.0	218800;237900;606785
UMOD	104.2	97.7	96.2	609886;603860;162000
UMPS	174.8	100.0	99.4	258900
UNC119	124.5	100.0	99.7	615518
UNC13D	106.2	99.7	98.1	608898
UNC45B	126.0	99.3	98.0	616279
UNC80	131.4	100.0	99.5	616801
UNG	124.8	100.0	98.8	608106
UPB1	160.9	100.0	100.0	613161
UPF3B	61.2	92.2	84.1	300676
UQCC2	114.9	100.0	99.7	615824
UQCC3	123.3	100.0	98.7	616111
UQCRB	117.8	99.4	95.1	615158
UQCRC2	133.3	99.9	99.3	615160
UQCRQ	146.8	100.0	100.0	615159
UROC1	149.7	100.0	100.0	276880
UROD	158.6	98.9	96.1	176100
UROS	125.6	100.0	99.9	263700
USB1	139.6	100.0	99.4	604173

USH1C	109.5	100.0	99.8	602092;276904
USH1G	161.0	99.6	97.9	606943
USH2A	156.7	100.0	99.8	613809;276901
USP18	185.6	95.9	95.9	617397
USP27X	187.6	100.0	100.0	300984
USP45	120.3	99.6	98.1	618513
USP8	78.2	96.9	87.8	219090
USP9X	109.6	98.2	92.9	300968;300919
USP9Y	32.2	48.6	43.2	415000
UVSSA	115.4	99.3	98.8	614640
VAC14	106.1	99.9	98.5	617054
VAMP1	153.2	100.0	100.0	108600;618323
VANGL1	192.8	100.0	100.0	600145
VANGL2	173.1	99.9	99.0	182940
VAPB	114.2	100.0	99.9	608627;182980
VAR5	131.4	100.0	99.9	617802
VAR52	139.2	100.0	99.4	615917
VAX1	97.2	97.5	91.5	614402
VCAN	180.4	100.0	100.0	143200
VCL	109.0	99.9	99.0	611407;613255
VCP	122.7	100.0	99.2	613954;616687;167320
VDR	123.0	99.9	99.0	277440
VEGFC	169.9	100.0	100.0	615907
VHL	141.3	96.3	91.4	193300;171300;144700;263400
VIM	121.9	99.3	97.0	116300
VIPAS39	133.8	100.0	100.0	613404
VKORC1	147.5	100.0	100.0	607473;122700
VLDLR	157.4	100.0	99.8	224050
VMA21	89.1	99.0	94.6	310440
VPS11	131.4	94.9	93.6	616683

VPS13A	92.6	99.4	95.6	200150
VPS13B	163.9	99.5	98.2	216550
VPS13C	132.4	99.4	96.9	616840
VPS13D	171.0	100.0	99.7	607317
VPS33A	120.6	97.3	95.7	617303
VPS33B	128.1	100.0	100.0	208085
VPS37A	70.6	91.3	78.2	614898
VPS45	155.6	99.2	95.6	615285
VPS51	85.7	95.0	83.2	618606
VPS53	133.5	91.5	90.7	615851
VRK1	156.9	99.7	98.5	607596
VSX1	69.0	84.7	80.5	614195;148300
VSX2	100.3	100.0	99.3	610092;610093
VWA3B	148.7	100.0	99.7	616948
VWF	107.9	99.8	98.6	193400;277480;613554
WAC	174.0	100.0	99.7	616708
WARS	121.4	99.8	98.3	617721
WARS2	140.8	100.0	99.4	617710
WAS	81.1	95.9	85.3	313900;300299;301000
WASHC4	130.6	99.1	95.5	615817
WASHC5	164.8	100.0	99.8	220210;603563
WBP2	101.9	100.0	99.7	617639
WDFY3	151.4	100.0	99.6	617520
WDPCP	122.2	98.2	94.4	615992;217085
WDR11	139.6	98.0	96.5	614858
WDR19	153.1	100.0	99.4	614376;614377;614378;616307
WDR26	119.5	99.0	96.6	617616
WDR34	116.2	100.0	99.6	615633
WDR35	172.4	99.8	98.9	613610;614091
WDR36	151.1	99.7	97.6	609887

WDR37	172.0	100.0	99.6	618652
WDR4	161.3	100.0	100.0	618346;618347
WDR45	77.0	96.4	89.7	300894
WDR45B	80.8	98.0	89.2	617977
WDR60	121.8	99.5	97.0	615503
WDR62	157.6	100.0	99.5	604317
WDR66	130.1	100.0	100.0	618152
WDR72	151.9	96.8	96.4	613211
WDR73	180.8	100.0	100.0	251300
WDR81	175.2	100.0	100.0	610185;617967
WEE2	119.0	100.0	99.6	617996
WFS1	194.8	100.0	99.9	600965;614296;116400;222300
WHRN	127.3	99.8	98.1	611383;607084
WIPF1	111.8	100.0	99.9	614493
WIPI2	133.7	100.0	99.3	618453
WISP3	140.6	100.0	100.0	208230
WNK1	156.2	99.9	99.6	614492;201300
WNK4	149.5	99.9	99.3	614491
WNT1	207.7	99.3	95.3	615220
WNT10A	118.7	100.0	99.4	224750;150400;257980
WNT10B	144.0	100.0	99.4	617073;225300
WNT2B	153.0	98.0	91.3	618168
WNT3	140.1	100.0	99.6	273395
WNT4	200.3	99.1	94.8	611812;158330
WNT5A	127.0	100.0	100.0	180700
WNT7A	184.0	100.0	100.0	228930;276820
WRAP53	187.5	100.0	100.0	613988
WRN	147.8	99.9	98.8	277700
WT1	83.5	99.9	98.3	194070;194080;608978;156240;136680;256370
WVOX	138.2	100.0	100.0	133239;616211;614322

