

WES MENDELIAN INHERITED DISORDERS DG 2.16

<i>Gene</i>	<i>Median coverage</i>	<i>% covered >10x</i>	<i>% covered >20x</i>	<i>OMIM disease ID</i>
A4GALT	176.9	100.0	100.0	111400
AAAS	102.3	100.0	99.6	231550
AAGAB	134.7	99.9	99.8	148600
AARS	103.7	100.0	99.5	6163;613287
AARS2	122.7	100.0	99.8	614096;6159
AASS	131.5	99.9	99.4	238700
ABAT	83.2	99.9	98.3	613163
ABCA1	97.0	99.9	98.4	205400;6041
ABCA12	129.3	99.6	98.4	242500;6013
ABCA3	119.4	100.0	99.5	610921
ABCA4	104.5	99.9	98.9	248200;601718;604116
ABCA5	73.9	98.2	91.7	135400
ABCB11	134.9	100.0	99.2	6055;601847
ABCB4	123.3	99.9	99.2	600803;614972;602347
ABCB6	127.9	100.0	99.9	609153;614497;615402
ABCB7	126.2	99.9	98.6	301310
ABCC2	110.7	100.0	99.8	237500
ABCC6	109.1	93.6	92.8	614473;264800;177850
ABCC8	125.8	100.0	99.9	125853;610374;606176;256450;240800
ABCC9	142.6	100.0	99.7	239850;614050;608569
ABCD1	87.4	77.2	75.0	300100
ABCD3	108.1	99.5	97.3	616278
ABCD4	129.0	99.8	98.4	614857
ABCG5	139.5	100.0	99.9	210250
ABCG8	133.9	99.7	98.2	210250

ABHD12	93.1	100.0	98.9	612674
ABHD5	180.9	100.0	100.0	275630
ABL1	155.2	100.0	99.9	617602
ACAD8	122.1	100.0	99.9	611283
ACAD9	124.3	99.9	99.1	611126
ACADM	129.5	99.8	99.2	201450
ACADS	148.2	100.0	100.0	201470
ACADSB	113.1	99.9	97.3	610006
ACADVL	115.8	99.8	98.0	201475
ACAN	121.3	94.6	89.1	608361;165800;612813
ACAT1	110.2	99.7	98.3	203750
ACD	159.6	100.0	100.0	616553
ACE	120.1	99.9	99.5	267430
ACER3	115.7	99.6	98.9	617762
ACO2	115.3	95.8	89.5	614559;6163
ACOX1	123.7	100.0	100.0	264470
ACOX2	111.0	100.0	99.3	617308
ACP4	91.2	96.8	88.5	617297
ACP5	172.6	100.0	99.6	607944
ACSF3	145.8	99.9	99.1	614265
ACSL4	102.8	98.6	93.5	300387
ACSL6	106.0	99.4	97.7	-
ACTA1	95.3	99.8	97.9	161800;255310;616852
ACTA2	87.3	99.9	98.6	613834;614042;611788
ACTB	80.5	100.0	99.7	243310;6074
ACTC1	111.1	100.0	98.9	612794;612098;613424
ACTG1	116.3	100.0	100.0	604717;6146
ACTG2	97.3	99.3	96.0	155310
ACTN1	131.5	100.0	100.0	615193
ACTN2	128.9	100.0	100.0	612158

ACTN4	130.5	100.0	99.9	603278
ACVR1	136.9	100.0	99.9	135100
ACVR1B	137.8	100.0	99.4	-
ACVR2B	115.6	99.7	97.0	613751
ACVRL1	113.6	100.0	98.4	600376
ACY1	118.5	100.0	98.6	609924
ADA	104.6	100.0	99.6	102700
ADA2	83.5	99.9	97.6	182410;6157
ADAM10	121.4	94.8	93.4	615537
ADAM17	119.0	99.8	98.6	614328
ADAM22	133.9	99.9	99.4	617933
ADAM9	141.3	99.9	99.0	612775
ADAMTS10	122.8	100.0	99.8	277600
ADAMTS13	103.8	98.1	95.2	274150
ADAMTS17	109.2	97.6	92.3	613195
ADAMTS18	129.7	100.0	99.9	615458
ADAMTS2	126.3	100.0	99.6	225410
ADAMTS3	136.6	100.0	99.8	618154
ADAMTSL2	115.9	99.0	96.3	231050
ADAMTSL4	122.7	100.0	99.6	225100;2252
ADAR	109.2	99.9	99.3	127400;615
ADAT3	128.0	100.0	99.9	615286
ADCY1	134.5	96.8	95.4	610154
ADCY5	131.8	97.8	94.7	606703
ADCY6	162.8	100.0	100.0	616287
ADD3	143.5	99.9	99.6	617008
ADGRE2	137.9	96.6	96.1	125630
ADGRG1	147.2	100.0	100.0	6158;606854
ADGRG2	82.7	97.7	90.9	300985
ADGRG6	135.7	99.8	98.7	616503

ADGRV1	126.0	99.7	98.4	6055;604352
ADIPOQ	121.1	100.0	100.0	612556
ADK	102.4	99.8	98.0	614300
ADNP	190.5	100.0	100.0	615873
ADPRHL2	163.8	100.0	100.0	618170
ADRA2B	214.3	100.0	100.0	607876
ADRB2	103.1	100.0	100.0	-
ADSL	138.6	99.2	98.6	103050
ADSSL1	110.7	95.5	87.9	617030
AEBP1	147.7	100.0	100.0	618000
AFF2	107.8	99.8	98.8	309548
AFF4	99.8	99.9	99.0	616368
AFG3L2	98.3	95.9	86.1	610246;6145
AFP	106.7	97.2	90.6	615969
AGA	142.7	100.0	100.0	208400
AGBL1	106.4	98.5	98.4	615523
AGBL5	104.9	100.0	99.4	617023
AGK	108.5	99.5	95.7	212350;6147
AGL	146.9	100.0	99.4	232400
AGPAT2	162.6	99.1	94.8	608594
AGPS	75.4	99.5	97.8	600121
AGRN	151.6	98.4	94.5	615120
AGT	192.1	100.0	100.0	267430
AGTPBP1	116.9	98.7	95.1	618276
AGTR1	143.6	91.9	91.6	267430
AGXT	160.8	100.0	100.0	259900
AHCY	111.6	99.9	97.7	613752
AHDC1	148.5	99.7	98.3	615829
AHI1	129.8	99.7	98.3	608629
AHR	184.0	100.0	99.6	618345

AHSG	160.8	100.0	99.8	203650
AICDA	128.4	100.0	99.5	605258
AIFM1	90.0	99.8	96.7	300614;300816;310490
AIMP1	79.4	99.1	92.4	260600
AIMP2	117.6	96.1	89.3	618006
AIP	137.2	100.0	99.6	102200
AIPL1	113.0	100.0	99.9	604393
AIRE	102.3	100.0	99.9	240300
AK1	136.9	100.0	99.9	612631
AK2	96.1	98.7	94.4	267500
AK7	113.7	99.7	96.8	617965
AKAP9	98.4	99.1	96.7	611820
AKR1C2	135.8	94.9	87.9	614279
AKR1D1	91.5	99.6	95.7	235555
AKT1	152.6	100.0	99.4	114480;615109;114500;176920;167000
AKT2	162.7	100.0	99.8	125853;2409
AKT3	82.3	99.2	94.2	615937
ALAD	94.9	99.5	94.7	612740
ALAS2	74.7	98.9	94.7	300751;3008
ALB	156.5	100.0	99.2	616000
ALDH18A1	113.7	100.0	99.8	601162;616586;219150;616603
ALDH1A3	102.4	99.7	97.0	615113
ALDH2	126.5	100.0	100.0	610251
ALDH3A2	113.5	95.3	94.3	270200
ALDH4A1	123.9	100.0	99.8	239510
ALDH5A1	91.0	99.3	93.2	271980
ALDH6A1	104.9	100.0	99.6	614105
ALDH7A1	66.7	93.5	86.1	266100
ALDOA	120.4	76.5	74.5	611881
ALDOB	135.3	100.0	99.3	229600

ALG1	46.5	53.2	50.2	608540
ALG11	129.3	96.8	96.3	613661
ALG12	155.7	100.0	99.9	607143
ALG13	77.3	98.5	92.1	300884
ALG14	199.4	100.0	100.0	616227
ALG2	103.2	100.0	100.0	607906;6162
ALG3	106.5	100.0	99.9	601110
ALG6	101.6	99.1	95.6	603147
ALG8	118.5	96.6	96.2	608104;6179
ALG9	113.0	100.0	99.6	263210;6088
ALMS1	172.8	100.0	99.7	203800
ALOX12B	125.6	100.0	99.8	242100
ALOXE3	124.7	100.0	99.4	606545
ALPK3	113.9	99.4	97.2	618052
ALPL	154.8	100.0	99.7	241500;146300;241510
ALS2	145.1	100.0	99.8	205100;606353;607225
ALX1	134.2	99.9	98.5	613456
ALX3	134.6	91.1	79.0	136760
ALX4	157.1	100.0	100.0	609597;6135
AMACR	157.7	100.0	100.0	214950;6143
AMBN	175.1	99.3	97.1	616270
AMELX	85.7	98.9	93.5	301200
AMER1	98.2	99.8	98.9	300373
AMH	82.2	99.9	98.2	261550
AMHR2	143.2	100.0	99.4	261550
AMMECR1	97.4	99.8	98.9	300990
AMN	101.5	98.1	90.6	261100
AMPD1	115.8	99.9	98.6	615511
AMPD2	132.3	100.0	99.9	6158;615686
AMT	142.7	100.0	100.0	605899

AMTN	119.3	100.0	99.1	617607
ANG	154.1	100.0	100.0	611895
ANGPTL3	94.0	99.2	95.9	605019
ANGPTL4	125.5	100.0	98.0	615881
ANK1	132.5	100.0	99.3	182900
ANK2	139.5	100.0	100.0	600919
ANK3	139.9	99.4	99.0	615493
ANKH	111.6	100.0	99.9	123;118600
ANKLE2	144.7	100.0	99.8	616681
ANKRD11	119.6	99.2	97.1	148050
ANKRD26	83.3	95.3	90.1	188000
ANKS6	94.2	98.3	94.4	615382
ANLN	140.7	98.7	97.7	616032
ANO10	106.0	98.9	96.3	613728
ANO3	118.3	99.5	97.7	615034
ANO5	131.0	99.6	97.3	613319;166260;611307
ANO6	133.3	99.8	98.0	262890
ANOS1	76.7	91.7	88.0	308700
ANTXR1	108.3	99.0	96.9	230740
ANTXR2	119.3	99.9	98.6	228600
ANXA11	86.8	99.9	98.4	617839
AP1S1	101.0	100.0	99.8	609313
AP1S2	55.0	75.3	68.6	304340
AP2S1	110.7	90.4	89.8	600740
AP3B1	112.1	99.5	96.5	608233
AP3B2	125.6	99.4	97.6	617276
AP3D1	125.2	98.4	97.9	617050
AP4B1	121.0	99.9	98.4	614066
AP4E1	106.6	99.8	98.8	6137;184450
AP4M1	129.3	99.7	98.1	612936

AP4S1	66.2	78.5	71.3	614067
AP5Z1	121.3	100.0	100.0	613647
APC	141.4	99.9	99.6	135290;613659;114550;114500;175100
APC2	122.4	99.9	98.7	617169
APCDD1	171.4	100.0	99.3	605389
APOA1	140.5	100.0	100.0	105200;6041
APOA2	86.4	87.4	81.4	-
APOA5	187.8	100.0	100.0	144650
APOB	154.7	100.0	99.7	6156;144010
APOC2	103.7	100.0	100.0	207750
APOC3	97.3	100.0	100.0	614028
APOE	83.3	100.0	99.9	269600;611771;104310;617347
APOPT1	78.3	82.0	81.5	220110
APP	107.1	100.0	99.8	104300;6057
APRT	93.2	100.0	100.0	614723
APTX	96.3	94.1	91.3	208920
AQP2	126.1	100.0	99.9	125800
AQP5	122.4	100.0	99.5	600231
AR	90.8	98.1	93.7	300633;313200;300068;312300
ARCN1	141.9	96.7	96.6	617164
ARF1	165.2	100.0	100.0	618185
ARFGEF2	125.2	99.7	98.7	608097
ARG1	159.1	100.0	100.0	207800
ARHGAP26	125.3	99.9	99.6	607785
ARHGAP31	141.4	99.8	98.7	100300
ARHGDI1	202.4	100.0	100.0	615244
ARHGEF10	119.5	99.8	98.1	608236
ARHGEF18	140.4	99.5	97.3	617433
ARHGEF2	113.5	100.0	99.8	617523
ARHGEF9	51.5	76.1	71.3	300607

ARID1A	134.4	99.4	98.4	614607
ARID1B	139.6	99.5	99.2	135900
ARID2	156.4	99.8	98.5	617808
ARL13B	102.2	100.0	99.4	612291
ARL2BP	63.8	92.4	83.1	615434
ARL3	73.5	99.8	95.7	6182;618161
ARL6	100.3	99.8	98.2	600151;6136
ARL6IP1	62.7	94.8	76.6	615685
ARMC4	107.2	94.4	93.5	615451
ARMC5	170.0	100.0	99.6	615954
ARMC9	124.8	100.0	99.3	617622
ARNT2	120.9	100.0	100.0	615926
ARPC1B	139.6	100.0	100.0	617718
ARR3	83.7	99.9	99.2	301010
ARSA	138.5	100.0	100.0	250100
ARSB	109.4	99.9	98.9	253200
ARSE	80.5	97.9	89.2	302950
ARSG	113.1	99.9	98.6	618144
ARV1	108.9	100.0	99.2	617020
ARX	49.3	87.3	79.2	300215;300004;308350;300419;309510
ASAH1	125.7	99.3	97.2	228;159950
ASB10	106.0	99.8	97.4	603383
ASCC1	125.4	95.7	92.0	6169;614266
ASCL1	297.3	100.0	100.0	209880
ASH1L	143.7	98.7	98.5	617796
ASL	123.6	100.0	98.5	207900
ASNS	82.8	98.6	92.2	615574
ASPA	116.1	99.7	96.9	271900
ASPH	111.3	99.9	98.8	601552
ASPM	111.6	99.7	98.0	608716

ASPSCR1	123.0	100.0	99.8	606243
ASS1	97.4	95.0	87.1	215700
ASXL1	132.4	100.0	99.5	6143;605039
ASXL2	140.9	99.7	98.8	617190
ASXL3	138.1	99.7	99.1	615485
ATAD1	65.2	99.3	89.8	618011
ATAD3A	90.3	93.6	87.5	617183
ATCAY	152.7	100.0	99.7	601238
ATF6	125.2	100.0	99.3	616517
ATG5	126.9	99.1	97.0	617584
ATIC	113.9	100.0	99.7	608688
ATL1	134.7	99.9	99.0	182600;6137
ATL3	115.4	99.8	97.7	615632
ATM	110.9	99.6	97.2	208900
ATN1	155.1	99.9	99.1	125370
ATOH7	176.2	98.6	97.0	221900
ATP11C	77.0	98.6	92.3	301015
ATP13A2	134.1	99.9	99.7	606693;6172
ATP1A1	111.1	100.0	99.6	618036;6183
ATP1A2	161.7	100.0	99.5	6025;104290
ATP1A3	159.8	100.0	100.0	601338;128235;614820
ATP2A1	146.4	100.0	100.0	601003
ATP2A2	143.2	100.0	99.8	1242;101900
ATP2B3	123.0	99.6	97.5	302500
ATP2C1	111.6	99.9	99.3	169600
ATP5A1	71.5	93.9	85.4	616;615228
ATP5D	101.3	97.5	90.8	618120
ATP5E	145.8	100.0	100.0	614053
ATP6AP1	105.6	99.8	96.9	300972
ATP6AP2	44.9	88.4	64.2	300423;3009

ATP6V0A2	117.4	99.9	99.0	219200;2783
ATP6V0A4	105.4	100.0	99.2	602722
ATP6V1A	133.4	99.6	97.3	617403;618
ATP6V1B1	172.2	100.0	100.0	267300
ATP6V1B2	120.3	100.0	99.1	6165;124480
ATP6V1E1	66.5	92.3	85.9	617402
ATP7A	111.2	99.5	96.7	300489;304150;309400
ATP7B	128.7	99.9	99.1	277900
ATP8A2	115.2	99.9	99.5	615268
ATP8B1	114.0	97.5	94.6	243300;147480;211600
ATPAF2	103.5	100.0	100.0	604273
ATR	144.6	99.8	98.6	6146;210600
ATRX	89.2	99.1	95.5	300448;309580;301040
ATXN1	170.2	100.0	100.0	164400
ATXN10	133.9	99.9	99.8	603516
ATXN2	83.1	94.3	89.9	183090
ATXN3	90.5	92.6	87.9	109150
ATXN7	110.9	99.5	98.0	164500
ATXN8OS				608768
AUH	127.0	100.0	99.7	250950
AURKC	69.1	99.7	94.3	243060
AUTS2	130.6	99.5	97.7	615834
AVP	65.2	98.2	83.8	125700
AVPR2	133.1	100.0	99.8	3048;300539
AXIN1	140.8	99.7	98.3	114550;6079
AXIN2	124.2	100.0	99.9	6086;114500
B2M	198.9	100.0	99.8	2416;105200
B3GALNT2	93.9	92.9	91.0	615181
B3GALT6	81.7	82.6	77.6	6153;271640
B3GAT3	121.0	99.6	96.5	245600

B3GLCT	96.6	99.7	99.1	261540
B4GALNT1	151.2	99.8	97.9	609195
B4GALT1	112.2	99.8	97.7	607091
B4GALT7	123.9	99.8	98.1	130070
B4GAT1	136.9	100.0	100.0	615287
B9D1	103.7	92.2	92.1	614209;6171
B9D2	105.8	100.0	100.0	614175
BAAT	103.0	99.8	97.3	607748
BACH2	159.0	100.0	99.8	618394
BAG3	171.4	100.0	99.9	6139;612954
BANF1	51.1	96.6	84.1	614008
BAP1	104.8	85.0	82.9	614327
BAX	108.4	100.0	97.9	6131;114500
BBIP1	119.7	97.3	90.3	615995
BBS1	146.4	100.0	100.0	209900
BBS10	158.1	100.0	99.9	615987
BBS12	187.1	100.0	100.0	615989
BBS2	150.7	99.9	99.6	6166;615981
BBS4	110.2	99.9	99.2	615982
BBS5	98.5	98.0	93.3	615983
BBS7	142.9	99.1	96.5	615984
BBS9	113.6	98.6	94.4	615986
BCAP31	73.4	93.2	78.3	300475
BCHE	179.2	100.0	100.0	617936
BCKDHA	176.9	100.0	99.8	248600
BCKDHB	123.3	98.6	92.8	248600
BCKDK	203.5	100.0	100.0	614923
BCL10	126.9	100.0	100.0	137245;6161
BCL11A	145.5	99.5	98.0	617101
BCL11B	127.4	99.9	98.0	617237;6181

BCL2	204.0	100.0	100.0	-
BCL7A	152.5	100.0	100.0	-
BCO1	129.2	100.0	100.0	115300
BCOR	102.7	98.8	95.3	300166
BCR	129.8	86.8	84.5	6131;608232
BCS1L	147.9	100.0	100.0	262000;124000;256000;603358
BDP1	135.3	98.2	94.3	618257
BEAN1	144.0	99.9	97.5	117210
BEST1	127.2	99.6	97.1	611809;613194;153700;193220
BFSP1	100.1	100.0	99.1	611391
BFSP2	99.3	99.9	98.2	611597
BGN	135.9	100.0	99.8	301;300106
BHLHA9	33.5	94.5	73.0	6094;607539
BICD2	150.5	100.0	99.6	615290;6183
BIN1	113.4	99.9	98.4	255200
BLK	127.9	100.0	100.0	613375
BLM	111.0	99.6	98.0	210900
BLNK	91.4	97.0	93.1	613502
BLOC1S3	67.4	100.0	99.9	614077
BLOC1S6	101.1	99.2	95.1	614171
BLVRA	111.9	100.0	99.9	614156
BMP1	152.7	100.0	100.0	614856
BMP15	94.3	99.9	97.9	300510
BMP2	163.4	100.0	100.0	112600;6179
BMP4	173.4	100.0	100.0	600625;6079
BMPER	127.1	100.0	99.5	608022
BMPR1A	78.2	99.5	92.9	6101;174900
BMPR1B	139.4	100.0	100.0	112600;616849;609441
BMPR2	153.7	99.9	99.9	2655;178600
BMS1	76.4	66.8	65.6	107600