XDH	110.6	100.0	99.9	278300
XIAP	100.4	93.0	88.8	300635
XIST				300087
XK	83.0	99.8	98.1	300842
XPA	83.7	99.6	95.6	278700
XPC	162.6	100.0	100.0	278720
XPNPEP3	124.2	100.0	100.0	613159
XPR1	152.8	100.0	99.9	616413
XRCC1	130.5	100.0	98.8	617633
XRCC2	205.8	99.8	97.4	617247
XRCC4	165.8	99.9	99.3	616541
XYLT1	148.0	97.4	89.6	615777
XYLT2	149.8	100.0	98.3	605822
YAP1	106.6	96.4	89.4	120433
YARS	131.1	100.0	99.9	608323
YARS2	194.6	100.0	99.8	613561
YME1L1	133.4	99.0	95.2	617302
YWHAG	212.8	100.0	100.0	617665
YY1	105.8	100.0	99.8	617557
YY1AP1	163.8	99.3	98.2	602531
ZAP70	166.6	100.0	99.3	269840;617006
ZBTB11	199.9	99.9	99.6	618383
ZBTB16	153.1	100.0	99.9	612447
ZBTB18	210.2	100.0	99.9	612337
ZBTB20	186.4	100.0	100.0	259050
ZBTB24	168.0	100.0	100.0	614069
ZBTB42	121.3	100.0	100.0	616248
ZC3H14	181.4	99.9	98.9	617125
ZC4H2	87.8	100.0	99.0	314580
ZDHHC9	60.1	99.9	93.8	300799

ZEB1	170.5	100.0	99.4	613270;609141
ZEB2	158.7	99.9	99.1	235730
ZFHX2	134.8	100.0	99.6	147430
ZFHX3	131.0	100.0	99.6	176807
ZFP57	129.1	100.0	99.8	601410
ZFPM2	181.3	100.0	100.0	610187;616067;187500
ZFYVE26	116.7	100.0	99.1	270700
ZFYVE27	122.0	100.0	100.0	610244
ZIC1	219.9	100.0	100.0	616602
ZIC2	110.1	100.0	98.7	609637
ZIC3	129.6	100.0	99.9	306955;314390
ZMPSTE24	155.1	100.0	99.9	275210;608612
ZMYND10	120.3	100.0	100.0	615444
ZMYND11	147.7	100.0	99.6	616083
ZMYND15	162.0	100.0	99.4	615842
ZNF141	153.9	100.0	100.0	615226
ZNF142	136.1	100.0	99.9	618425
ZNF148	187.7	99.9	99.6	617260
ZNF335	137.1	100.0	99.9	615095
ZNF341	129.4	97.2	95.0	618282
ZNF408	147.0	100.0	100.0	616468;616469
ZNF423	195.9	100.0	100.0	614844
ZNF462	195.9	100.0	99.9	618619
ZNF469	154.6	100.0	100.0	229200
ZNF513	142.5	100.0	100.0	613617
ZNF644	178.6	100.0	100.0	614167
ZNF687	176.3	100.0	100.0	616833
ZNF711	127.7	99.8	98.2	300803
ZNF750	182.0	100.0	100.0	610227
ZNHIT3	145.8	74.4	74.4	260565

ZP1	202.3	100.0	100.0	615774
ZP2	131.6	99.8	98.4	618353
ZP3	168.1	100.0	100.0	617712
ZSWIM6	142.4	95.5	91.9	603671;617865

Gene symbols used follow HGCN guidelines: Gray KA, Yates B, Seal RL, Wright MW, Bruford EA. Nucleic Acids Res. 2015 Jan;43(Database issue):D1079-85.

Median Coverage describes the average number of reads seen across 50 exomes.

% Covered 10x describes the percentage of a gene's coding sequence that is covered at least 10x.

% Covered 20x describes the percentage of a gene's coding sequence that is covered at least 20x.

Genes with Median Coverage and % Covered 10x/20x denoting NC are non-coding genes for which coverage statistics could not be generated.

OMIM release used for OMIM disease identifiers and descriptions : October 1st, 2016.

Ad 1. "No OMIM phenotype" signifies a gene without a current OMIM association Ad 2. OMIM phenotype descriptions between {} signify risk factors