BOLA3	48.1	99.9	92.5	614299
BPGM	101.3	100.0	100.0	222800
BPTF	143.6	96.3	94.6	617755
BRAF	72.5	92.4	80.2	211980;613706;613707;115150
BRAT1	142.0	100.0	99.3	614498;6181
BRCA1	161.4	99.1	98.1	617883
BRCA2	106.2	99.6	98.7	194070;6057
BRDT	107.1	97.2	92.1	617644
BRF1	109.0	99.8	98.1	616202
BRIP1	125.8	99.7	98.8	609054
BRPF1	161.5	100.0	100.0	617333
BRWD3	106.4	99.2	95.6	300659
BSCL2	105.2	100.0	100.0	615924;269700;270685;600794
BSND	139.4	100.0	99.9	602522
BTD	126.6	99.9	99.7	253260
BTK	98.0	99.9	99.0	300755;3072
BUB1	126.2	99.9	98.6	-
BUB1B	122.0	99.8	98.7	2573;114500
BVES	112.6	99.7	98.5	616812
C11orf70	85.4	99.6	97.1	618063
C12orf4	128.2	99.9	99.3	618221
C12orf57	145.6	100.0	100.0	218340
C12orf65	110.4	100.0	99.6	613559;615
C15orf41	122.0	100.0	99.6	615631
C19orf12	104.2	100.0	99.8	614298;615
C19orf70	79.3	99.9	99.1	618329
C1GALT1C1	139.9	100.0	99.0	300622
C1QA	196.1	100.0	100.0	613652
C1QB	161.5	100.0	100.0	613652
C1QBP	66.7	91.9	79.5	617713

C1QC	187.0	100.0	99.6	613652
C1QTNF5	154.2	97.2	90.6	605670
C1R	151.0	100.0	100.0	130080
C1S	96.8	99.8	97.8	613783;6172
C2	126.3	100.0	100.0	217000
C21orf2	130.3	100.0	98.8	6175;602271
C21orf59	139.8	99.6	96.2	615500
C2CD3	116.9	95.8	95.2	615948
C2orf71	116.6	99.9	99.0	613428
C3	141.6	100.0	99.4	613779
C4A	86.4	98.5	96.1	614380
C4B	83.0	98.7	96.6	614379
C4orf26	206.1	100.0	100.0	614832
C5	120.9	99.5	97.7	609536
C5orf42	124.5	99.8	98.0	6146;277170
C6	139.1	100.0	99.6	612446
C7	113.1	99.7	97.3	610102
C7orf43	144.4	100.0	99.8	618351
C8A	105.6	100.0	99.4	613790
C8B	105.6	99.9	98.7	613789
C8orf37	144.1	99.8	99.4	6174;614500
C9	121.0	99.9	99.3	613825
C9orf72	97.2	99.5	96.8	105550
CA12	100.7	100.0	100.0	143860
CA2	137.4	100.0	99.9	259730
CA4	162.1	100.0	100.0	600852
CA5A	93.2	99.6	95.7	615751
CA8	107.5	99.7	97.6	613227
CABP2	76.6	78.5	71.0	614899
CABP4	148.3	100.0	100.0	610427

CACNA1A	92.4	97.8	94.7	108500;141500;183086;617106
CACNA1B	134.4	99.3	97.3	614860
CACNA1C	141.0	99.9	99.1	6119;601005
CACNA1D	127.4	98.0	97.7	6155;614896
CACNA1E	120.9	99.8	99.2	618285
CACNA1F	84.9	99.8	97.1	300600;300476;300071
CACNA1G	148.6	100.0	99.8	616795;6181
CACNA1H	139.3	99.4	98.1	617027
CACNA1S	120.9	100.0	99.7	170400
CACNA2D4	95.9	99.0	97.1	610478
CACNB2	130.1	99.9	99.2	611876
CACNB4	97.8	97.2	95.5	613855
CACNG2	113.7	100.0	99.4	614256
CAD	136.7	99.9	99.2	616457
CALM1	95.8	99.9	97.8	614916;6162
CALM2	44.0	66.7	61.3	616249
CALR	111.8	98.1	91.7	2545;187950
CAMK2A	117.3	100.0	99.8	617798;6181
CAMK2B	111.8	100.0	100.0	617799
CAMTA1	179.5	100.0	99.7	614756
CANT1	144.9	100.0	100.0	6177;251450
CAPN1	162.5	100.0	100.0	616907
CAPN3	98.3	99.2	97.0	253600;6181
CAPN5	153.6	100.0	99.8	193235
CARD11	138.2	100.0	99.6	616452;617638;615206
CARD14	124.5	100.0	99.2	6027;173200
CARD9	133.2	100.0	99.5	212050
CARMIL2	137.3	98.4	96.6	618131
CARS2	128.2	100.0	100.0	616672
CASK	85.1	99.5	94.5	300422;3007

CASP10	106.2	99.8	98.2	613659;605027;603909
CASP14	85.8	100.0	99.9	617320
CASP8	128.1	95.6	95.2	114550;6073
CASQ1	93.5	99.8	98.2	616231
CASQ2	113.5	100.0	99.1	611938
CASR	154.3	100.0	99.7	239200;601198;145980
CAST	112.4	99.8	97.1	616295
CAT	136.9	100.0	100.0	614097
CATSPER1	115.6	100.0	99.6	612997
CAV1	189.3	100.0	100.0	606721;615343;612526
CAV3	220.8	100.0	100.0	192600;611818;123320;614321;606072
CAVIN1	174.1	100.0	100.0	613327
CBL	126.0	97.3	97.0	607785;6136
CBS	123.3	99.9	99.0	236200
CBX2	149.7	100.0	100.0	613080
CC2D1A	135.0	100.0	99.5	608443
CC2D2A	111.7	99.0	97.1	612285;216360;612284
CCBE1	75.3	99.8	99.1	235510
CCDC103	116.2	100.0	99.8	614679
CCDC114	134.1	100.0	99.8	615067
CCDC115	77.9	88.9	87.1	616828
CCDC151	127.2	100.0	100.0	616037
CCDC174	120.5	99.7	97.5	616816
CCDC22	97.5	98.8	94.5	300963
CCDC39	86.7	99.4	96.8	613807
CCDC40	112.0	99.4	98.4	613808
CCDC47	143.9	99.5	96.6	618268
CCDC50	122.1	100.0	99.7	607453
CCDC65	80.3	99.6	97.1	615504
CCDC78	135.9	100.0	100.0	614807

CCDC8	186.9	100.0	100.0	614205
CCDC88A	92.8	99.3	96.7	617507
CCDC88C	108.2	100.0	99.4	236600;6161
CCM2	133.4	99.2	97.9	603284
CCND2	135.7	100.0	100.0	615938
CCNK	86.8	90.6	87.0	618147
CCNO	130.9	100.0	99.8	615872
CCT5	117.9	99.9	98.9	256840
CD151	122.2	100.0	100.0	609057
CD164	121.8	99.0	94.5	616969
CD19	108.8	100.0	99.9	613493
CD247	95.5	100.0	99.5	610163
CD27	105.3	100.0	100.0	615122
CD2AP	121.7	99.7	98.3	607832
CD320	113.9	100.0	99.9	613646
CD36	119.8	99.7	99.1	608404
CD3D	138.9	100.0	99.9	615617
CD3E	125.9	100.0	98.9	615615
CD3G	136.6	100.0	100.0	615607
CD4	120.5	100.0	99.6	613949
CD40	147.8	100.0	99.9	606843
CD40LG	109.6	97.2	87.3	308230
CD55	134.6	95.5	90.4	226300
CD59	149.6	93.5	85.8	612300
CD70	109.0	100.0	99.2	618261
CD79A	133.5	100.0	99.3	613501
CD79B	194.3	100.0	100.0	612692
CD81	158.3	100.0	100.0	613496
CD8A	150.8	100.0	99.9	608957
CD96	140.9	99.9	99.4	211750

CDAN1	112.4	100.0	99.6	224120
CDC14A	150.1	99.6	97.4	608653
CDC42	90.2	97.6	89.1	616737
CDC45	138.9	99.6	98.1	617063
CDC6	139.4	99.9	99.8	613805
CDC73	113.6	99.9	98.8	608266;145001;145000
CDCA7	112.0	100.0	99.5	616910
CDH1	104.5	99.2	99.0	137215;608089;119580;167000
CDH11	126.5	100.0	100.0	211380
CDH15	157.7	100.0	99.8	612580
CDH23	172.7	100.0	100.0	6014;601067
CDH3	140.5	100.0	99.8	6016;225280
CDHR1	143.6	99.9	99.0	613660
CDK10	131.3	100.0	100.0	617694
CDK13	126.5	99.9	98.2	617360
CDK5	107.2	100.0	99.8	616342
CDK5RAP2	107.0	99.8	98.8	604804
CDK6	110.0	99.6	97.4	616080
CDKL5	100.0	95.1	93.1	300672
CDKN1B	151.5	99.9	99.4	610755
CDKN1C	100.1	89.8	81.7	130650;6147
CDKN2A	121.7	92.3	92.3	6067;155755
CDON	107.0	100.0	99.0	614226
CDSN	131.0	100.0	100.0	146520;2703
CDT1	130.9	100.0	99.9	613804
CEACAM16	130.5	100.0	100.0	614614;6184
CEBPA	139.8	99.9	99.1	601626
CEBPE	99.1	100.0	99.9	245480
CEL	146.5	94.0	90.4	609812
CENPE	76.6	98.5	93.2	616051

CENPF	139.9	99.8	98.7	243605
CENPJ	136.0	99.9	99.2	6137;608393
CEP104	104.0	99.3	97.5	616781
CEP120	131.7	100.0	99.4	6178;616300
CEP135	89.9	98.8	92.6	614673
CEP152	144.4	99.7	98.2	613823;6149
CEP164	89.3	99.8	98.0	614845
CEP19	181.7	100.0	100.0	615703
CEP250	99.8	99.9	98.8	618358
CEP290	82.6	97.3	91.7	610188;610189;611134;615991;611755
CEP41	78.2	98.9	94.4	614464
CEP55	124.5	100.0	100.0	236500
CEP57	85.1	98.7	91.6	614114
CEP63	120.8	98.2	94.7	614728
CEP78	120.1	99.7	97.6	617236
CEP83	108.8	99.4	96.6	615862
CERKL	114.1	99.4	97.2	608380
CERS1	70.0	92.6	81.4	616230
CERS3	95.2	99.8	98.2	615023
CES1	124.6	99.4	97.2	618057
CETP	120.6	100.0	99.9	143470
CFAP43	119.0	99.7	97.9	617592
CFAP44	110.2	99.5	98.2	617593
CFAP53	131.8	99.1	97.0	614779
CFAP69	70.0	98.5	92.8	617959
CFB	119.4	100.0	99.9	615561
CFC1	125.8	91.0	80.1	605376
CFD	113.8	96.9	89.7	613912
CFH	155.4	99.4	97.9	6098;126700
CFHR5	96.6	99.8	97.5	614809

CFI	139.0	99.5	97.0	610984
CFL2	119.2	100.0	99.2	610687
CFP	98.4	99.7	97.4	312060
CFTR	113.5	99.4	97.4	219700;2772
CHAMP1	172.9	100.0	100.0	616579
CHAT	117.1	95.4	86.9	254210
CHCHD10	26.1	63.1	38.4	616209;615048;615911
CHCHD2	69.7	99.9	93.7	616710
CHD1	108.1	98.2	91.9	617682
CHD2	123.9	99.3	99.0	615369
CHD3	95.0	97.7	94.0	618205
CHD4	111.8	100.0	99.9	617159
CHD7	137.0	99.9	99.4	6124;214800
CHEK2	88.6	83.8	80.1	259500;6093
CHKB	115.4	100.0	100.0	602541
CHM	100.3	98.3	92.0	303100
CHMP1A	123.2	100.0	99.8	614961
CHMP2B	90.2	99.5	97.7	6147;600795
CHMP4B	139.0	100.0	98.9	605387
CHN1	147.2	99.9	99.4	604356
CHRD1	88.1	99.9	98.8	309300
CHRM3	131.0	100.0	100.0	100100
CHRNA1	92.6	94.6	93.3	601462;253290;608930
CHRNA2	174.4	100.0	100.0	610353
CHRNA4	109.8	99.9	99.2	600513
CHRN1	128.2	100.0	99.7	6163;616313
CHRN2	160.6	99.7	98.0	605375
CHRNA	140.4	99.8	98.0	616321;616323;616322;253290
CHRNE	167.8	100.0	100.0	605809;616324;608931
CHRNA	141.3	100.0	100.0	265;253290

CHST11	188.8	100.0	100.0	618167
CHST14	160.6	99.9	98.9	601776
CHST3	133.8	100.0	100.0	143095
CHST6	279.8	100.0	100.0	217800
CHST8	257.9	100.0	100.0	616265
CHSY1	125.9	99.3	97.9	605282
CHUK	126.5	99.8	99.2	613630
CIB1	122.3	99.3	96.3	618267
CIB2	198.0	99.9	99.4	6149;609439
CIC	72.7	64.7	63.3	617600
CIDEC	83.6	99.9	96.4	615238
CIITA	148.8	100.0	99.9	209920
CISD2	113.6	83.4	83.3	604928
CIT	101.4	99.9	98.5	617090
CITED2	149.7	99.2	99.0	6144;614431
CKAP2L	156.0	99.9	98.9	272440
CLCF1	87.2	100.0	99.6	610313
CLCN1	125.1	100.0	99.8	160800;2557
CLCN2	115.1	100.0	99.7	6157;605635
CLCN4	105.7	99.9	98.9	300114
CLCN5	104.3	99.7	96.5	308990;300554;300009;310468
CLCN7	146.7	99.8	98.7	6115;166600
CLCNKA	112.0	99.8	97.3	613090
CLCNKB	99.4	99.7	97.1	6131;607364
CLDN1	122.5	100.0	100.0	607626
CLDN10	138.2	100.0	100.0	617671
CLDN14	111.7	100.0	99.9	614035
CLDN16	126.6	100.0	100.0	248250
CLDN19	125.4	99.1	95.1	248190
CLEC7A	148.5	100.0	99.9	613108

CLIC2	73.7	99.9	96.8	300886
CLIC5	97.6	100.0	99.9	616042
CLMP	86.2	100.0	99.6	615237
CLN3	114.7	92.6	91.9	204200
CLN5	138.7	99.9	98.8	256731
CLN6	132.3	100.0	99.9	204300;6018
CLN8	144.5	83.5	83.5	600143;61
CLP1	135.7	100.0	100.0	615803
CLPB	125.6	99.8	97.9	616271
CLPP	139.3	100.0	99.2	614129
CLPX	149.9	99.7	98.4	618015
CLRN1	135.3	100.0	99.4	6142;276902
CLTC	153.1	100.0	99.7	617854
CNBP	117.6	100.0	100.0	602668
CNGA1	110.4	92.5	86.5	613756
CNGA3	149.6	100.0	99.7	216900
CNGB1	107.4	99.5	98.0	613767
CNGB3	101.5	98.6	93.9	2623;248200
CNKS2	89.0	98.5	92.3	301008
CNNM2	199.8	100.0	100.0	6164;613882
CNNM4	161.6	100.0	99.5	217080
CNPY3	78.4	100.0	100.0	617929
CNTN1	128.0	99.7	98.7	612540
CNTN2	123.7	92.7	92.7	615400
CNTNAP1	157.2	99.9	99.1	616286;6182
CNTNAP2	127.1	100.0	99.8	610042
COA5	74.9	86.6	83.5	616500
COA6	112.5	99.4	97.0	616501
COA7	122.0	100.0	100.0	618387
COASY	172.7	100.0	100.0	615643;6183

COCH	159.5	100.0	99.9	6181;601369
COG1	108.4	100.0	99.9	611209
COG2	124.6	99.7	98.1	617395
COG4	94.5	100.0	99.6	6182;613489
COG5	126.3	99.9	98.4	613612
COG6	90.4	99.1	96.0	6153;614576
COG7	106.1	100.0	99.7	608779
COG8	145.0	100.0	98.5	611182
COL10A1	106.8	100.0	99.9	156500
COL11A1	96.6	97.9	94.0	228520;604841;154780
COL11A2	111.6	100.0	99.4	601868;609706;215150;184840;614524
COL12A1	124.2	99.8	99.1	616470;6165
COL13A1	89.8	100.0	99.3	616720
COL17A1	104.5	99.3	96.9	122400;2267
COL18A1	133.5	99.5	96.9	267750
COL1A1	141.0	99.8	98.4	166220;114000;259420;130060;166200;166210
COL1A2	93.3	98.5	94.6	166220;225320;617821;259420;166210
COL25A1	131.9	99.5	98.9	616219
COL27A1	142.2	99.9	99.2	615155
COL2A1	112.2	100.0	99.7	616583;108300;183900;609162;184250;200610;150600;609508;151210;271700;608805;132450;604864;156550
COL3A1	99.2	99.3	96.8	130050;6183
COL4A1	95.7	99.6	97.3	611773;269160;175780;180000
COL4A2	109.0	100.0	99.1	614483
COL4A3	90.5	99.6	97.7	203780;141200;104200
COL4A3BP	133.1	99.7	97.8	616351
COL4A4	92.4	99.8	97.4	2038;141200
COL4A5	56.8	96.8	85.7	301050
COL4A6	81.4	97.1	92.0	300914
COL5A1	136.4	99.9	98.9	130000
COL5A2	100.2	99.9	99.4	130010

COL6A1	158.8	100.0	99.8	158810;2541
COL6A2	175.3	100.0	99.8	158810;255600;254090
COL6A3	154.0	100.0	99.8	158810;254090;616411
COL7A1	139.7	99.8	98.9	131750;132000;131850;607523;226600;604129;131705
COL8A2	119.3	100.0	99.6	136800;6091
COL9A1	132.3	100.0	99.7	6141;614134
COL9A2	95.2	99.9	98.8	600204;6143
COL9A3	107.8	99.6	96.8	600969
COLEC10	120.1	100.0	99.9	248340
COLEC11	180.6	100.0	100.0	265050
COLGALT1	149.5	97.8	92.1	618360
COLQ	100.9	99.8	97.5	603034
COMP	132.0	95.8	92.8	1772;132400
COPB2	139.0	99.8	99.0	617800
COQ2	103.5	97.6	97.1	607426
COQ4	105.0	91.3	90.2	616276
COQ6	127.5	99.9	98.6	614650
COQ7	138.3	99.9	99.6	616733
COQ8A	161.8	100.0	99.9	612016
COQ8B	99.5	100.0	99.8	615573
COQ9	73.8	100.0	98.1	614654
CORIN	140.2	100.0	99.7	614595
CORO1A	150.8	99.9	98.5	615401
COX10	220.4	100.0	99.9	256;220110
COX14	95.2	100.0	100.0	220110
COX15	87.7	99.9	98.3	256000;6151
COX20	66.2	96.4	85.3	220110
COX4I2	116.5	100.0	99.6	612714
COX6A1	148.3	100.0	99.9	616039
COX6B1	139.1	100.0	100.0	220110

COX7B	38.6	62.3	33.6	300887
COX8A	109.4	100.0	100.0	220110
CP	100.6	93.1	87.4	604290
CPA6	109.1	99.4	96.9	614417;6144
CPAMD8	101.3	98.3	94.5	617319
CPLX1	102.3	100.0	100.0	617976
CPN1	97.9	99.8	97.8	212070
CPOX	134.1	99.5	97.2	121300
CPS1	133.8	100.0	99.9	237300
CPT1A	131.5	99.9	98.4	255120
CPT1C	121.4	100.0	100.0	616282
CPT2	139.2	98.3	98.2	600649;255110;608836
CR2	131.7	100.0	99.9	614699
CRADD	113.2	100.0	98.2	614499
CRAT	115.5	100.0	99.9	617917
CRB1	155.0	100.0	100.0	600105;613835;172870
CRB2	116.0	99.8	98.5	219730;6162
CRBN	125.2	88.1	87.3	607417
CREB1	120.0	99.6	96.1	612160
CREB3L1	135.8	100.0	99.8	616229
CREBBP	110.7	99.4	97.0	180849;6183
CRELD1	98.9	99.8	95.9	606217
CRIPT	42.6	98.7	91.2	615789
CRLF1	126.4	93.2	90.7	272430
CRTAP	120.2	100.0	99.1	610682
CRTC1	166.1	99.8	99.5	-
CRX	196.6	100.0	100.0	120970;6138
CRYAA	131.0	95.8	90.7	604219
CRYAB	94.0	99.7	96.8	615184;613869;613763;608810
CRYBA1	106.0	100.0	99.7	600881

CRYBA2	168.4	100.0	100.0	115900
CRYBA4	121.5	100.0	100.0	610425
CRYBB1	125.2	100.0	99.8	611544
CRYBB2	137.6	100.0	100.0	601547
CRYBB3	139.5	100.0	100.0	609741
CRYGB	96.8	99.8	97.4	615188
CRYGC	127.3	100.0	99.6	604307
CRYGD	103.2	100.0	99.4	115700
CRYGS	79.8	93.9	83.5	116100
CRYM	82.5	99.8	97.2	616357
CSF1R	113.3	99.9	99.1	221820
CSF2RA	53.7	90.0	88.0	300770
CSF2RB	123.2	99.8	98.4	614370
CSF3R	105.4	99.7	98.6	617014
CSNK1D	118.7	99.0	95.4	615224
CSNK2A1	104.5	93.7	89.2	617062
CSPP1	119.0	100.0	99.1	615636
CSRP3	88.6	100.0	98.3	607482;6121
CST3	79.0	99.7	95.6	105150
CSTA	110.9	99.9	99.1	607936
CSTB	70.0	99.3	90.9	254800
CTBP1	101.2	94.3	86.7	617915
CTC1	105.5	100.0	99.3	612199
CTCF	128.8	99.9	98.9	615502
CTDP1	128.1	95.1	88.0	604168
CTH	141.0	100.0	99.8	219500
CTHRC1	100.7	99.5	94.9	614266
CTLA4	141.0	100.0	100.0	616100
CTNNA1	109.6	99.1	97.2	608970
CTNNA2	106.0	100.0	99.6	618174

CTNNA3	131.7	100.0	99.8	615616
CTNNB1	127.4	100.0	99.9	155255;114550;132600;615075;617572;114500;167000
CTNND1	124.9	100.0	99.9	617681
CTNS	112.6	100.0	99.5	219900;219800;219750
CTPS1	108.8	100.0	99.9	615897
CTSA	132.9	100.0	99.9	256540
CTSC	116.2	100.0	100.0	245000;245010;170650
CTSD	171.0	99.8	97.8	610127
CTSF	107.0	91.3	81.8	615362
CTSK	86.3	100.0	99.8	265800
CTU2	136.5	100.0	99.8	618142
CUBN	103.2	99.6	97.6	261100
CUL3	119.0	99.9	98.9	614496
CUL4B	78.0	97.6	89.3	300354
CUL7	129.2	100.0	99.8	273750
CUX1	117.0	97.5	95.1	618330
CUX2	120.9	99.9	99.3	618141
CWC27	84.5	99.8	97.5	250410
CWF19L1	103.2	99.9	99.3	616127
CXCR4	122.8	100.0	100.0	193670
CXorf56	73.4	99.1	92.7	301013
CYB561	145.0	92.8	92.7	618182
CYB5A	132.5	100.0	100.0	250790
CYB5R3	152.1	99.2	98.3	250800
CYBA	110.5	96.7	86.9	233690
CYBB	99.1	99.9	99.0	300645;3064
CYC1	152.2	99.3	95.6	615453
CYCS	61.0	99.1	93.1	612004
CYFIP2	116.5	99.8	98.5	618008
CYLD	109.2	99.7	97.8	605041;132700;601606

CYP11A1	121.2	99.2	95.0	613743
CYP11B1	155.9	100.0	100.0	202;103900
CYP11B2	156.0	100.0	100.0	203400;6106
CYP17A1	108.5	100.0	99.6	202110
CYP19A1	125.7	99.4	97.3	6135;139300
CYP1B1	134.4	100.0	100.0	231300;6173
CYP21A2	91.6	99.2	93.4	201910
CYP24A1	169.1	100.0	100.0	143880
CYP26B1	168.7	100.0	100.0	614416
CYP26C1	133.0	100.0	99.9	614974
CYP27A1	173.0	100.0	99.7	213700
CYP27B1	147.1	100.0	99.7	264700
CYP2A6	140.1	100.0	99.4	122700
CYP2B6	101.4	99.8	97.2	614546
CYP2C19	148.1	99.7	97.3	609535
CYP2C9	157.0	99.4	96.5	122700
CYP2R1	130.7	99.7	96.8	600081
CYP2U1	134.3	98.4	95.5	615030
CYP4F22	115.3	100.0	98.8	604777
CYP4V2	137.2	99.9	98.3	210370
CYP7B1	103.8	99.6	96.6	6138;270800
D2HGDH	142.0	100.0	99.4	600721
DAB1	113.5	100.0	100.0	615945
DACT1	126.8	97.5	93.8	617466
DAG1	189.0	100.0	100.0	6165;613818
DARS	125.4	99.9	99.0	615281
DARS2	126.8	100.0	98.6	611105
DBH	145.6	100.0	99.9	223360
DBT	109.9	99.6	96.9	248600
DCAF17	90.4	99.9	97.9	241080

DCAF8	110.7	100.0	99.7	610100
DCC	118.6	100.0	99.8	157600;133239;617542;114500
DCDC2	150.0	99.9	99.8	610212;617394;616217
DCHS1	149.4	100.0	99.9	601390;6078
DCLRE1C	138.9	99.9	97.2	6036;602450
DCN	129.7	95.7	95.2	610048
DCPS	128.0	100.0	99.6	616459
DCTN1	112.6	99.9	99.2	6076;168605
DCX	90.5	99.9	98.4	300067
DDB2	147.3	99.8	98.4	278740
DDC	97.9	99.5	95.0	608643
DDHD1	161.6	99.9	98.4	609340
DDHD2	129.6	100.0	99.5	615033
DDOST	114.0	100.0	99.8	614507
DDR2	115.8	100.0	99.3	271665;6182
DDRGK1	100.0	100.0	99.8	602557
DDX11	100.7	86.7	81.2	613398
DDX3X	73.5	86.2	82.9	300958
DDX58	112.3	99.8	99.1	616298
DDX59	141.5	100.0	99.8	174300
DEAF1	113.4	99.8	97.6	615828;6172
DEGS1	144.9	100.0	100.0	618404
DENND5A	99.2	99.8	98.9	617281
DEPDC5	124.5	99.9	99.7	604364
DES	125.0	100.0	100.0	181400;601419;604765
DFNA5	90.9	99.9	99.0	600994
DFNB59	116.8	99.9	98.8	610220
DGAT1	150.3	96.7	92.0	615863
DGKE	127.8	99.8	98.3	615008
DGUOK	119.4	99.9	97.9	251880;617068;617070

DHCR24	155.8	100.0	99.9	602398
DHCR7	144.9	100.0	100.0	270400
DHDDS	81.0	97.1	93.8	6178;613861
DHFR	50.0	94.1	83.1	613839
DHH	164.9	100.0	100.0	233420;6071
DHODH	98.8	100.0	100.0	263750
DHTKD1	122.4	99.9	98.8	204750;615
DHX30	161.5	100.0	100.0	617804
DHX38	104.9	100.0	99.5	618220
DIABLO	174.0	100.0	99.6	614152
DIAPH1	101.7	99.9	99.6	124900;6166
DIAPH2	67.0	96.2	88.1	300511
DIAPH3	82.7	99.7	96.9	609129
DICER1	137.9	99.8	98.4	618272;138800;601200;180295
DIP2B	128.0	100.0	99.9	136630
DIS3L2	143.3	100.0	99.8	267000
DKC1	91.2	99.8	97.7	305000
DLAT	100.2	99.8	99.2	245348
DLC1	160.0	99.9	99.7	114500
DLD	119.2	99.9	99.7	246900
DLG3	79.3	99.2	92.1	300850
DLL3	108.5	96.7	92.5	277300
DLL4	175.2	100.0	99.7	616589
DLX3	146.7	100.0	99.0	104510;1903
DLX4	228.4	100.0	100.0	616788
DLX5	145.3	100.0	99.8	220600
DMD	108.2	99.4	98.0	310200;300376;302045
DMGDH	134.7	100.0	99.8	605850
DMP1	133.0	100.0	99.9	241520
DMPK	151.3	100.0	99.9	160900

DMXL2	154.0	99.8	98.9	6176;616113
DNA2	124.3	99.7	97.3	6158;615156
DNAAF1	112.8	100.0	99.5	613193
DNAAF2	150.1	99.9	98.7	612518
DNAAF3	115.0	99.9	98.5	606763
DNAAF4	94.1	99.9	98.2	615482
DNAAF5	107.6	95.4	85.2	614874
DNAH1	158.1	100.0	99.8	6176;617576
DNAH11	131.3	99.8	98.7	611884
DNAH5	114.1	99.9	99.1	608644
DNAH9	110.7	99.9	98.5	618300
DNAI1	115.4	100.0	100.0	244400
DNAI2	151.7	99.6	96.6	612444
DNAJB11	107.4	99.8	99.5	618061
DNAJB13	116.3	100.0	99.5	617091
DNAJB2	118.4	100.0	100.0	614881
DNAJB6	60.7	96.8	84.4	603511
DNAJC12	140.7	87.4	87.4	617384
DNAJC19	93.8	98.4	92.3	610198
DNAJC21	128.1	99.9	99.5	617052
DNAJC3	137.4	100.0	99.7	616192
DNAJC5	188.2	100.0	100.0	162350
DNAJC6	126.5	99.9	99.0	615528
DNAL1	104.0	99.3	96.2	614017
DNAL4	69.9	99.9	95.3	616059
DNASE1L3	113.0	100.0	99.7	614420
DNM1	139.8	94.7	92.3	616346
DNM1L	119.5	99.9	98.7	6144;610708
DNM2	123.9	99.7	96.7	606482;615368;160150
DNMBP	129.0	99.8	99.0	618415

DNMT1	114.3	99.2	98.7	6141;604121
DNMT3A	122.9	99.7	98.2	601626;6159
DNMT3B	116.4	100.0	99.9	242860
DOCK2	119.5	100.0	99.5	616433
DOCK3	113.1	100.0	99.2	618292
DOCK6	121.5	99.6	98.6	614219
DOCK7	120.7	99.6	97.8	615859
DOCK8	112.1	100.0	99.6	243700
DOK7	135.1	94.0	93.3	254300;6184
DOLK	157.2	100.0	100.0	610768
DONSON	90.2	99.0	92.4	6176;251230
DPAGT1	87.5	100.0	99.9	6148;608093
DPF2	99.8	99.6	96.7	618027
DPH1	161.6	100.0	100.0	616901
DPM1	134.7	95.2	88.2	608799
DPM2	88.5	99.8	97.6	615042
DPM3	200.5	100.0	100.0	612937
DPP6	122.4	99.9	98.6	616311
DPY19L2	85.9	74.4	70.2	613958
DPYD	141.6	99.5	96.4	274270
DPYS	117.5	100.0	99.8	222748
DRAM2	130.4	100.0	100.0	616502
DRC1	91.2	100.0	99.3	615294
DRD4	107.9	96.4	85.9	-
DSC2	123.7	99.6	97.2	610476
DSC3	95.6	99.3	97.3	613102
DSE	89.7	99.7	97.2	615539
DSG1	131.0	99.4	97.7	6155;148700
DSG2	129.5	99.9	99.2	610193;6129
DSG4	158.3	99.8	99.0	607903

DSP	140.6	100.0	99.6	607450;612908;609638;605676;607655;615821
DSPP	79.0	98.4	93.8	125490;125500;605594;125420
DST	144.8	99.9	99.2	6154;614653
DSTYK	121.7	99.6	97.7	270750;6108
DTNA	125.2	100.0	99.9	604169
DTNBP1	113.4	99.8	97.9	614076
DUOX2	128.8	99.5	96.4	607200
DUOXA2	140.5	100.0	100.0	274900
DUSP6	164.1	100.0	100.0	615269
DVL1	140.8	98.6	95.9	616331
DVL3	186.0	100.0	100.0	616894
DYM	103.3	97.4	95.5	223800;6073
DYNC1H1	140.6	100.0	99.6	158600;614563;614228
DYNC2H1	102.2	98.8	95.5	613091
DYNC2LI1	95.4	99.7	97.0	617088
DYRK1A	130.4	100.0	99.9	614104
DYRK1B	110.5	98.8	94.8	615812
DYSF	133.6	100.0	99.9	253601;254130;606768
DZIP1L	96.7	99.7	98.0	617610
EARS2	99.0	99.7	97.8	614924
EBF3	140.9	100.0	99.8	617330
EBP	63.2	99.5	95.2	300960;303
ECE1	145.6	98.0	97.7	613870
ECEL1	107.1	100.0	97.4	615065
ECHS1	103.8	100.0	99.7	616277
ECM1	158.6	99.9	99.0	247100
EDA	102.0	95.6	85.7	3135;305100
EDAR	126.6	100.0	100.0	2249;129490
EDARADD	89.8	99.7	98.3	6149;614940
EDC3	113.7	100.0	99.0	616460

EDN1	156.5	100.0	99.9	612798;6157
EDN3	135.2	100.0	100.0	6133;209880
EDNRA	150.7	100.0	99.8	616367
EDNRB	120.9	96.9	92.5	6005;277580
EED	85.3	99.5	96.3	617561
EEF1A2	188.3	100.0	100.0	6164;616393
EEF2	154.9	100.0	100.0	609306
EFEMP1	147.8	99.9	99.4	126600
EFEMP2	129.4	100.0	100.0	614437
EFL1	150.5	99.5	98.1	617941
EFNB1	116.7	100.0	99.9	304110
EFTUD2	103.2	100.0	99.2	610536
EGF	110.5	100.0	99.7	611718
EGFR	135.2	100.0	100.0	211980;6161
EGLN1	102.0	97.6	85.9	609820
EGR2	130.0	100.0	100.0	145900;605253;607678
EHHADH	133.4	100.0	99.7	615605
EHMT1	127.7	94.6	94.2	610253
EIF2AK3	134.2	99.5	96.3	226980
EIF2AK4	129.8	99.7	98.6	234810
EIF2B1	121.7	100.0	99.9	603896
EIF2B2	109.7	99.4	92.4	603896
EIF2B3	134.7	100.0	100.0	603896
EIF2B4	122.0	100.0	99.6	603896
EIF2B5	103.1	100.0	99.6	603896
EIF2S3	81.4	96.7	88.4	300148
EIF3F	63.1	98.7	88.5	618295
EIF4A3	87.5	100.0	99.4	268305
ELAC2	109.4	99.9	99.0	615440
ELANE	141.5	100.0	99.3	2027;162800

ELMO2	102.3	100.0	98.8	606893
ELMOD3	135.8	100.0	99.9	615429
ELN	103.1	100.0	98.9	1855;123700
ELOVL4	104.4	99.9	99.1	133190;600110;614457
ELOVL5	105.7	100.0	99.1	615957
ELP1	118.7	99.7	98.4	223900
ELP2	120.6	99.8	98.0	617270
ELP4	57.4	73.1	69.7	617141
EMC1	105.7	100.0	98.9	616875
EMD	138.2	100.0	98.9	310300
EMG1	123.2	100.0	99.9	211180
EML1	129.9	100.0	99.6	600348
EMP2	78.4	99.5	96.1	615861
EMX2	155.2	100.0	100.0	269160
ENAM	139.5	100.0	100.0	2047;104500
ENG	128.4	99.9	98.7	187300
ENO3	173.2	100.0	100.0	612932
ENPP1	129.2	97.5	93.3	208000;615522;613312
ENTPD1	125.0	100.0	99.9	615683
EOGT	102.7	79.3	78.1	615297
EP300	165.5	99.7	98.6	618333;114500;613684
EPAS1	132.0	99.9	98.2	611783
EPB41	119.2	99.6	97.4	611804
EPB41L1	121.5	99.4	95.3	614257
EPB42	128.0	100.0	99.3	612690
EPCAM	76.5	99.7	95.7	613217;6132
EPG5	110.3	99.3	97.9	242840
EPHA2	157.0	100.0	99.8	116600
EPHB4	156.5	100.0	99.8	617300;6182
EPHX1	116.0	99.2	96.0	607748

EPM2A	116.5	90.9	88.8	254780
EPO	98.6	100.0	99.4	6179;617907
EPRS	139.4	99.9	99.2	617951
EPS8	114.6	99.8	96.6	615974
EPS8L2	159.7	99.0	96.3	617637
ERAL1	156.5	100.0	100.0	617565
ERBB2	138.8	99.6	98.0	613659;211980;137800
ERBB3	113.3	99.9	99.2	607598
ERBB4	127.8	99.9	99.2	615515
ERCC1	85.7	100.0	98.1	610758
ERCC2	128.0	100.0	99.8	278730;601675;610756
ERCC3	92.0	99.9	98.4	6164;610651
ERCC4	132.0	100.0	99.8	615272;278760;610965
ERCC5	126.3	99.9	99.5	6166;278780
ERCC6	158.2	100.0	99.9	616946;133540;278800;214150;600630
ERCC6L2	121.7	99.9	99.0	615715
ERCC8	82.8	98.9	90.0	216400;6146
ERF	146.8	100.0	99.2	600775;6172
ERGIC1	178.0	95.3	94.5	208100
ERLIN1	141.4	100.0	100.0	615681
ERLIN2	115.3	100.0	99.2	611225
ERMARD	118.9	99.8	98.5	615544
ESCO2	115.6	99.4	97.3	269;268300
ESPN	30.8	53.5	42.4	609006
ESR1	137.0	100.0	100.0	114480;6154
ESR2	111.6	100.0	99.6	618187
ESRP1	95.3	99.8	98.4	618013
ESRRB	121.7	99.9	99.1	608565
ETFA	132.7	100.0	99.8	231680
ETFB	116.8	100.0	100.0	231680

ETFDH	114.4	100.0	99.3	231680
ETHE1	97.3	99.9	97.8	602473
ETV6	148.3	100.0	99.4	601626;6162
EVC	106.3	95.9	92.4	2255;193530
EVC2	110.2	99.4	96.3	2255;193530
EWSR1	67.2	91.8	82.8	612219
EXOC6B	107.7	98.7	97.4	618395
EXOSC2	110.3	100.0	99.9	617763
EXOSC3	125.1	96.4	87.8	614678
EXOSC8	89.0	98.2	90.3	616081
EXOSC9	132.5	99.6	95.1	618065
EXPH5	163.6	100.0	99.9	615028
EXT1	88.6	99.6	98.0	133700;2153
EXT2	118.0	99.9	99.1	133701;6167
EXTL3	184.1	100.0	100.0	617425
EYA1	120.2	99.9	99.8	166780;113650;602588
EYA4	136.9	100.0	99.9	601316;6054
EYS	132.5	99.7	97.5	602772
EZH2	130.0	99.4	97.6	277590
F10	173.6	99.8	99.1	227600
F11	126.7	100.0	99.9	612416
F12	151.3	99.9	99.5	234000;6106
F13A1	112.9	100.0	99.6	613225
F13B	105.8	98.6	92.9	613235
F2	128.1	99.8	97.1	188050;6137
F5	145.5	99.5	97.7	188055;2274
F7	162.0	100.0	100.0	227500
F8	106.0	99.4	97.2	306700
F9	109.5	99.9	98.4	3069;300807
FA2H	92.7	98.8	92.5	612319

FADD	181.7	100.0	100.0	613759
FAH	128.4	100.0	99.8	276700
FAM111A	232.1	100.0	99.5	6024;127000
FAM111B	157.9	99.9	99.6	615704
FAM126A	125.4	100.0	99.4	610532
FAM161A	136.9	99.9	99.1	606068
FAM20A	111.1	100.0	99.4	204690
FAM20C	145.2	100.0	100.0	259775
FAM46A	158.6	100.0	100.0	617952
FAM58A	53.9	81.9	76.1	300707
FAM83H	120.2	100.0	99.9	130900
FAM92A	79.4	87.6	77.4	618219
FAN1	132.2	100.0	99.9	614817
FANCA	112.4	99.9	98.9	227650
FANCB	76.4	98.6	93.2	300514
FANCC	100.8	99.7	99.2	227645
FANCD2	115.6	99.1	96.6	227646
FANCE	118.2	96.6	89.9	600901
FANCF	244.4	100.0	100.0	603467
FANCG	140.7	100.0	99.8	614082
FANCI	136.2	99.9	98.9	609053
FANCL	105.8	99.7	98.0	614083
FANCM	100.6	99.3	97.1	618086;6181
FAR1	73.7	97.2	91.8	616154
FARS2	161.9	100.0	100.0	614946;617
FARSB	78.0	97.4	92.7	613658
FAS	226.0	99.9	99.6	601859
FASLG	82.0	100.0	99.0	601859
FASTKD2	115.5	99.6	97.9	220110
FAT2	131.9	100.0	99.8	617769

FAT4	190.3	100.0	99.9	616;615546
FBLN5	96.6	91.8	91.5	608895;219100;614434
FBN1	137.1	100.0	99.8	102370;616914;604308;614185;129600;154700;184900;608328
FBN2	142.2	100.0	99.8	121050;6161
FBP1	105.5	100.0	99.3	229700
FBXL3	188.9	100.0	100.0	606220
FBXL4	168.9	100.0	100.0	615471
FBXO11	86.0	98.2	93.7	618089
FBXO31	111.5	99.6	97.3	615979
FBXO38	159.8	99.7	98.3	615575
FBXO7	152.8	99.9	99.6	260300
FCGR3A	163.2	99.6	96.7	615707
FCGR3B	137.4	98.8	97.1	-
FCN3	124.7	100.0	100.0	613860
FDFT1	136.3	100.0	99.6	618156
FDPS	58.4	97.9	91.6	616631
FDX2	147.2	100.0	100.0	251900
FDXR	122.3	99.9	99.1	617717
FECH	104.0	100.0	99.7	177000
FERMT1	90.8	99.6	96.6	173650
FERMT3	144.9	100.0	99.9	612840
FEZF1	179.7	100.0	100.0	616030
FGA	137.0	99.3	97.3	105200;616004;202400
FGB	136.7	99.7	98.2	616;202400
FGD1	86.7	98.4	93.0	305400
FGD4	104.3	99.7	97.8	609311
FGF10	120.5	100.0	99.6	1809;149730
FGF12	100.4	100.0	99.9	617166
FGF14	214.2	100.0	100.0	609307
FGF16	96.3	99.3	94.0	309630

FGF17	167.3	100.0	100.0	615270
FGF20	125.3	100.0	98.3	615721
FGF23	122.3	99.7	97.7	618;193100
FGF3	139.5	100.0	100.0	610706
FGF5	155.5	99.9	99.5	190330
FGF8	130.0	97.9	86.8	612702
FGF9	153.5	100.0	100.0	612961
FGFR1	122.6	100.0	99.6	166250;147950;615465;613001;101600;123150;190440
FGFR2	113.1	97.7	96.8	613659;123500;614592;101200;101400;123790;149730;207410;101600;609579;123150
FGFR3	138.5	100.0	99.6	109800;162900;616482;603956;602849;114500;149730;187600;187601;146000;612247;610474;273300;100800
FGG	126.4	99.8	98.0	616;202400
FH	128.0	95.0	88.5	150800;6068
FHL1	64.1	98.3	91.4	300696;300280;300717;300718;300695
FIBP	124.7	100.0	99.8	617107
FIG4	157.5	100.0	99.6	612577;216340;612691;611228
FIGLA	92.0	100.0	99.6	612310
FKBP10	157.5	99.5	97.3	611;259450
FKBP14	80.8	99.8	97.9	614557
FKRP	153.3	100.0	100.0	607155;613153;606612
FKTN	107.5	99.7	96.1	611588;613152;611615;253800
FLAD1	170.7	100.0	99.6	255100
FLCN	152.3	100.0	100.0	144700;173600;114500;135150
FLG	147.1	100.0	99.9	146700
FLG2	352.3	99.9	99.9	618084
FLI1	153.8	99.3	97.9	617443
FLNA	142.7	100.0	99.9	300049;311300;300048;309350;305620;304120;314400;300244;300321
FLNB	123.6	99.7	98.7	108720;108721;272460;112310;150250
FLNC	153.2	100.0	99.6	614065;617047;609524
FLRT3	170.3	100.0	100.0	615271
FLT3	110.2	99.9	98.8	6131;601626

FLT4	160.3	99.2	99.1	6021;153100
FLVCR1	146.1	99.9	99.2	609033
FLVCR2	124.8	100.0	100.0	225790
FMN2	109.6	86.6	84.2	616193
FMO3	131.9	100.0	99.3	602079
FMR1	78.8	96.3	91.0	300623;300624;311360
FN1	106.0	99.9	98.9	6019;184255
FOLR1	107.4	100.0	99.9	613068
FOXC1	80.4	99.7	97.5	6025;601631
FOXC2	122.3	100.0	100.0	153400
FOXE1	87.5	100.0	99.7	241850
FOXE3	88.3	89.7	82.5	610256;613
FOXF1	153.8	100.0	100.0	265380
FOXG1	142.0	97.8	88.7	613454
FOXI1	194.5	100.0	100.0	600791
FOXL2	117.7	100.0	98.8	110100;609
FOXN1	133.0	100.0	99.5	601705
FOXO1	107.9	100.0	99.4	268220
FOXP1	114.1	100.0	99.8	613670
FOXP2	129.2	99.5	98.7	602081
FOXP3	115.6	99.1	94.8	304790
FOXRED1	121.0	99.8	98.2	618241
FRAS1	119.2	99.9	99.2	219000
FREM1	110.7	99.8	98.4	248450;608980;614485
FREM2	152.4	100.0	99.5	6177;123570
FRMD4A	115.2	91.4	90.5	616819
FRMD7	101.0	99.8	97.8	310700
FRMPD4	108.4	99.6	97.2	300983
FRRS1L	99.1	85.5	79.1	616981
FSCN2	164.3	100.0	100.0	607921

FSHB	112.0	100.0	100.0	229070
FSHR	96.6	99.9	97.4	276400;608115;233300
FSIP2	96.8	99.9	99.3	618153
FTCD	116.8	98.7	95.2	229100
FTH1	66.2	98.7	87.9	615517
FTL	145.2	99.7	96.7	600886;615604;606159
FTO	95.8	83.8	83.6	612938
FTSJ1	122.9	99.2	95.1	309549
FUCA1	125.9	100.0	99.9	230000
FUK	104.4	99.4	97.8	618324
FUS	119.4	99.5	97.0	6148;608030
FUT6	142.5	100.0	100.0	613852
FUT8	130.4	99.9	99.2	618005
FUZ	128.5	100.0	100.0	-
FXN	64.9	99.7	96.8	229300
FXYD2	108.1	100.0	100.0	154020
FYB1	96.3	99.5	96.8	273900
FYCO1	123.2	100.0	100.0	610019
FZD2	179.4	99.7	97.8	164745
FZD4	179.1	100.0	100.0	133780
FZD6	186.4	100.0	100.0	614157
G6PC	146.8	100.0	99.9	232200
G6PC3	114.6	100.0	100.0	612541
G6PD	114.4	99.5	97.4	300908
GAA	160.8	100.0	99.9	232300
GAB1	155.1	100.0	99.5	605428
GABBR2	109.2	98.2	94.6	617903;6179
GABRA1	164.2	100.0	99.8	615744
GABRB1	169.0	99.9	99.8	617153
GABRB2	129.2	100.0	99.9	617829

GABRB3	131.7	99.5	97.8	617113
GABRG2	126.4	91.1	89.7	611277;6184
GAD1	112.7	99.9	99.7	603513
GAL	169.5	100.0	100.0	616461
GALC	102.9	99.8	98.8	245200
GALE	140.0	100.0	100.0	230350
GALK1	165.2	100.0	99.9	230200
GALNS	108.3	100.0	99.3	253000
GALNT3	125.8	99.9	98.7	211900
GALT	152.6	100.0	100.0	230400
GAMT	112.5	98.3	91.5	612736
GAN	142.2	99.9	99.4	256850
GANAB	107.1	99.9	98.3	600666
GARS	128.9	100.0	99.7	6015;600794
GAS8	127.3	100.0	99.4	616726
GATA1	92.9	99.9	98.2	300367;300835;314050;190685
GATA2	115.0	100.0	99.0	6142;614038
GATA3	220.5	100.0	100.0	146255
GATA4	87.6	95.9	86.7	614429;614430;615542;187500;607941
GATA5	74.0	100.0	99.2	617912
GATA6	110.2	98.3	92.5	614474;187500;614475;217095;600001
GATAD1	136.1	100.0	100.0	614672
GATAD2B	97.4	100.0	99.1	615074
GATM	137.3	100.0	100.0	612718
GBA	169.8	100.0	100.0	608013;231005;231000;230900;230800
GBA2	141.5	100.0	99.6	614409
GBE1	157.4	99.9	99.7	2636;232500
GCDH	145.9	100.0	99.1	231670
GCH1	84.8	100.0	99.5	128230;2339
GCK	138.6	100.0	100.0	125853;125851;606176;602485

GCLC	143.7	99.3	95.8	230450
GCM2	135.1	100.0	100.0	146200;6173
GCNT2	151.2	99.5	99.5	1167;110800
GCSH	32.1	88.4	69.8	605899
GDAP1	145.6	99.8	99.0	214400;607706;608340;607831
GDAP2	118.2	99.9	99.3	618369
GDF1	50.7	97.8	84.7	208530;6139
GDF2	142.4	100.0	100.0	615506
GDF3	127.9	100.0	100.0	613702;613703;613704
GDF5	169.6	100.0	100.0	615072;112600;615298;201250;200700;113100;228900;610017
GDF6	156.3	100.0	100.0	613703;615360;118100;613094;617898
GDF9	141.5	100.0	100.0	618014
GDI1	136.4	99.5	97.9	300849
GDNF	183.5	100.0	100.0	209880
GEMIN4	148.4	100.0	99.7	617913
Gennaam (Gencode v27 I37)				OMIM Phenotype ID (key3_exclBracketsBraces)
GFAP	103.7	91.9	91.4	203450
GFER	90.6	100.0	99.6	613076
GFI1	105.7	100.0	100.0	6131;607847
GFI1B	170.9	99.9	98.2	187900
GFM1	104.2	99.9	99.0	609060
GFM2	121.3	98.9	95.6	618397
GFPT1	146.0	99.9	99.1	610542
GGCX	101.2	100.0	99.4	6108;277450
GGT1	12.1	20.3	18.2	231950
GH1	159.5	100.0	100.0	262650;262400;612781;173100
GHR	150.6	99.5	99.4	6043;262500
GHRHR	108.1	96.0	95.2	618157
GHSR	173.6	98.7	95.2	615925

GIF	110.1	100.0	99.2	261000
GINS1	122.7	98.1	90.6	617827
GIPC3	127.8	98.9	95.2	601869
GJA1	156.2	100.0	100.0	218400;104100;600309;241550;257850;186100;164200;617525
GJA3	162.2	100.0	100.0	601885
GJA5	207.8	100.0	100.0	614;108770
GJA8	156.6	100.0	100.0	116200
GJB1	150.9	100.0	99.9	302800
GJB2	141.4	100.0	100.0	220290;124500;148210;149200;602540;148350;601544
GJB3	228.5	100.0	100.0	220290;612644;133200
GJB4	246.1	100.0	100.0	617524
GJB6	140.9	100.0	100.0	220290;612643;129500;612645
GJC2	45.3	92.6	75.4	613206;613480;608804
GK	44.1	84.9	63.9	307030
GLA	73.6	99.5	95.8	301500
GLB1	82.6	99.7	95.4	230600;230500;230650;253010
GLDC	59.2	90.6	79.2	605899
GLDN	106.6	99.8	96.9	617194
GLE1	97.1	100.0	99.9	253310;6119
GLI1	122.9	100.0	99.8	174400;6181
GLI2	158.2	100.0	100.0	610829;6158
GLI3	139.5	100.0	99.3	146510;174700;175700;174200
GLIS2	129.6	100.0	100.0	611498
GLIS3	123.7	100.0	99.5	610199
GLMN	70.2	99.0	95.0	138000
GLRA1	96.8	100.0	99.7	149400
GLRB	104.6	99.5	94.5	614619
GLRX5	137.6	99.6	96.1	616859;6169
GLS	84.2	99.5	96.0	618312;618328;618339
GLUD1	65.5	98.1	87.5	606762

GLUL	77.0	99.7	96.5	610015
GLYCTK	161.3	100.0	99.5	220120
GM2A	122.0	100.0	100.0	272750
GMNN	124.4	99.7	97.9	616835
GMPPA	147.2	100.0	99.8	615510
GMPPB	211.8	100.0	100.0	615351;615350;615352
GNA11	162.4	100.0	99.5	145981;6154
GNAI2	124.3	100.0	100.0	192605
GNAI3	88.3	98.9	94.5	602483
GNAL	130.2	99.4	96.5	615073
GNAO1	152.8	93.8	93.8	6175;615473
GNAQ	52.8	81.0	64.3	1853;163000
GNAS	211.3	100.0	100.0	103580;219080;166350;612463;174800;612462;617686;603233
GNAS-AS1				603233
GNAT1	176.4	100.0	100.0	6164;610444
GNAT2	100.7	99.8	98.2	613856
GNB1	145.2	100.0	100.0	613065;617
GNB3	146.0	100.0	99.9	617024
GNB4	150.3	100.0	100.0	615185
GNB5	113.0	99.9	97.5	617173;6172
GNE	113.8	100.0	99.3	6058;269921
GNMT	126.9	99.9	98.7	606664
GNPAT	127.2	99.5	96.8	222765
GNPTAB	148.0	100.0	99.3	2526;252500
GNPTG	177.6	100.0	98.5	252605
GNRH1	84.5	96.5	78.0	614841
GNRHR	145.4	100.0	100.0	146110
GNS	94.5	99.6	95.2	252940
GORAB	165.7	100.0	98.9	231070
GOSR2	102.6	95.8	93.7	614018

GOT1	107.7	100.0	99.4	614419
GP1BA	136.8	98.7	95.7	153670;231200;177820
GP1BB	68.6	94.5	83.1	231200
GP6	123.2	100.0	99.7	614201
GP9	134.3	99.9	98.3	231200
GPAA1	123.1	100.0	98.3	617810
GPC3	75.7	98.7	92.7	3129;194070
GPC6	126.6	100.0	100.0	258315
GPD1	87.7	100.0	99.4	614480
GPD1L	128.0	100.0	99.9	611777
GPHN	144.7	99.9	98.8	615501
GPI	141.4	100.0	99.8	613470
GPIHBP1	149.5	100.0	100.0	615947
GPNMB	150.5	100.0	100.0	617920
GPR101	111.7	100.0	100.0	300943
GPR143	59.5	91.0	79.1	300500;3008
GPR179	146.8	100.0	100.0	614565
GPR68	165.4	99.9	99.0	617217
GPR88	146.7	100.0	99.6	616939
GPRASP2	79.6	100.0	99.5	301018
GPSM2	119.6	99.8	99.0	604213
GPT2	121.7	100.0	99.4	616281
GPX4	165.9	94.4	90.7	250220
GREB1L	128.0	99.9	99.0	617805
GREM2	149.7	100.0	100.0	617275
GRHL2	116.8	100.0	100.0	608641;618031;616029
GRHL3	133.2	100.0	99.8	606713
GRHPR	99.6	84.2	81.7	260000
GRIA3	82.4	98.6	92.1	300699
GRIA4	124.0	99.7	98.1	617864

GRID2	146.8	99.9	99.4	616204
GRIK2	121.7	96.2	95.4	611092
GRIN1	166.1	100.0	99.9	6178;614254
GRIN2A	131.2	100.0	100.0	245570
GRIN2B	158.0	99.8	99.0	613970;6161
GRIN2D	82.8	91.9	79.5	617162
GRIP1	111.1	100.0	99.3	617667
GRK1	135.7	100.0	100.0	613411
GRM1	156.6	100.0	99.9	6177;614831
GRM6	138.3	98.0	92.4	257270
GRN	174.1	100.0	100.0	607485;6147
GRXCR1	154.5	100.0	99.7	613285
GRXCR2	112.4	100.0	99.9	615837
GSC	133.8	100.0	98.9	602471
GSN	115.5	95.6	93.5	105120
GSS	93.3	100.0	99.2	231900;2661
GTF2E2	85.2	100.0	98.2	616943
GTF2H5	81.8	99.9	95.9	616395
GTPBP2	128.9	99.7	98.6	617988
GTPBP3	164.7	100.0	100.0	616198
GUCA1A	172.9	100.0	100.0	602093
GUCA1B	130.0	100.0	99.9	613827
GUCY1A3	148.0	99.9	99.8	615750
GUCY2C	117.5	100.0	99.4	614616;6147
GUCY2D	108.9	100.0	99.9	601777;215500;204000
GUF1	95.1	99.9	98.4	617065
GULOP				-
GUSB	99.5	92.5	90.5	253220
GYG1	125.6	100.0	99.4	613507;6162
GYS1	109.6	100.0	98.6	611556

GYS2	120.1	99.7	98.0	240600
GZF1	187.8	100.0	99.7	617662
H19				180860;130650;194071
H6PD	193.5	99.0	99.0	604931
HAAO	104.6	100.0	99.8	617660
HACE1	136.2	99.9	99.1	616756
HADH	111.1	99.3	98.8	231530;61
HADHA	72.9	96.3	89.3	609015;609
HADHB	77.6	96.7	83.8	609015
HAMP	169.0	100.0	100.0	613313
HARS	134.8	100.0	100.0	614504;6166
HARS2	136.6	100.0	99.9	614926
HAVCR2	117.7	100.0	99.9	618398
HAX1	137.4	100.0	100.0	610738
HBA1	137.9	100.0	100.0	613978;617981;604131;140700;617973
HBA2	127.4	98.7	92.5	613978;617981;604131;140700
HBB	131.9	100.0	100.0	603902;603903;617971;617980;140700;613985;141749
HBD	178.4	100.0	100.0	-
HBG1	134.8	96.9	91.6	141749
HBG2	242.1	100.0	100.0	614;141749
HCCS	92.4	99.2	95.2	309801
HCFC1	104.4	99.3	95.8	309541
HCN1	137.5	100.0	99.7	615871
HCN4	96.0	100.0	99.7	6131;163800
HCRT	129.1	99.2	93.0	161400
HDAC6	113.9	99.7	97.7	300863
HDAC8	108.1	100.0	99.2	300882
HECW2	109.3	99.9	98.7	617268
HELLS	102.8	98.8	92.7	616911
HEPACAM	118.3	95.5	88.7	613925;6139

HERC1	142.1	100.0	99.7	617011
HERC2	95.1	80.0	76.1	615516
HES7	53.9	90.1	72.7	613686
HESX1	66.2	100.0	98.7	182230
HEXA	106.3	93.7	92.4	272800
HEXB	163.0	99.7	98.5	268800
HFE	108.0	100.0	98.9	235200
HFE2	150.1	100.0	100.0	602390
HFM1	54.6	96.7	90.6	615724
HGD	98.2	100.0	99.8	203500
HGF	138.0	99.9	99.2	608265
HGSNAT	98.3	87.2	86.2	252930;6165
HIBCH	69.9	96.3	79.8	250620
HIKESHI	54.5	96.8	84.3	616881
HINT1	63.3	91.2	79.1	137200
HIST1H1E	112.1	100.0	100.0	617537
HIVEP2	162.8	100.0	100.0	616977
HK1	116.5	100.0	99.7	617460;605285;235700
HLCS	142.3	100.0	100.0	253270
HMBS	97.3	100.0	98.4	176000
HMGB3	37.1	81.1	62.4	300915
HMGCL	119.4	99.9	98.7	246450
HMGCS2	102.4	100.0	99.4	605911
HMOX1	137.4	96.5	90.7	614034
HMX1	39.8	85.4	63.9	612109
HNF1A	163.2	100.0	99.9	142330;612520;144700;600496
HNF1B	118.8	99.6	96.8	1379;125853
HNF4A	129.8	99.9	99.0	125850;616
HNMT	133.1	100.0	99.9	616739
HNRNPA1	61.0	98.3	85.0	6154;615424

HNRNPA2B1	139.1	99.8	98.2	615422
HNRNPDL	88.6	99.6	93.8	609115
HNRNPH2	126.2	100.0	100.0	300986
HNRNPK	61.1	88.1	79.9	616580
HNRNPU	149.9	99.9	99.3	617391
HOGA1	149.6	100.0	99.1	613616
HOMER2	113.1	99.8	97.8	616707
HOXA1	164.0	100.0	100.0	601536
HOXA11	88.3	100.0	98.0	605432
HOXA13	77.7	90.9	79.6	140000;1763
HOXA2	83.0	100.0	99.9	612290
HOXB1	147.8	100.0	100.0	614744
HOXC13	172.8	100.0	100.0	614931
HOXD10	157.3	100.0	100.0	192950
HOXD13	198.2	100.0	100.0	113300;113200;186000;610713;186300
HPCA	253.9	100.0	100.0	224500
HPD	148.1	100.0	99.7	140350;2767
HPGD	90.6	99.9	98.9	119900;2591
HPRT1	59.8	98.3	88.2	300322;3003
HPS1	115.8	100.0	99.9	203300
HPS3	132.7	99.9	98.8	614072
HPS4	128.1	100.0	99.9	614073
HPS5	122.8	99.9	98.7	614074
HPS6	164.6	99.9	97.8	614075
HPSE2	100.6	100.0	99.7	236730
HR	117.4	99.6	97.3	209500;146550;203655
HRAS	182.3	100.0	100.0	188470;109800;162900;163200;218040;137550
HRG	126.1	95.0	94.2	613116
HSD11B1	113.8	100.0	99.0	614662
HSD11B2	165.6	94.3	87.3	218030

HSD17B10	92.4	100.0	98.4	300438
HSD17B3	116.4	100.0	99.9	264300
HSD17B4	109.4	96.3	93.6	233400;2615
HSD3B2	131.8	100.0	99.9	201810
HSD3B7	143.7	99.5	96.2	607765
HSF4	148.7	99.8	98.5	116800
HSPA9	82.6	89.5	84.2	182170;6169
HSPB1	67.2	98.0	91.9	6086;606595
HSPB3	226.1	100.0	100.0	613376
HSPB8	213.9	100.0	100.0	6087;158590
HSPD1	74.3	98.1	92.5	6122;605280
HSPG2	119.8	99.5	98.8	2558;224410
HTR1A	184.7	100.0	100.0	614674
HTRA1	89.0	95.2	87.0	6168;600142
HTRA2	132.6	100.0	99.6	617248
HTT	125.2	98.9	97.6	6174;143100
HUWE1	79.3	99.1	94.3	300706
HYAL1	110.7	100.0	100.0	601492
HYDIN	106.8	99.8	98.9	608647
HYLS1	156.6	100.0	100.0	236680
HYOU1	130.8	99.9	99.5	233600
IARS	125.4	99.9	99.0	617093
IARS2	142.9	100.0	99.9	616007
IBA57	137.4	99.3	95.9	6165;615330
ICK	110.0	99.8	99.3	612651
ICOS	156.4	100.0	99.9	607594
IDH2	98.5	100.0	99.6	613657
IDH3B	128.2	95.5	95.4	612572
IDS	100.9	99.9	97.1	309900
IDUA	148.1	98.9	94.6	607015;607014;607016

IER3IP1	106.3	94.3	82.8	614231
IFIH1	110.8	99.8	98.2	6158;182250
IFITM5	94.9	100.0	99.1	610967
IFNAR2	129.5	99.5	96.9	616669
IFNGR1	145.0	99.9	99.3	209950;616
IFNGR2	125.2	97.0	93.5	614889
IFT122	120.5	99.9	99.0	218330
IFT140	117.6	99.9	99.2	266920;6178
IFT172	94.5	100.0	99.4	6164;615630
IFT27	115.8	100.0	100.0	615996
IFT43	112.4	100.0	100.0	617871;614099;617866
IFT52	121.0	100.0	99.7	617102
IFT57	120.5	99.9	99.3	617927
IFT74	84.7	99.1	95.8	617119
IFT80	64.9	96.7	84.7	611263
IFT81	92.3	93.6	89.0	617895
IGBP1	99.1	98.8	93.2	300472
IGF1	98.0	100.0	99.8	608747
IGF1R	114.9	100.0	99.6	270450
IGF2	119.6	100.0	100.0	616489
IGF2R	113.7	99.6	97.9	114550
IGFALS	108.2	100.0	99.9	615961
IGFBP7	82.7	99.4	95.3	614224
IGHG2	26.2	72.5	49.5	-
IGHM	170.0	100.0	100.0	601495
IGHMBP2	108.3	99.6	97.4	604320;6162
IGKC	113.2	100.0	100.0	614102
IGLL1	92.2	100.0	99.6	613500
IGSF1	69.9	99.2	93.9	300888
IGSF3	97.5	96.3	93.7	149700

IHH	171.9	100.0	100.0	6078;112500
IKBKB	110.0	99.3	96.4	615592;6182
IKBKG	60.1	88.1	78.8	300301;300636;300291;300584;300640;308300
IKZF1	181.7	100.0	100.0	616873
IL10RA	144.4	100.0	100.0	613148
IL10RB	130.1	100.0	99.3	612567
IL11RA	131.5	100.0	99.6	614188
IL12B	94.8	99.9	97.0	614890
IL12RB1	112.9	98.0	95.6	614891
IL17F	73.1	99.2	94.0	613956
IL17RA	149.1	100.0	100.0	613953
IL17RC	123.6	100.0	100.0	616445
IL17RD	134.0	99.9	99.0	615267
IL1RAPL1	99.7	99.9	98.1	300143
IL1RN	139.3	100.0	99.7	612852
IL21	74.9	99.8	95.0	615767
IL21R	145.0	100.0	100.0	615207
IL2RA	100.6	99.9	98.7	606367
IL2RG	59.3	99.3	94.0	3129;300400
IL31RA	109.5	99.9	99.6	613955
IL36RN	92.8	100.0	100.0	614204
IL7R	114.1	100.0	99.9	608971
ILD1R	111.5	99.9	98.7	609646
IMPA1	72.1	96.7	86.7	617323
IMPAD1	170.4	100.0	99.9	614078
IMPDH1	53.6	95.3	84.1	180105;6138
IMPG1	90.7	99.9	98.6	616151
IMPG2	125.6	99.4	97.6	613581;6162
INF2	99.5	85.6	83.5	6145;613237
ING1	160.1	100.0	100.0	275355

INPP5E	116.8	100.0	98.6	213300;6102
INPP5K	88.8	100.0	99.3	617404
INPPL1	127.9	99.8	98.0	258480
INS	113.6	100.0	99.9	613370;125852;606176;616214
INSL3	67.1	81.3	78.9	219050
INSR	116.4	99.0	95.1	246200;262190;609968;610549
INTU	115.4	99.8	98.7	617925;6179
INVS	143.7	100.0	99.9	602088
IQCB1	93.3	91.6	80.0	609254
IQCE	131.4	100.0	98.9	617642
IQSEC2	73.1	95.8	87.9	309530
IRAK4	103.9	99.7	96.5	6108;607676
IRF1	138.5	100.0	99.9	211980;6137
IRF2BP2	86.8	100.0	99.3	617765
IRF2BPL	176.5	99.0	96.7	618088
IRF6	90.3	99.4	95.0	119300;1195
IRF7	152.6	100.0	99.8	616345
IRF8	111.8	99.9	98.6	226990;6149
IRX5	134.9	100.0	99.8	611174
ISCA1	67.2	93.5	84.0	617613
ISCA2	105.1	99.8	95.8	616370
ISCU	117.2	100.0	99.9	255125
ISG15	184.2	100.0	100.0	616126
ISPD	110.2	99.6	97.5	614643;6161
ITCH	116.3	95.4	94.6	613385
ITGA2B	124.4	99.9	98.9	187800;2738
ITGA3	150.1	99.7	98.0	614748
ITGA6	138.9	99.9	99.0	226730
ITGA7	129.2	99.7	98.2	613204
ITGA8	115.5	100.0	99.5	191830

ITGB2	156.8	100.0	100.0	116920
ITGB3	112.8	100.0	99.8	187800;2738
ITGB4	152.1	99.2	97.4	226730;226650;131800
ITGB6	127.5	96.7	95.0	616221
ITK	103.1	99.9	99.1	613011
ITM2B	134.9	99.9	99.7	117300;616079;176500
ITPA	130.2	100.0	100.0	616647
ITPR1	131.2	100.0	99.7	606658;117360;206700
ITPR2	128.9	99.9	98.4	106190
IVD	100.0	100.0	99.9	243500
IYD	105.5	99.3	94.7	274800
JAG1	133.7	99.2	97.1	617992;187500;118450
JAGN1	118.5	100.0	100.0	616022
JAK2	103.5	97.6	95.0	601626;133100;263300;254450;614521
JAK3	122.1	98.8	97.2	600802
JAM3	126.9	100.0	99.9	613730
JPH1	168.8	100.0	99.9	607831
JPH2	123.7	99.5	95.5	613873
JPH3	196.0	100.0	99.9	606438
JUP	124.5	100.0	99.8	6115;601214
KANK1	119.2	100.0	99.8	612900
KANK2	163.4	100.0	99.9	616099;6178
KANSL1	139.1	99.8	98.6	610443
KARS	104.1	100.0	98.8	6139;613641
KAT6A	148.4	100.0	99.7	616268
KAT6B	155.7	99.9	99.1	603736;6062
KATNB1	154.2	100.0	100.0	616212
KBTBD13	177.3	100.0	100.0	609273
KCNA1	150.1	100.0	100.0	160120
KCNA2	126.3	100.0	99.7	616366

KCNA4	123.0	100.0	100.0	618284
KCNA5	154.2	100.0	100.0	612240
KCNB1	129.7	100.0	99.7	616056
KCNC1	170.9	100.0	100.0	616187
KCNC3	112.7	90.4	72.9	605259
KCND3	162.0	99.9	99.2	6164;607346
KCNE1	369.2	100.0	100.0	612347;6137
KCNE2	126.7	100.0	97.9	6137;611493
KCNE3	143.4	100.0	100.0	613119
KCNH1	148.4	98.7	98.3	135500;6118
KCNH2	106.9	98.6	95.1	609620;6137
KCNJ1	157.5	100.0	100.0	241200
KCNJ10	148.6	89.2	88.1	6128;600791
KCNJ11	199.7	100.0	100.0	610582;606176;601820;616329
KCNJ13	138.9	100.0	100.0	6142;193230
KCNJ2	154.8	100.0	100.0	609622;613980;170390
KCNJ5	160.1	100.0	99.8	6137;613485
KCNJ6	157.2	100.0	99.9	614098
KCNK3	161.7	99.8	98.5	615344
KCNK4	194.7	100.0	99.9	618381
KCNK9	171.2	100.0	100.0	612292
KCNMA1	102.3	94.8	93.4	609446;6176
KCNN4	154.7	100.0	99.5	616689
KCNQ1	135.8	97.9	95.3	609621;192500;607554;220400
KCNQ1OT1				130650
KCNQ2	118.3	91.5	90.2	6137;121200
KCNQ3	110.4	99.9	98.7	121201
KCNQ4	165.1	99.2	97.7	600101
KCNQ5	135.0	99.4	97.7	617601
KCNT1	131.2	96.0	95.1	614959;615

KCNT2	106.2	99.5	97.4	617771
KCNV2	138.9	100.0	100.0	610356
KCTD1	93.9	100.0	99.7	181270
KCTD17	113.4	100.0	99.5	616398
KCTD7	154.9	95.0	95.0	611726
KDF1	110.3	100.0	99.9	617337
KDM1A	130.9	100.0	98.8	616728
KDM5B	121.6	99.0	97.0	618109
KDM5C	102.8	99.5	97.0	300534
KDM6A	97.7	95.3	87.8	300867
KDR	117.8	100.0	99.6	602089
KDSR	158.2	99.9	99.5	617526
KERA	175.3	100.0	100.0	217300
KHDC3L	160.0	100.0	99.7	614293
KIAA0556	126.6	100.0	99.6	616784
KIAA0586	117.7	97.0	93.0	616490;6165
KIAA0753	113.2	99.9	98.7	617127
KIAA1109	140.8	99.9	98.9	617822
KIAA1161	250.0	100.0	100.0	618317
KIDINS220	137.5	100.0	99.8	617296
KIF11	92.1	97.8	94.5	152950
KIF14	116.6	99.6	97.9	6179;616258
KIF1A	115.0	99.7	97.6	614255;614213;610357
KIF1B	139.6	100.0	99.6	118210;1713
KIF1BP	161.1	96.1	96.0	609460
KIF1C	147.7	100.0	99.4	611302
KIF21A	120.7	99.9	99.1	135700
KIF22	173.8	100.0	99.9	603546
KIF2A	105.7	99.6	96.8	615411
KIF4A	77.4	98.1	91.5	300923

KIF5A	116.0	100.0	99.9	604187;6172
KIF5C	109.9	99.9	99.0	615282
KIF7	105.2	98.2	93.5	607131;200990;614120
KISS1	79.5	100.0	98.1	614842
KISS1R	156.4	100.0	100.0	6148;176400
KIT	136.2	100.0	99.6	172800;601626;273300;154800;606764
KITLG	83.3	99.6	97.2	6167;145250
KIZ	145.0	99.9	98.1	615780
KL	171.8	99.2	98.1	617994
KLC2	127.0	99.9	99.2	609541
KLF1	115.3	100.0	99.9	6137;111150
KLF11	162.4	100.0	99.8	610508
KLF6	152.4	100.0	100.0	176807;6137
KLHL10	139.1	100.0	99.9	615081
KLHL15	140.4	100.0	99.7	300982
KLHL24	172.7	100.0	100.0	617294
KLHL3	105.6	99.9	97.7	614495
KLHL40	130.6	100.0	100.0	615348
KLHL41	172.8	100.0	99.8	615731
KLHL7	116.2	100.0	99.5	6171;612943
KLK4	164.3	100.0	100.0	204700
KLKB1	132.3	100.0	99.5	612423
KLLN	152.3	100.0	100.0	615107
KMT2A	133.0	100.0	99.9	605130
KMT2B	141.1	96.9	93.5	617284
KMT2C	138.9	91.8	90.4	617768
KMT2D	136.2	100.0	99.7	147920
KMT5B	165.5	100.0	99.6	617788
KNL1	105.5	99.0	97.2	604321
KPTN	145.7	100.0	100.0	615637

KRAS	67.2	99.4	97.3	114480;109800;601626;260350;137215;211980;614470;615278;108010;163200;609942
KREMEN1	143.4	99.7	97.3	617392
KRIT1	98.6	99.8	98.8	116860
KRT1	98.0	99.9	98.8	113800;144200;607602;146590;607654;600962
KRT10	128.8	99.9	98.6	113800;609165;607602
KRT12	134.2	99.7	97.3	122100
KRT13	120.3	100.0	99.3	615785
KRT14	42.6	89.0	80.0	131760;131900;161000;131800;125595;601001
KRT16	34.9	75.2	53.2	167200;613
KRT17	17.6	46.8	28.0	167210;1845
KRT18	34.2	89.8	71.1	215600
KRT2	134.6	100.0	99.5	146800
KRT25	126.7	100.0	100.0	616760
KRT3	113.3	100.0	99.7	122100
KRT4	121.3	100.0	99.5	193900
KRT5	110.6	100.0	100.0	131760;609352;131960;131900;131800;601001;179850
KRT6A	121.7	96.9	89.2	615726
KRT6B	118.2	98.2	91.8	615728
KRT6C	105.5	88.6	79.8	615735
KRT71	143.1	100.0	99.9	615896
KRT74	138.6	100.0	99.6	614929;613981;194300
KRT8	37.0	89.5	67.8	215600
KRT81	83.7	99.9	97.8	158000
KRT83	67.6	98.6	90.0	6178;158000
KRT85	101.3	99.0	95.2	602032
KRT86	85.3	100.0	97.7	158000
KRT9	68.1	99.4	96.3	144200
KY	112.6	100.0	99.8	617114
KYNU	104.7	98.8	93.8	6177;236800
L1CAM	126.6	99.9	98.6	307000;304100;303350

L2HGDH	124.0	99.0	96.7	236792
LAGE3	68.3	98.1	90.5	301006
LAMA1	116.0	100.0	99.5	615960
LAMA2	130.6	100.0	99.5	607855;6181
LAMA3	125.2	99.9	99.6	226650;245660;226700
LAMA4	118.2	100.0	99.7	615235
LAMB1	142.9	100.0	99.7	615191
LAMB2	166.5	100.0	99.6	6142;609049
LAMB3	116.9	100.0	99.4	104530;226650;226700
LAMC2	100.5	99.7	98.3	2267;226650
LAMC3	148.1	99.7	98.6	614115
LAMP2	92.3	97.9	92.8	300257
LAMTOR2	172.2	100.0	100.0	610798
LARGE1	115.2	100.0	99.7	608840;6132
LARP7	75.5	88.8	75.2	615071
LARS	131.5	99.7	98.0	615438
LARS2	122.8	100.0	100.0	615300;617
LAS1L	78.6	99.6	95.7	309585
LAT	114.4	100.0	99.3	617514
LBR	103.0	98.3	91.5	169400;613471;618019;215140
LCA5	139.9	99.8	98.9	604537
LCAT	140.7	99.4	95.1	2459;136120
LCK	148.6	99.3	97.3	615758
LCT	118.8	99.8	97.9	223000
LDB3	147.1	96.0	94.7	601493;6095
LDHA	55.6	96.6	88.0	612933
LDHD	143.8	100.0	100.0	245450
LDLR	148.1	100.0	98.9	143890
LDLRAP1	149.0	99.9	99.1	603813
LEF1	106.0	100.0	99.8	-

LEMD2	103.2	100.0	99.6	212500
LEMD3	122.5	99.8	98.4	166700
LEP	174.7	100.0	99.9	614962
LEPR	106.5	94.2	91.4	614963
LFNG	117.6	92.8	87.7	609813
LGI1	133.3	98.3	97.2	600512
LGI4	99.9	99.4	96.7	617468
LHB	23.5	92.3	52.6	228300
LHCGR	137.0	97.9	94.1	2383;176410
LHFPL5	207.7	100.0	100.0	610265
LHX3	116.2	96.6	96.4	221750
LHX4	131.2	100.0	100.0	262700
LIAS	125.3	99.9	98.7	614462
LIFR	110.3	99.7	97.4	601559
LIG4	173.4	100.0	99.8	606593
LIM2	112.9	100.0	99.5	615277
LIMS2	118.5	95.7	93.2	616827
LINGO1	201.9	100.0	100.0	618103
LINS1	133.6	100.0	99.3	614340
LIPA	105.0	96.5	94.4	278000
LIPC	98.5	100.0	99.1	614025
LIPE	121.8	100.0	99.5	615980
LIPH	120.2	100.0	99.7	604379
LIPN	113.9	100.0	99.1	613943
LIPT1	203.2	100.0	99.9	616299
LIPT2	91.2	99.9	99.3	617668
LITAF	102.2	95.2	91.1	601098
LMAN1	144.3	99.8	99.4	227300
LMAN2L	109.3	100.0	99.2	616887
LMBR1	122.9	98.4	96.3	186200;135750;174500;188740;200500

LMBRD1	100.1	98.9	94.1	277380
LMF1	136.8	100.0	99.9	246650
LMNA	104.7	97.7	91.9	176670;212112;275210;115200;610140;605588;151660;181350;616516;248370;613205
LMNB1	118.4	100.0	99.7	169500
LMNB2	140.4	99.2	97.4	616540
LMOD3	128.6	100.0	99.8	616165
LMX1B	146.6	99.9	98.5	161200
LNPBK	89.1	98.4	92.3	618090
LONP1	148.0	100.0	100.0	600373
LOR	39.8	100.0	93.8	604117
LOX	158.5	99.9	99.6	617168
LOXHD1	113.3	99.9	99.5	613079
LPAR6	100.3	99.8	98.4	278150
LPIN1	123.4	99.1	96.4	268200
LPIN2	97.8	100.0	99.6	609628
LPL	128.2	100.0	99.9	2386;144250
LPP	104.5	100.0	99.9	601626
LRAT	240.7	100.0	100.0	613341
LRBA	129.8	100.0	99.6	614700
LRIG2	126.8	99.8	99.1	615112
LRIT3	108.0	94.3	93.1	615058
LRMDA	114.9	99.4	97.6	615179
LRP1	172.3	99.8	99.3	604093
LRP2	139.2	100.0	99.9	222448
LRP4	128.0	99.7	99.0	212780;616304;614305
LRP5	168.1	99.8	98.7	601813;144750;617875;607634;259770;607636
LRP6	136.8	99.9	99.2	616724
LRPAP1	141.0	100.0	99.6	615431
LRPPRC	129.3	100.0	99.6	220111
LRRC56	130.7	100.0	99.2	618254

LRRC6	139.3	99.8	97.3	614935
LRRC8A	223.3	100.0	100.0	613506
LRSAM1	135.4	100.0	99.9	614436
LRTOMT	114.4	99.1	94.4	611451
LSS	127.6	100.0	99.7	616509;6183
LTBP2	112.9	99.9	99.3	251750;613086;614819
LTBP3	147.5	100.0	99.6	601216;6178
LTBP4	148.0	100.0	99.4	613177
LYRM4	77.5	67.4	62.4	615595
LYRM7	61.9	98.7	91.3	615838
LYST	136.3	99.4	97.8	214500
LYZ	143.0	100.0	100.0	105200
LZTFL1	117.0	99.8	99.2	615994
LZTR1	143.6	100.0	99.7	6166;605275
LZTS1	143.2	100.0	100.0	133239
MAB21L2	237.8	100.0	100.0	615877
MACF1	128.6	99.9	99.2	618325
MAD1L1	106.6	99.8	97.8	176807
MAD2L2	139.1	100.0	99.8	617243
MAF	88.9	87.2	83.0	6102;601088
MAFA	58.9	99.8	93.9	147630
MAFB	124.0	100.0	99.9	617;166300
MAG	160.7	100.0	100.0	616680
MAGED2	86.7	99.5	97.6	300971
MAGEL2	120.4	97.9	93.1	615547
MAGI2	90.4	94.6	91.7	617609
MAGT1	96.8	98.2	96.3	300853
MAK	131.8	99.5	97.4	614181
MALT1	129.4	93.0	89.4	615468
MAML2	110.9	100.0	100.0	-

MAMLD1	125.0	99.8	98.2	300758
MAN1B1	125.5	100.0	99.8	614202
MAN2B1	128.6	99.9	98.6	248500
MANBA	118.3	99.5	97.5	248510
MAOA	98.9	100.0	99.0	300615
MAP2K1	92.3	99.5	96.3	615279
MAP2K2	124.2	98.5	94.1	615280
MAP3K1	144.0	99.4	97.0	613762
MAP3K20	109.8	99.9	98.9	616890;6178
MAP3K7	118.4	99.9	99.3	157800;6171
MAP3K8	132.7	100.0	99.9	211980
MAPKAPK3	87.6	100.0	99.6	617111
MAPKBP1	132.5	100.0	100.0	617271
MAPRE2	158.4	99.7	98.1	616734
MAPT	151.6	99.9	99.6	260540;172700;600274;601104
MARK3	122.8	99.7	97.6	618283
MARS	100.4	99.9	98.0	6163;615486
MARS2	178.4	100.0	100.0	6164;611390
MARVELD2	139.0	98.8	95.9	610153
MASP1	131.1	100.0	99.3	257920
MASP2	121.9	100.0	99.5	613791
MAST1	168.6	100.0	99.8	618273
MAT1A	144.1	99.8	98.4	250850
MATN3	99.6	86.5	84.5	6087;607078
MATR3	86.6	96.9	92.7	606070
MBD5	147.7	99.9	99.8	156200
MBOAT7	110.0	100.0	99.7	617188
MBTPS1	112.5	99.7	98.2	618392
MBTPS2	111.2	99.9	98.6	308800;308205;301014;300918
MC2R	148.3	100.0	99.2	202200

MC4R	186.5	100.0	100.0	618406
MCC	120.0	100.0	99.5	114500
MCCC1	137.6	100.0	99.4	210200
MCCC2	119.0	100.0	99.7	210210
MCEE	121.1	100.0	99.9	251120
MCFD2	91.4	97.6	91.0	613625
MCM2	151.9	100.0	100.0	616968
MCM3AP	130.4	99.9	99.2	618124
MCM4	133.1	100.0	99.5	609981
MCM5	122.5	100.0	100.0	617564
MCM6	128.6	100.0	100.0	223100
MCM8	123.3	99.9	99.1	612885
MCM9	128.7	99.9	99.7	616185
MCOLN1	157.1	99.9	99.0	252650
MCPH1	133.1	99.9	98.5	251200
MDH2	109.4	98.0	97.9	617339
MECOM	131.2	100.0	99.6	616738
MECP2	124.8	100.0	98.5	300260;300673;300055;312750
MECR	108.2	100.0	99.7	617282
MED12	85.1	99.5	95.5	309520;300895;305450
MED13L	108.5	99.9	99.6	6168;608808
MED17	132.4	97.5	94.7	613668
MED23	133.6	99.8	98.4	614249
MED25	132.7	100.0	99.7	6164;605589
MEF2C	127.9	99.4	95.5	613443
MEFV	126.8	98.6	96.5	134610;2491
MEGF10	125.9	100.0	99.8	614399
MEGF8	144.0	100.0	99.5	614976
MEIOB	103.3	99.7	98.3	617706
MEIS2	123.6	100.0	99.8	600987

MEN1	132.0	100.0	99.5	131100
MEOX1	105.0	99.9	97.4	214300
MERTK	128.2	99.4	98.7	613862
MESP2	128.0	97.0	94.9	608681
MET	151.3	99.9	99.3	605074;616705;114550
METTL23	116.9	100.0	100.0	615942
MFAP5	106.8	99.6	94.8	616166
MFF	86.2	93.7	89.6	617086
MFN2	122.8	100.0	99.9	617087;601152;609260
MFRP	128.1	100.0	100.0	611;609549
MFSD2A	114.3	100.0	99.3	616486
MFSD8	121.3	100.0	99.6	610951;6162
MGAT2	145.4	100.0	100.0	212066
MGME1	142.4	100.0	99.9	615084
MGP	134.2	98.7	94.6	245150
MIB1	127.1	100.0	99.9	615092
MICU1	103.3	98.8	96.5	615673
MID1	124.1	99.8	97.4	300000
MID2	108.7	99.5	97.2	300928
MINPP1	163.8	100.0	99.5	-
MIP	117.1	99.7	97.0	615274
MIPEP	99.3	99.4	96.6	617228
MIR17HG				614326
MIR184				614303
MIR204				616722
MIR96				613074
MITF	141.1	100.0	99.8	103470;193510;103500;617306
MKKS	155.7	83.2	83.2	236700;6052
MKL1	115.8	97.9	95.8	-
MKRN3	136.0	100.0	100.0	615346

MKS1	92.4	99.6	97.8	249000;617121;615990
MLC1	96.7	100.0	99.9	604004
MLH1	139.2	99.9	99.3	276300;609310;158320
MLH3	141.5	100.0	99.9	6144;114500
MLLT10	123.9	96.4	94.2	601626
MLPH	97.4	99.7	97.2	609227
MLYCD	95.7	99.4	96.5	248360
MMAA	168.5	100.0	100.0	251100
MMAB	94.6	100.0	99.7	251110
MMACHC	196.0	100.0	100.0	277400
MMADHC	81.2	92.7	79.5	277410
MME	112.7	99.7	98.1	617017;617
MMP1	133.2	99.8	99.2	606963
MMP13	112.5	93.4	92.1	6021;250400
MMP14	148.0	100.0	99.7	277950
MMP19	118.1	99.9	98.5	611543
MMP2	154.2	100.0	100.0	259600
MMP20	90.8	99.8	97.6	612529
MMP21	94.9	100.0	98.0	616749
MMP9	143.9	100.0	99.1	613073
MN1	143.4	100.0	99.9	607174
MNX1	54.8	78.6	70.8	176450
MOCOS	147.2	99.9	99.1	603592
MOCS1	91.2	98.8	95.7	252150
MOCS2	137.7	99.6	99.5	252160
MOG	96.6	99.9	99.3	614250
MOGS	141.0	100.0	100.0	606056
MORC2	123.8	100.0	99.5	616688
MPC1	153.1	100.0	99.6	614741
MPDU1	102.4	100.0	99.6	609180

MPDZ	128.3	99.6	98.2	615219
MPI	110.1	100.0	99.9	602579
MPIG6B	119.0	100.0	99.8	617441
MPL	125.8	100.0	99.8	601977;254450;604498
MPLKIP	104.3	100.0	99.9	234050
MPO	153.5	99.9	99.4	254600
MPV17	88.6	100.0	98.9	256810;6184
MPZ	125.0	100.0	98.9	118200;607791;618184;145900;180800;607677;607736
MPZL2	91.7	100.0	99.8	618145
MRAP	163.4	100.0	100.0	607398
MRE11	49.7	97.3	86.0	604391
MRPL3	63.4	93.2	81.4	614582
MRPL44	126.3	100.0	99.7	615395
MRPS14	168.7	100.0	100.0	618378
MRPS16	127.0	99.9	98.5	610498
MRPS2	158.6	100.0	99.9	617950
MRPS22	134.6	99.9	98.7	611719;6181
MRPS34	169.0	100.0	99.9	617664
MRPS7	153.2	100.0	100.0	617872
MS4A1	127.6	99.9	98.8	613495
MSH2	111.7	99.4	96.4	276300;120435;158320
MSH3	139.6	99.8	99.2	608089;6171
MSH5	104.2	100.0	99.8	617442
MSH6	165.1	100.0	100.0	276300;6144
MSMO1	51.6	95.8	88.5	616834
MSN	66.9	97.5	91.7	300988
MSR1	144.0	100.0	99.3	614266
MSRB3	131.9	99.9	99.6	613718
MSTN	155.6	100.0	99.9	614160
MSTO1	101.4	99.3	96.1	617675

MSX1	143.3	99.9	98.6	608874;106600;189500
MSX2	101.1	100.0	100.0	168500;168550;604757
MTAP	96.0	98.9	93.4	112250
MTFMT	132.5	100.0	99.8	614947;6182
MTHFD1	115.4	99.8	97.4	617780
MTHFR	114.9	98.2	96.4	236250
MTHFS	89.4	75.4	75.0	618367
MTM1	79.1	98.7	91.9	310400
MTMR2	99.1	99.9	98.5	601382
MTO1	143.7	91.4	89.6	614702
MTOR	112.0	99.9	99.1	607341;6166
MTPAP	122.3	99.0	93.2	613672
MTR	131.4	99.9	99.4	250940
MTRR	131.1	100.0	99.0	236270
MTTP	114.7	99.9	99.4	200100
MUC1	67.7	93.1	84.2	174000
MUSK	131.5	100.0	100.0	6163;208150
MUT	131.3	99.9	98.9	251000
MUTYH	152.0	100.0	100.0	613659;608456;132600
MVD	113.0	99.9	98.4	614714
MVK	121.4	91.0	90.5	610377;175900;260920
MXI1	102.7	98.3	93.4	176807
MYBPC1	127.8	99.9	99.2	6149;614335
MYBPC3	141.5	100.0	98.6	115197;6154
MYC	132.2	66.0	64.0	113970
MYCN	173.8	100.0	100.0	164280
MYD88	194.7	100.0	99.8	6123;153600
MYF5	171.4	100.0	100.0	618155
MYH11	122.1	100.0	99.5	132900
MYH14	109.8	99.0	95.1	6144;600652

MYH2	108.2	100.0	99.5	605637
MYH3	94.1	99.9	98.3	178110;193700;601680
MYH6	95.5	99.0	95.3	613251;613252;614089
MYH7	92.2	99.5	96.4	613426;192600;160500;608358;181430;255160
MYH8	115.4	100.0	99.4	6088;158300
MYH9	128.5	99.6	98.5	155100;6036
MYL2	132.2	99.8	95.9	608758
MYL3	98.0	100.0	100.0	608751
MYL4	133.2	100.0	100.0	617280
MYLK	124.3	99.9	99.5	613780
MYLK2	132.9	100.0	100.0	192600
MYMK	140.5	100.0	100.0	254940
MYO15A	143.7	99.8	98.8	600316
MYO18B	122.1	99.9	99.2	616549
MYO1E	115.4	99.8	98.7	614131
MYO3A	113.0	99.2	95.3	607101
MYO5A	109.0	99.7	98.6	214450
MYO5B	108.3	97.9	94.7	251850
MYO6	101.5	99.5	96.4	6078;606346
MYO7A	125.2	99.8	98.5	601317;600060;276900
MYO9A	139.8	99.9	99.1	618198
MYOC	153.4	99.9	98.6	137750
MYOT	138.6	100.0	99.2	182920;6092
MYOZ2	142.4	100.0	99.9	613838
MYPN	124.8	99.9	99.0	615248;6173
MYRF	144.1	97.5	96.5	618113;6183
MYSM1	111.0	99.8	98.4	618116
MYT1L	144.7	100.0	99.8	616521
NAA10	105.0	100.0	98.8	300855;3098
NAA15	95.7	97.6	94.5	617787

NACC1	169.5	100.0	100.0	617393
NADK2	163.3	99.9	99.0	616034
NAGA	121.7	100.0	100.0	609241;6092
NAGLU	117.7	97.1	94.1	6165;252920
NAGS	104.3	100.0	99.9	237310
NALCN	117.0	99.7	98.7	6163;615419
NANOS1	106.8	100.0	99.3	615413
NANS	97.2	99.9	98.4	610442
NARS2	120.7	97.6	97.2	616239
NAT8L	91.4	98.8	94.6	614063
NAXD	132.1	100.0	99.9	618321
NAXE	81.4	99.7	97.0	617186
NBAS	138.5	99.9	99.1	6165;614800
NBEAL2	166.0	100.0	99.5	139090
NBN	93.8	99.8	98.4	609135;613065;251260
NCAPD2	118.1	100.0	99.4	617983
NCAPD3	100.1	99.8	98.2	617984
NCAPH	119.6	100.0	99.9	617985
NCF1	23.1	27.8	22.5	233700
NCF2	109.2	99.8	98.2	233710
NCF4	148.6	100.0	100.0	613960
NCSTN	92.7	100.0	99.6	142690
NDE1	89.3	100.0	99.6	605013;614
NDN	125.0	99.5	96.9	176270
NDP	91.6	100.0	99.5	3106;305390
NDRG1	114.0	100.0	100.0	601455
NDST1	188.4	100.0	100.0	616116
NDUFA1	184.9	99.9	99.2	301020
NDUFA10	114.6	99.9	98.9	618243
NDUFA11	116.0	99.8	97.4	618236

NDUFA12	160.8	100.0	100.0	618244
NDUFA13	121.3	92.3	91.7	618249
NDUFA2	162.6	100.0	99.6	618235
NDUFA6	201.9	100.0	100.0	618253
NDUFA9	101.6	99.7	96.5	618247
NDUFAF1	98.5	100.0	99.9	618234
NDUFAF2	54.1	94.3	82.0	618233
NDUFAF3	141.0	100.0	99.9	618240
NDUFAF4	98.3	99.2	94.5	618237
NDUFAF5	124.9	99.9	99.1	618238
NDUFAF6	91.9	99.8	98.5	618239
NDUFB11	103.3	98.6	95.0	300952;301
NDUFB3	23.3	89.7	62.5	618246
NDUFB8	105.3	100.0	99.8	618252
NDUFB9	105.2	97.8	93.3	618245
NDUFS1	143.5	99.9	99.8	618226
NDUFS2	100.1	100.0	100.0	618228
NDUFS3	124.8	90.7	90.5	618230
NDUFS4	144.5	100.0	99.7	252010
NDUFS6	111.9	100.0	100.0	618232
NDUFS7	140.5	100.0	99.9	618224
NDUFS8	156.8	100.0	99.7	618222
NDUFV1	141.7	99.9	98.8	618225
NDUFV2	74.2	92.4	77.3	618229
NEB	100.1	83.0	82.4	256030
NECAP1	102.3	100.0	100.0	615833
NECTIN1	134.0	100.0	99.9	225060
NECTIN4	121.6	100.0	99.9	613573
NEDD4L	93.7	72.3	71.5	617201
NEFH	110.6	99.5	97.6	616924

NEFL	178.7	99.8	97.8	617882;607684;607734
NEK1	115.9	99.7	98.1	263520
NEK2	86.4	98.6	92.4	615565
NEK8	141.3	100.0	99.9	613824;6154
NEK9	118.9	99.8	98.2	614262;617022;617025
NEU1	141.3	99.3	96.4	256550
NEUROD1	154.5	100.0	99.4	606394
NEUROD2	145.4	100.0	100.0	618374
NEUROG3	172.9	100.0	100.0	610370
NEXMIF	132.0	100.0	99.5	300912
NEXN	90.2	96.1	85.9	6139;613122
NF1	106.2	92.5	89.4	193520;607785;162200;162210;601321
NF2	94.2	100.0	99.6	607174;101000;162091
NFASC	121.2	100.0	99.8	618356
NFE2L2	166.2	100.0	99.9	617744
NFIA	149.5	100.0	98.8	613735
NFIB	107.6	97.5	96.9	618286
NFIX	174.4	100.0	99.7	6148;602535
NFKB1	93.0	99.9	98.7	616576
NFKB2	135.0	99.1	96.5	615577
NFKBIA	134.6	95.3	89.4	612132
NFU1	61.8	97.4	82.1	605711
NGF	199.0	100.0	100.0	608654
NGLY1	135.4	100.0	99.7	615273
NHEJ1	58.5	99.7	92.8	611291
NHLRC1	169.7	100.0	100.0	254780
NHLRC2	119.0	99.8	98.7	618278
NHP2	121.9	100.0	99.2	613987
NHS	111.0	98.5	96.0	3024;302200
NIN	127.0	99.9	99.4	614851

NIPA1	156.7	100.0	99.9	600363
NIPAL4	126.7	100.0	99.3	612281
NIPBL	124.9	98.8	96.9	122470
NKX2-1	88.8	100.0	99.7	118700;611
NKX2-5	120.8	100.0	99.9	225250;187500;217095;614432;108900;614435
NKX2-6	139.9	100.0	100.0	217095
NKX3-2	138.4	100.0	99.8	613330
NKX6-2	122.9	98.1	91.2	617560
NLGN4X	147.9	99.5	97.4	300495
NLRC4	159.4	100.0	99.9	616050;6161
NLRP1	117.7	99.5	97.6	6174;615225
NLRP12	161.7	100.0	100.0	611762
NLRP3	134.6	100.0	99.9	617772;120100;191900;148200;607115
NLRP7	124.5	99.9	98.8	231090
NME1	77.1	100.0	99.9	256700
NME8	104.7	98.6	93.8	610852
NMNAT1	113.5	100.0	98.5	608553
NNT	124.6	100.0	98.5	614736
NOBOX	98.9	99.8	98.1	611548
NOD2	125.3	100.0	99.9	186580
NODAL	144.8	100.0	100.0	270100
NOG	233.6	100.0	100.0	185800;611377;186570;184460;186500
NOL3	112.8	99.6	96.3	614937
NONO	78.1	99.1	95.3	300967
NOP10	120.5	100.0	100.0	224230
NOP56	113.1	100.0	98.8	614153
NOTCH1	141.8	99.8	98.9	109730;616
NOTCH2	123.7	100.0	99.6	6102;102500
NOTCH3	106.3	98.4	94.2	615293;130720;125310
NPC1	117.8	100.0	99.2	257220

NPC2	124.7	100.0	99.9	607625
NPHP1	121.2	99.8	98.5	266900;609583;256100
NPHP3	121.4	99.8	98.5	208540;267010;604387
NPHP4	125.6	100.0	99.7	607;606966
NPHS1	106.3	100.0	99.5	256300
NPHS2	114.5	100.0	99.5	600995
NPM1	65.0	94.5	83.5	601626
NPPA	158.5	100.0	100.0	612201;6157
NPR2	144.1	100.0	99.4	615923;616255;602875
NPRL2	138.7	100.0	100.0	617116
NPRL3	120.3	100.0	99.8	617118
NR0B1	138.6	99.9	99.2	300018;3002
NR0B2	102.8	100.0	99.7	601665
NR1H4	122.3	99.8	98.3	617049
NR2E3	105.1	99.9	98.6	6111;268100
NR2F1	222.3	100.0	100.0	615722
NR2F2	236.6	100.0	100.0	615779
NR3C1	129.3	100.0	99.9	615962
NR3C2	123.4	100.0	98.1	177735;6051
NR4A3	114.9	100.0	99.9	612237
NR5A1	111.0	100.0	99.7	617480;613957;612965;612964
NRAS	145.5	100.0	100.0	188470;162900;249400;614470;114500;163200;613224;137550
NRIP1	181.1	100.0	100.0	618270
NRL	114.8	99.9	98.3	613750
NRXN1	141.6	97.6	97.3	614325
NSD1	147.0	100.0	99.8	117550
NSDHL	125.8	99.7	97.1	300831;3081
NSMCE2	81.4	99.9	98.6	617253
NSMCE3	194.0	100.0	100.0	617241
NSMF	109.8	99.4	97.4	614838

NSUN2	94.7	97.6	93.5	611091
NT5C2	121.2	97.9	96.3	613162
NT5C3A	64.1	97.2	85.7	266120
NT5E	151.4	100.0	99.9	211800
NTF4	151.2	99.8	97.7	613100
NTHL1	121.6	100.0	100.0	616415
NTN1	194.9	100.0	100.0	618264
NTRK1	133.0	100.0	99.3	2568;155240
NTRK2	136.2	100.0	99.9	6178;613886
NUBPL	102.0	98.9	95.5	618242
NUMA1	132.0	100.0	99.5	612376
NUP107	126.6	99.8	98.6	618078;616730;618348
NUP133	121.1	99.7	97.8	618177;6183
NUP155	120.3	98.4	96.9	615770
NUP160	137.7	100.0	99.9	618178
NUP205	133.5	99.6	98.7	616893
NUP214	149.1	99.9	99.4	6131;601626
NUP37	156.4	100.0	99.7	618179
NUP62	111.8	100.0	100.0	271930
NUP85	125.7	100.0	100.0	618176
NUP88	141.5	100.0	100.0	618393
NUP93	117.8	96.9	93.8	616892
NUS1	53.3	71.5	44.1	6178;617082
NYX	131.7	99.6	98.1	310500
OAT	68.2	81.7	70.1	258870
OBSL1	147.2	100.0	99.8	612921
OCA2	116.8	99.7	97.7	203200
OCLN	173.9	100.0	100.0	251290
OCRL	106.2	99.8	98.3	300555;309
OFD1	51.9	85.8	70.8	300424;300209;300804;311200

OGG1	118.7	100.0	99.7	144700
OGT	106.5	99.9	98.4	300997
OPA1	124.7	99.7	97.4	210000;165500;616896;125250
OPA3	156.6	100.0	99.2	2585;165300
OPCML	144.1	99.6	99.5	167000
OPHN1	78.3	98.9	95.0	300486
OPLAH	141.5	100.0	99.9	260005
OPN1LW	58.7	68.3	61.3	303700;3039
OPN1MW	56.9	66.1	57.9	303700;3038
OPN1SW	95.9	100.0	100.0	190900
OPTN	104.0	100.0	99.7	6134;137760
ORA11	198.9	99.8	98.2	612782;6159
ORC1	90.3	99.9	98.7	224690
ORC4	73.6	98.1	92.0	613800
ORC6	127.6	100.0	99.9	613803
OSBPL2	138.2	100.0	100.0	616340
OSGEP	98.1	100.0	97.3	617729
OSMR	131.7	100.0	99.5	105250
OSTM1	109.3	98.2	92.5	259720
OTC	111.4	100.0	99.7	311250
OTOA	97.2	99.7	98.3	607039
OTOF	135.6	100.0	99.8	601071
OTOG	134.6	99.6	98.8	614945
OTOGL	104.6	99.4	97.0	614944
OTUD6B	117.7	99.8	99.3	617452
OTULIN	132.6	98.7	95.2	617099
OTX2	127.4	100.0	99.3	610125;614
OVOL2	120.8	99.8	97.7	122000
OXCT1	125.5	99.7	98.2	245050
P2RX2	174.5	100.0	100.0	608224

P2RY12	186.2	100.0	100.0	609821
P3H1	129.3	100.0	100.0	610915
P3H2	98.8	99.9	99.4	614292
P4HA2	114.8	99.9	98.4	617238
P4HB	108.7	94.6	93.8	112240
PABPN1	76.7	76.7	60.6	164300
PACS1	106.7	100.0	99.4	615009
PACS2	155.4	100.0	99.3	618067
PADI3	139.0	100.0	100.0	191480
PADI6	104.5	99.9	99.0	617234
PAFAH1B1	77.0	92.0	82.8	607432
PAH	126.4	100.0	100.0	261600
PAK1	103.0	99.9	98.8	618158
PAK3	85.3	98.6	93.7	300558
PALB2	143.5	100.0	99.9	610832
PAM16	64.5	66.4	65.3	613320
PANK2	154.1	100.0	100.0	234200;6072
PAPSS2	103.8	99.7	97.7	612847
PARK7	83.5	100.0	99.8	606324
PARN	127.3	99.9	99.5	6164;616353
PATL2	93.7	99.8	96.2	617743
PAX1	189.5	97.0	92.1	615560
PAX2	184.1	100.0	100.0	120330;616
PAX3	106.9	100.0	99.7	193500;148820;268220;122880
PAX4	81.7	100.0	99.0	6122;125853
PAX6	116.5	100.0	99.8	106210;120430;120200;148190;136520;604229;165550
PAX7	131.1	100.0	100.0	268220
PAX8	94.4	100.0	99.8	218700
PAX9	236.1	99.8	99.6	604625
PBX1	111.7	99.9	98.2	617641

PC	155.4	99.9	98.7	266150
PCBD1	103.9	100.0	99.7	264070
PCCA	99.2	99.3	95.5	606054
PCCB	111.8	99.3	96.9	606054
PCDH12	182.1	100.0	100.0	251280
PCDH15	140.3	99.2	99.0	602083;609533;601067
PCDH19	176.6	99.9	98.9	300088
PCGF2	95.1	99.4	97.0	618371
PCK1	119.4	100.0	99.9	261680
PCLO	142.1	99.8	99.0	608027
PCNA	92.0	100.0	98.2	615919
PCNT	115.4	99.7	97.7	210720
PCSK1	141.9	100.0	99.2	600955
PCSK9	102.8	96.8	92.9	603776
PCYT1A	95.6	97.9	94.4	608940
PDCD10	98.3	99.8	99.0	603285
PDE10A	107.6	81.4	80.4	6169;616921
PDE11A	152.1	99.9	99.9	610475
PDE1C	108.0	99.8	99.4	618140
PDE3A	120.4	99.9	99.2	112410
PDE4D	102.7	95.8	94.4	614613
PDE6A	102.6	100.0	99.2	613810
PDE6B	157.3	100.0	100.0	163500;6138
PDE6C	116.2	99.5	97.2	613093
PDE6D	114.7	100.0	99.9	615665
PDE6G	125.8	100.0	99.5	613582
PDE6H	58.2	98.5	76.0	610024
PDE8B	99.7	99.9	98.9	6142;609161
PDGFB	115.4	100.0	100.0	607907;607174;615483
PDGFRA	124.7	100.0	100.0	6077;606764

PDGFRB	126.6	99.7	98.0	616592;601812;228550;615007
PDGFRL	133.1	100.0	99.5	1146;114500
PDHA1	85.3	98.9	95.4	312170
PDHB	111.4	99.2	97.2	614111
PDHX	129.0	99.9	99.5	245349
PDK3	108.4	97.4	94.5	300905
PDP1	129.1	100.0	100.0	608782
PDSS1	104.8	96.7	87.7	614651
PDSS2	112.9	99.6	96.1	614652
PDX1	72.9	99.1	95.2	260370;6064
PDYN	121.8	100.0	100.0	610245
PDZD7	93.9	99.6	97.8	605472;618
PEPD	117.4	100.0	99.6	170100
PER2	91.8	100.0	99.2	604348
PER3	146.1	99.8	98.1	616882
PET100	87.9	98.0	87.6	220110
PEX1	127.9	99.9	99.3	214100;234580;601539
PEX10	113.3	99.9	97.4	614870;6149
PEX11B	87.9	100.0	99.4	614920
PEX12	120.6	100.0	100.0	266510;6149
PEX13	179.6	100.0	100.0	6149;614883
PEX14	130.5	99.8	97.8	614887
PEX16	140.8	98.6	94.8	6149;614876
PEX19	84.9	100.0	98.9	614886
PEX2	134.9	100.0	100.0	6149;614866
PEX26	94.3	100.0	99.6	6149;614872
PEX3	113.9	99.9	99.2	6174;614882
PEX5	107.9	100.0	99.2	616716;202370;214110
PEX6	106.5	98.5	92.0	616617;614862;614863
PEX7	111.0	91.2	89.3	215100;6149

PFKM	113.7	100.0	99.2	232800
PFN1	156.9	100.0	100.0	614808
PGAM2	163.6	100.0	100.0	261670
PGAP1	110.9	99.1	95.8	615802
PGAP2	134.7	100.0	99.5	614207
PGAP3	70.3	63.5	59.9	615716
PGK1	44.7	90.9	75.9	300653
PGM1	128.8	100.0	99.8	614921
PGM3	149.3	99.9	99.6	615816
PHACTR1	104.3	100.0	99.6	618298
PHC1	178.0	100.0	99.5	615414
PHEX	107.9	99.8	98.6	307800
PHF6	60.3	98.2	87.9	301900
PHF8	74.4	99.2	95.8	300263
PHGDH	106.6	100.0	99.3	256520;6018
PHIP	130.8	99.3	97.2	617991
PHKA1	90.2	97.4	91.6	300559
PHKA2	93.7	99.9	98.7	306000
PHKB	125.3	99.9	99.1	261750
PHKG2	155.6	100.0	100.0	613027
PHOX2A	56.0	98.6	88.9	602078
PHOX2B	145.5	100.0	100.0	209880;613
PHYH	74.0	99.9	96.9	266500
PI4KA	91.8	93.7	89.7	616531
PIBF1	74.3	99.2	94.4	617767
PICALM	101.3	99.5	95.9	601626
PIEZO1	144.5	100.0	99.5	6168;194380
PIEZO2	104.2	99.9	99.2	108145;617146;114300;248700
PIGA	70.9	92.9	84.0	3009;300818
PIGC	85.9	99.3	92.2	617816

PIGG	143.4	100.0	99.5	616917
PIGH	93.8	78.8	67.3	618010
PIGL	122.1	99.7	99.6	280000
PIGM	148.9	100.0	100.0	610293
PIGN	106.3	93.6	91.1	614080
PIGO	144.5	100.0	99.9	614749
PIGP	89.3	94.8	86.0	617599
PIGS	90.0	100.0	99.4	618143
PIGT	159.3	98.1	98.1	6154;615398
PIGV	124.4	100.0	100.0	239300
PIGW	145.0	100.0	99.8	616025
PIGY	90.3	100.0	99.9	616809
PIH1D3	74.7	98.4	89.1	300991
PIK3CA	127.7	100.0	99.8	162900;211980;155500;612918;114500;613089;167000;615108;182000;114480;613659;114550;602501
PIK3CD	158.2	99.5	97.8	615513
PIK3R1	124.3	99.9	98.9	615214;616005;269880
PIK3R2	104.3	93.9	90.2	603387
PIK3R5	120.7	100.0	99.9	615217
PIKFYVE	136.4	99.9	99.7	121850
PINK1	87.3	96.4	90.7	605909
PIP5K1C	136.6	99.8	97.6	611369
PITPNM3	123.3	99.8	98.6	600977
PITX1	174.5	98.9	96.0	119800
PITX2	164.8	100.0	99.5	137600;180500;180550
PITX3	88.5	100.0	99.5	6106;107250
PKD1	35.9	43.0	35.0	173900
PKD1L1	108.7	100.0	99.3	617205
PKD2	102.3	98.7	95.8	613095
PKHD1	130.4	99.9	99.4	263200
PKLR	169.2	100.0	99.7	2662;102900

PKP1	120.8	99.8	98.4	604536
PKP2	91.9	96.7	90.7	609040
PLA2G4A	124.5	99.8	99.3	618372
PLA2G6	111.9	99.8	98.2	256600;610217;612953
PLA2G7	120.9	99.8	98.6	614278
PLAA	163.0	99.7	98.6	617527
PLAG1	168.3	100.0	100.0	181030
PLAU	99.6	100.0	99.0	601709
PLCB1	134.9	100.0	99.7	613722
PLCB4	102.5	99.8	98.0	614669
PLCD1	116.1	100.0	99.3	151600
PLCE1	125.0	99.8	99.0	610725
PLCG2	105.8	100.0	99.3	6149;614468
PLCZ1	75.7	99.1	96.0	617214
PLD1	116.4	99.9	99.3	212093
PLD3	172.6	100.0	100.0	617770
PLEC	144.1	100.0	100.0	612138;613723;226670;131950;616487
PLEKHG2	152.2	100.0	99.0	616763
PLEKHG5	101.6	99.8	97.7	6154;611067
PLEKHM1	127.8	100.0	99.9	611497;6181
PLG	93.4	87.8	86.8	217090
PLIN1	93.1	100.0	99.3	613877
PLK4	149.7	99.8	98.2	616171
PLN	163.5	100.0	100.0	609909;6139
PLOD1	131.9	99.8	97.3	225400
PLOD2	121.3	99.6	97.3	609220
PLOD3	109.7	100.0	99.9	612394
PLP1	112.8	99.7	97.7	3129;312080
PLPBP	95.3	99.6	95.3	617290
PLPP6	179.0	100.0	99.4	611666

PLS3	116.9	96.9	95.3	300910
PLVAP	161.0	100.0	100.0	618183
PMFBP1	104.4	99.9	99.0	618112
PML	153.4	100.0	100.0	-
PMM2	127.7	100.0	99.7	212065
PMP2	122.6	100.0	99.7	618279
PMP22	96.3	98.9	94.3	139393;118300;118220;145900;162500;180800
PMPCA	108.1	99.1	95.9	213200
PMPCB	121.6	100.0	99.2	617954
PMS2	94.7	83.4	81.0	276300;6143
PMVK	118.7	100.0	99.9	175800
PNKD	126.8	100.0	99.8	118800
PNKP	109.0	100.0	99.9	6163;613402
PNLIP	133.9	100.0	97.7	614338
PNP	108.6	100.0	99.5	613179
PNPLA1	164.8	100.0	100.0	615024
PNPLA2	142.7	100.0	99.8	610717
PNPLA6	137.9	99.9	99.5	275400;612020;215470;245800
PNPLA8	121.2	100.0	99.7	251950
PNPO	74.4	100.0	99.3	610090
PNPT1	56.1	96.2	84.3	6149;614932
POC1A	112.9	100.0	100.0	614813
POC1B	79.6	99.7	97.9	615973
POF1B	71.7	94.6	84.3	300604
POFUT1	134.6	99.9	99.4	615327
POGLUT1	101.2	100.0	98.7	615696;6172
POGZ	122.2	99.5	99.0	616364
POLA1	104.0	99.3	95.4	301220
POLD1	124.5	98.0	93.9	615381
POLE	126.9	99.9	99.4	615139;6183

POLG	113.9	100.0	99.6	607459;613662;203700;157640;258450
POLG2	183.7	99.6	98.0	610131
POLH	116.2	99.9	98.6	278750
POLR1A	103.6	99.9	98.2	616462
POLR1C	98.3	98.9	94.9	6165;248390
POLR1D	183.1	91.6	91.6	613717
POLR3A	116.8	100.0	99.9	6077;264090
POLR3B	129.8	99.7	98.2	614381
POMC	148.2	100.0	100.0	609734
POMGNT1	115.5	100.0	99.6	613151;617123;613157;253280
POMGNT2	201.7	100.0	100.0	614830;6181
POMK	138.7	100.0	100.0	615249;6161
POMP	124.6	99.9	97.6	618;601952
POMT1	130.6	99.7	97.8	236670;609308;613155
POMT2	103.3	100.0	98.4	613150;613156;613158
POP1	120.1	100.0	99.4	617396
POR	175.5	99.2	97.1	201750;6136
PORCN	111.2	99.9	98.8	305600
POU1F1	109.1	99.9	98.2	613038
POU3F4	135.9	100.0	100.0	304400
POU4F3	261.7	100.0	100.0	602459
PPA2	92.3	98.8	91.7	617222;6172
PPARG	135.9	100.0	99.9	604367;609338;601665
PPCS	148.5	100.0	99.3	618189
PPIB	106.9	100.0	100.0	259440
PPM1D	170.2	100.0	99.6	114480;6175
PPM1K	132.5	100.0	100.0	615135
PPOX	95.2	99.8	97.5	176200
PPP1CB	113.1	100.0	99.1	617506
PPP1R15B	124.0	100.0	99.9	616817

PPP1R3A	150.8	100.0	99.7	125853
PPP2CA	161.0	100.0	99.9	618354
PPP2R1A	129.1	91.6	91.6	616362
PPP2R1B	135.6	100.0	99.8	211980
PPP2R2B	124.2	99.9	98.4	604326
PPP2R5D	136.6	100.0	100.0	616355
PPP3CA	121.2	99.6	97.5	617711;6183
PPT1	136.6	90.2	89.2	256730
PQBP1	163.5	100.0	100.0	309500
PRCC	152.6	100.0	99.9	605074
PRCD	95.6	100.0	100.0	610599
PRDM12	138.9	92.6	90.4	616488
PRDM16	205.4	99.9	99.1	615373
PRDM5	137.8	99.6	98.7	614170
PRDM6	110.6	99.9	99.0	617039
PRDM8	116.4	99.7	95.9	616640
PRDX1	95.0	100.0	99.7	277400
PREPL	103.9	99.7	97.7	616224
PRF1	138.1	91.2	90.6	609135;603553;605027
PRG4	131.1	99.2	92.4	208250
PRICKLE1	100.0	100.0	99.8	612437
PRIMPOL	118.1	97.7	94.6	615420
PRKACA	101.9	80.2	79.5	615830
PRKACG	204.5	100.0	100.0	616176
PRKAG2	129.9	99.7	97.4	261740;600858;194200
PRKAR1A	79.4	98.6	92.6	255960;160980;101800;610489
PRKCA	126.7	100.0	100.0	-
PRKCD	164.7	100.0	100.0	615559
PRKCG	129.8	100.0	99.3	605361
PRKCSH	152.6	99.5	94.8	174050

PRKD1	138.7	99.6	99.5	617364
PRKDC	97.9	99.3	96.5	615966
PRKG1	125.4	99.7	98.4	615436
PRKN	82.1	79.9	78.1	600116;211980;167000
PRKRA	190.7	100.0	100.0	612067
PRLR	129.5	100.0	99.7	6156;615554
PRMT7	119.1	100.0	99.9	617157
PRNP	119.0	100.0	100.0	603218;123400;600072;606688;137440
PROC	142.6	100.0	100.0	6123;176860
PRODH	81.8	89.0	81.7	239500
PROK2	117.4	100.0	99.9	610628
PROKR2	223.0	100.0	100.0	244200
PROM1	107.4	97.8	95.8	608051;612095;603786;612657
PROP1	96.9	92.5	83.7	262600
PROS1	95.8	97.7	92.7	612336;6145
PRPF3	73.2	98.4	94.8	601414
PRPF31	117.4	99.8	97.1	600138
PRPF4	124.9	100.0	99.5	615922
PRPF6	112.3	100.0	99.6	613983
PRPF8	103.4	99.9	98.9	600059
PRPH2	203.0	100.0	100.0	608133;136880;169150;608161;613105
PRPS1	111.6	100.0	99.9	301835;311070;304500;300661
PRRT2	111.8	100.0	99.0	128200;602066;605751
PRRX1	100.4	100.0	99.8	202650
PRSS1	141.4	100.0	99.9	167800
PRSS12	137.8	100.0	99.6	249500
PRSS56	95.4	100.0	99.2	613517
PRUNE1	118.0	100.0	99.3	617481
PRX	156.5	100.0	99.9	145900;6149
PSAP	98.1	100.0	99.3	610539;249900;611722;611721

PSAT1	42.8	90.3	72.5	610992;616
PSEN1	131.5	100.0	100.0	613737;172700;607822;600274;613694
PSEN2	109.9	100.0	99.9	6137;606889
PSENEEN	90.1	100.0	100.0	613736
PSMB4	119.2	100.0	99.9	617591
PSMB8	113.5	100.0	98.8	256040
PSMB9	81.5	99.9	97.7	617591
PSMC3IP	104.9	100.0	100.0	614324
PSMD12	85.5	98.5	90.1	617516
PSPH	126.6	100.0	99.8	614023
PSTPIP1	103.8	99.9	98.5	604416
PTCH1	110.2	99.9	98.4	109400;605462;610828
PTCH2	120.3	99.9	98.7	155255;109400;605462
PTDSS1	112.0	100.0	99.9	151050
PTEN	129.7	99.6	97.0	176807;605309;158350
PTF1A	120.6	99.9	98.2	609069;6159
PTGIS	113.7	99.5	96.4	145500
PTH	94.4	99.7	96.8	146200
PTH1R	106.6	100.0	99.1	156400;215045;125350;600002
PTHLH	127.2	98.4	90.3	613382
PTPN11	78.3	98.6	90.7	607785;163950;156250;151100
PTPN12	148.0	99.2	96.9	114500
PTPN14	159.2	99.3	96.8	613611
PTPRC	100.6	98.7	93.9	608971
PTPRF	154.8	100.0	99.9	616001
PTPRJ	137.4	97.7	96.3	114500
PTPRO	128.1	99.9	99.4	614196
PTPRQ	102.5	94.5	92.3	6177;613391
PTRH2	200.8	100.0	100.0	616263
PTS	101.5	99.8	98.4	261640

PUF60	163.3	100.0	99.4	615583
PUM1	126.9	100.0	99.5	617931
PURA	207.1	99.5	96.9	616158
PUS1	113.3	99.8	97.5	600462
PUS3	158.3	100.0	100.0	617051
PUS7	135.4	100.0	99.6	618342
PXDN	138.4	100.0	99.6	269400
PYCR1	96.0	99.7	97.4	612940;6144
PYCR2	116.5	99.7	96.9	616420
PYGL	141.0	100.0	100.0	232700
PYGM	121.1	100.0	99.9	232600
PYROXD1	48.6	93.0	78.5	617258
QARS	129.2	100.0	99.8	615760
QDPR	97.9	100.0	99.2	261630
QRICH1	133.0	100.0	99.4	617982
QRICH2	113.4	95.2	93.7	618341
RAB11B	212.7	100.0	100.0	617807
RAB18	83.4	99.7	97.2	614222
RAB23	107.4	100.0	99.2	201000
RAB27A	126.1	100.0	99.8	607624
RAB28	66.6	98.9	92.3	615374
RAB33B	191.3	100.0	100.0	615222
RAB39B	102.0	100.0	99.9	3115;300271
RAB3GAP1	121.7	99.4	98.9	600118
RAB3GAP2	91.6	99.7	96.9	6142;212720
RAB7A	115.3	100.0	99.9	600882
RAC1	101.1	99.6	94.4	617751
RAC2	100.6	100.0	99.4	608203
RAD21	83.0	97.8	93.4	611376;6147
RAD50	102.0	97.5	91.1	613078

RAD51	100.6	89.4	89.4	614508;6172
RAD51C	140.6	99.9	99.5	613390
RAD54B	113.6	99.0	96.1	114500;605
RAD54L	97.8	100.0	99.0	605027
RAF1	108.3	100.0	99.9	611554;611553;615916
RAG1	150.9	100.0	100.0	233650;603554;601457;609889
RAG2	186.2	100.0	100.0	233650;603554;601457
RAI1	194.4	100.0	100.0	182290
RAP1GDS1	97.9	99.0	94.4	-
RAPGEF2	143.0	99.8	98.9	618075
RAPSN	149.0	99.8	97.7	616326;6184
RARB	93.2	100.0	100.0	615524
RARS	93.4	93.6	90.0	616140
RARS2	104.0	100.0	99.4	611523
RASA1	109.8	98.5	95.7	605462;6084
RASGRP2	102.5	100.0	99.7	615888
RAX	135.9	99.9	98.5	611038
RAX2	89.2	100.0	99.9	610381;6138
RB1	89.8	97.8	93.1	180200;109800;182280;259500
RB1CC1	109.3	99.4	96.3	114480
RBBP8	120.6	99.9	99.3	251255;6067
RBCK1	107.9	100.0	99.2	615895
RBM10	111.6	99.8	97.6	311900
RBM20	177.6	100.0	99.7	613172
RBM28	130.1	100.0	99.9	612079
RBM8A	87.4	99.8	97.4	274000
RBMX	40.9	92.0	74.4	300238
RBP3	150.0	100.0	100.0	615233
RBP4	137.9	99.2	95.8	6164;615147
RBPJ	70.7	96.3	87.0	614814

RCBTB1	95.9	99.8	99.3	617175
RD3	165.7	100.0	100.0	610612
RDH11	93.0	99.9	98.5	616108
RDH12	80.7	99.8	97.2	612712
RDH5	167.7	100.0	100.0	136880
RDX	38.4	88.0	69.1	611022
RECQL4	159.9	100.0	99.8	218600;268400;266280
REEP1	71.5	78.6	76.2	610250;6148
REEP2	173.9	100.0	99.3	615625
REEP6	206.2	100.0	99.7	617304
RELA	97.8	99.8	99.2	618287
RELB	108.0	99.2	92.7	617585
RELN	130.1	100.0	99.6	257320
RELT	141.4	100.0	99.9	618386
REN	127.5	100.0	100.0	6131;267430
REPS1	121.5	99.0	96.4	617916
RERE	77.6	96.5	93.2	616975
REST	115.5	98.5	98.4	617626
RET	136.8	100.0	99.2	171400;171300;209880;162300;155240
RETREG1	126.9	99.7	98.8	613115
RFC1	125.7	99.9	98.6	614575
RFT1	105.7	100.0	99.2	612015
RFWD3	103.7	100.0	99.5	617784
RFX5	109.0	99.8	97.5	209920
RFX6	147.0	99.9	99.7	615710
RFXANK	123.1	100.0	99.3	209920
RFXAP	116.5	100.0	99.3	209920
RGR	120.8	100.0	99.1	613769
RGS9	107.8	98.7	96.7	608415
RGS9BP	143.6	100.0	100.0	608415

RHAG	122.0	100.0	98.1	185000;2682
RHBDF2	105.1	99.9	98.9	148500
RHCE	151.2	98.1	97.8	617970
RHO	165.3	100.0	100.0	136880;613731;610445
RHOBTB2	190.5	100.0	99.9	618004
RIMS1	126.0	99.8	98.6	603649
RIN2	119.5	100.0	99.6	613075
RIPK1	103.6	99.9	98.7	618108
RIPK4	167.5	100.0	100.0	214350;2637
RIPOR2	111.5	100.0	99.8	616515
RIPPLY2	78.7	100.0	98.7	616566
RIT1	139.2	100.0	100.0	615355
RLBP1	120.4	100.0	99.7	607476;607475;136880
RLIM	98.0	99.5	97.7	300978
RMND1	132.6	100.0	99.0	614922
RMRP				250460;250250;607095
RNASEH1	101.1	97.6	92.5	616479
RNASEH2A	129.8	100.0	99.7	610333
RNASEH2B	100.8	98.9	95.2	610181
RNASEH2C	281.7	100.0	100.0	610329
RNASEL	122.9	100.0	99.7	601518
RNASET2	102.2	95.4	90.2	612951
RNF113A	134.9	100.0	100.0	300953
RNF125	175.4	99.9	99.2	616260
RNF13	80.3	92.0	79.0	618379
RNF139	172.1	100.0	100.0	144700
RNF168	182.0	100.0	99.6	611943
RNF170	126.6	99.7	97.7	608984
RNF212	107.5	99.9	98.9	612042
RNF216	125.0	99.9	98.1	212840

RNF43	145.9	100.0	98.8	617108
RNF6	137.1	99.8	98.6	133239
RNPC3	41.6	88.8	68.7	618160
RNU4ATAC				6167;210710
ROBO2	127.4	98.8	97.5	610878
ROBO3	104.3	99.4	96.9	607313
ROGDI	127.6	100.0	99.4	226750
ROM1	126.1	100.0	99.9	608133
ROR1	149.1	99.1	97.2	617654
ROR2	160.6	100.0	99.7	2683;113000
RORA	103.6	96.8	91.2	618060
RORC	118.6	100.0	100.0	616622
RP1	109.4	91.4	90.8	180100
RP1L1	135.2	100.0	100.0	613587
RP2	155.8	100.0	99.8	312600
RP9	64.5	91.4	78.5	180104
RPE65	131.9	100.0	99.8	204100;6138
RPGR	81.3	82.4	75.5	300455;300834;304020;300029
RPGRIP1	128.0	100.0	99.7	6138;608194
RPGRIP1L	123.4	96.7	95.4	611561;611560;216360
RPIA	113.0	100.0	98.8	608611
RPL10	65.6	97.1	86.9	300998
RPL11	85.4	100.0	99.3	612562
RPL15	32.0	87.2	72.1	615550
RPL18	89.3	100.0	99.5	618310
RPL21	54.9	84.6	64.0	615885
RPL26	31.0	91.7	68.9	614900
RPL27	32.5	72.7	54.6	617408
RPL35	62.5	89.5	75.8	618312
RPL35A	75.4	96.4	84.6	612528

RPL5	34.7	85.0	67.7	612561
RPS10	91.8	98.8	91.8	613308
RPS14	106.0	99.7	93.8	153550
RPS15A	58.3	97.1	86.3	618313
RPS17	38.2	87.0	68.9	612527
RPS19	76.7	99.9	96.6	105650
RPS23	59.4	88.9	78.9	617412
RPS24	84.5	95.2	89.7	610629
RPS26	75.9	89.2	75.8	613309
RPS27	34.4	89.5	57.5	617409
RPS28	54.1	99.7	95.0	606164
RPS29	90.8	98.7	94.6	615909
RPS6KA3	87.8	98.3	93.0	300844;3036
RPS7	76.6	84.8	70.0	612563
RPSA	64.0	100.0	99.4	271400
RRAS2	82.6	92.4	81.0	-
RRM2B	143.9	99.9	99.4	6131;612075
RS1	51.4	98.7	87.3	312700
RSPH1	122.6	100.0	99.9	615481
RSPH3	139.5	99.9	99.3	616481
RSPH4A	146.9	98.1	95.3	612649
RSPH9	131.2	99.7	97.1	612650
RSPO1	103.8	100.0	99.9	610644
RSPO2	136.4	96.6	90.1	618021;618
RSPO4	144.4	100.0	100.0	206800
RSPRY1	142.0	100.0	99.9	616723
RSRC1	75.4	99.6	95.4	618402
RTEL1	131.1	99.7	97.7	6164;615190
RTN2	140.8	99.9	98.7	604805
RTN4IP1	79.6	100.0	98.0	616732

RTTN	117.9	98.8	97.4	614833
RUBCN	99.3	99.9	99.1	615705
RUNX1	84.6	99.6	96.3	6016;601399
RUNX2	102.8	73.4	72.2	1565;119600
RUSC2	188.1	100.0	100.0	617773
RYR1	117.1	98.7	95.7	117000;145600;255320
RYR2	124.9	99.9	98.9	600996;6048
S1PR2	200.8	99.5	96.8	610419
SACS	150.4	100.0	99.9	270550
SAG	127.0	100.0	99.9	6138;258100
SALL1	113.3	99.9	98.9	107480
SALL2	128.4	100.0	100.0	216820
SALL4	135.0	99.9	98.1	147750;6073
SAMD12	139.2	100.0	100.0	601068
SAMD9	163.9	100.0	99.9	610455;6171
SAMD9L	171.8	100.0	100.0	159550
SAMHD1	133.4	99.8	98.5	612952;6144
SAR1B	120.9	97.2	90.5	246700
SARS	107.6	99.9	98.8	617709
SARS2	117.9	95.1	93.2	613845
SASH1	152.1	99.3	97.8	127500;6184
SASS6	77.6	99.6	97.6	616402
SATB2	107.4	99.8	97.7	612313
SBDS	166.2	100.0	100.0	260400
SBF1	122.0	99.4	97.9	615284
SBF2	107.7	99.9	99.0	604563
SC5D	153.6	99.8	99.3	607330
SCAPER	138.7	98.2	96.4	618195
SCARB2	105.8	99.8	99.1	254900
SCARF2	104.8	99.5	95.7	600920

SCN10A	133.3	100.0	99.4	615551
SCN11A	122.1	99.3	97.1	6156;615548
SCN1A	121.4	100.0	99.1	609634;607208;604403
SCN1B	169.7	99.9	98.1	617350;615377;612838;604233
SCN2A	132.4	99.6	97.7	6137;607745
SCN2B	176.4	100.0	100.0	615378
SCN3A	138.7	99.9	99.1	6179;617935
SCN3B	137.7	100.0	100.0	613120
SCN4A	167.9	99.8	99.3	168300;170500;614198;608390;613345
SCN4B	66.0	99.8	97.7	611819
SCN5A	141.1	99.0	99.0	603829;614022;601154;601144;608567;113900;603830
SCN8A	154.3	100.0	99.7	614306;618364;617080;614558
SCN9A	128.4	99.1	97.7	167400;133020;243000;613863
SCNN1A	127.0	99.8	98.3	613021;618126;264350
SCNN1B	130.6	100.0	100.0	211400;264350;177200
SCNN1G	142.2	99.5	97.2	613071;618114;264350
SCO1	100.1	99.8	98.1	220110
SCO2	115.7	100.0	99.9	6089;604377
SCP2	107.8	99.7	96.4	613724
SCYL1	146.2	100.0	100.0	616719
SDCCAG8	124.1	100.0	99.7	613615;616
SDHA	88.9	85.1	77.7	252011;614165;256000;613642
SDHAF1	83.0	100.0	100.0	252011
SDHAF2	127.7	95.6	94.6	601650
SDHB	114.8	100.0	99.9	171300;115310;606864;606764
SDHC	85.8	99.6	95.3	605373;606864;606764
SDHD	43.7	52.7	50.6	171300;252011;606864;168000
SDR9C7	168.0	100.0	99.9	617574
SEC23A	122.6	99.7	97.9	607812
SEC23B	131.0	99.8	99.0	224100;6169

SEC24D	126.3	99.9	99.5	616294
SEC61A1	121.0	100.0	99.9	617056
SEC63	78.7	86.5	80.0	617004
SECISBP2	108.0	99.7	97.1	609698
SELENBP1	121.6	100.0	99.8	618148
SELENON	131.0	84.9	83.9	255310;6028
SEMA3E	130.9	100.0	99.6	214800
SEMA4A	124.3	100.0	99.3	6103;610282
SEPSECS	159.6	100.0	99.6	613811
SEPT12	103.2	99.9	98.0	614822
SEPT9	145.1	100.0	99.7	162100
SERAC1	111.0	99.7	99.0	614739
SERPINA1	104.9	100.0	99.7	613490
SERPINA3	114.4	100.0	99.9	-
SERPINA6	138.3	100.0	100.0	611489
SERPINB6	138.9	95.9	95.9	613453
SERPINB7	124.3	100.0	99.6	615598
SERPINB8	125.8	95.0	95.0	617115
SERPINC1	117.9	100.0	100.0	613118
SERPIND1	134.8	100.0	99.9	612356
SERPINE1	134.0	100.0	100.0	613329
SERPINF1	104.0	100.0	99.9	613982
SERPINF2	151.6	100.0	99.9	262850
SERPING1	96.7	99.5	96.7	106100;1208
SERPINH1	195.8	100.0	99.6	613848
SERPINI1	101.2	99.8	97.4	604218
SET	58.3	97.2	88.8	618106
SETBP1	122.7	98.8	97.7	269150;6161
SETD2	137.5	100.0	99.7	616831
SETD5	147.6	100.0	99.7	615761

SETX	151.6	100.0	99.6	606;602433
SF3B1	130.9	99.6	98.3	614286
SF3B4	75.5	99.9	98.3	154400
SFRP4	125.4	99.9	99.0	265900
SFTPA2	141.1	100.0	100.0	178500
SFTPBB	94.1	100.0	99.5	265120
SFTPC	98.4	100.0	99.1	610913
SFXN4	124.0	100.0	99.7	615578
SGCA	158.4	100.0	100.0	608099
SGCB	140.1	99.3	96.7	604286
SGCD	78.0	99.8	97.2	6067;601287
SGCE	97.7	96.0	92.3	159900
SGCG	114.5	100.0	99.8	253700
SGO1	107.8	99.9	98.9	616201
SGPL1	132.3	100.0	100.0	617575
SGSH	140.2	97.6	94.7	252900
SH2B3	108.4	99.9	97.6	133100;187950;254450
SH2D1A	108.9	97.8	92.4	308240
SH3BP2	139.3	91.9	91.4	118400
SH3KBP1	90.2	99.0	93.7	300310
SH3PXD2B	161.4	100.0	99.9	249420
SH3TC2	102.1	100.0	99.4	6134;601596
SHANK3	123.9	97.5	91.6	606232
SHH	147.1	100.0	100.0	269160;142945;147250;611638
SHOC2	139.6	99.9	99.4	607721
SHOX	35.9	82.5	67.2	249700;127300;300582
SHROOM4	96.2	99.9	98.7	300434
SI	118.7	99.4	95.9	222900
SIGMAR1	146.6	100.0	100.0	6144;605726
SIK1	118.5	99.6	96.7	616341

SIK3	97.2	99.8	98.5	618162
SIL1	129.5	98.9	96.2	248800
SIN3A	109.7	99.9	98.3	613406
SIPA1L3	171.8	100.0	99.5	616851
SIX1	131.1	99.9	98.7	605192;6084
SIX3	206.0	100.0	99.9	157170;2692
SIX5	76.3	99.9	97.3	610896
SIX6	278.5	100.0	100.0	212550
SKI	132.9	100.0	99.3	182212
SKIV2L	138.4	100.0	99.7	614602
SLC10A2	122.1	100.0	100.0	613291
SLC10A7	111.0	99.9	99.2	618363
SLC11A2	96.2	99.9	98.7	206100
SLC12A1	144.2	100.0	99.8	601678
SLC12A3	140.0	100.0	100.0	263800
SLC12A5	111.9	86.1	84.1	616645
SLC12A6	118.9	100.0	99.9	218000
SLC13A3	89.5	100.0	99.5	618384
SLC13A5	141.9	100.0	99.9	615905
SLC16A1	138.1	100.0	99.2	616095;610021;245340
SLC16A12	128.5	100.0	99.9	612018
SLC16A2	63.3	98.7	91.0	300523
SLC17A5	137.7	99.8	96.1	6044;269920
SLC17A8	121.5	100.0	99.8	605583
SLC17A9	140.1	95.8	95.4	616063
SLC18A2	106.8	100.0	99.8	618049
SLC18A3	256.7	100.0	100.0	617239
SLC19A2	101.3	100.0	99.6	249270
SLC19A3	134.6	100.0	99.9	607483
SLC1A1	145.6	100.0	99.6	222730

SLC1A2	97.1	99.3	97.2	617105
SLC1A3	99.5	100.0	99.8	612656
SLC1A4	146.4	100.0	99.5	616657
SLC20A2	108.6	100.0	98.5	213600
SLC22A12	117.7	100.0	99.8	220150
SLC22A18	113.5	100.0	99.5	114480;211980;268210
SLC22A5	129.7	100.0	100.0	212140
SLC24A1	167.0	100.0	100.0	613830
SLC24A4	103.5	100.0	99.8	615887
SLC24A5	104.1	99.9	99.3	113750
SLC25A1	103.2	99.3	95.1	615182;6182
SLC25A12	150.9	99.9	99.9	612949
SLC25A13	120.1	99.8	98.9	6058;603471
SLC25A15	146.8	97.9	93.6	238970
SLC25A19	77.4	99.9	97.8	607196;6137
SLC25A20	90.7	100.0	100.0	212138
SLC25A22	123.8	100.0	99.1	609304
SLC25A24	128.9	99.6	99.1	612289
SLC25A26	98.4	99.9	99.3	616794
SLC25A3	129.8	99.5	96.9	610773
SLC25A32	128.2	100.0	99.9	616839
SLC25A38	94.5	99.1	95.2	205950
SLC25A4	130.9	100.0	99.9	615418;617184;609283
SLC25A46	173.0	99.8	98.3	616505
SLC26A1	149.3	100.0	100.0	167030
SLC26A2	205.1	100.0	99.9	222600;256050;600972;226900
SLC26A3	132.5	99.9	99.2	214700
SLC26A4	113.0	100.0	99.5	274600;6008
SLC26A5	130.3	98.3	95.4	613865
SLC26A8	112.3	99.9	99.4	606766

SLC27A4	150.9	100.0	100.0	608649
SLC29A3	173.3	100.0	99.5	602782
SLC2A1	148.9	92.8	92.8	612126;608885;601042;606777
SLC2A10	152.6	98.0	97.5	208050
SLC2A2	158.1	100.0	99.9	227810
SLC2A9	104.8	100.0	98.7	612076
SLC30A10	176.1	100.0	100.0	613280
SLC30A2	120.7	100.0	99.2	608118
SLC30A9	88.6	98.7	93.1	617595
SLC33A1	132.0	99.7	97.7	6145;612539
SLC34A1	149.8	100.0	99.9	612286;616963;613388
SLC34A2	140.3	100.0	99.7	265100
SLC34A3	141.1	99.9	99.0	241530
SLC35A1	127.1	100.0	99.4	603585
SLC35A2	104.8	99.8	98.1	300896
SLC35A3	66.6	80.6	78.3	615553
SLC35C1	187.8	100.0	99.8	266265
SLC35D1	125.0	99.5	97.2	269250
SLC36A2	100.3	100.0	99.9	2426;138500
SLC37A4	114.3	100.0	99.6	2322;232220
SLC38A8	71.5	99.4	95.5	609218
SLC39A13	145.1	100.0	99.9	612350
SLC39A14	95.4	99.9	97.9	144755;617
SLC39A4	114.2	100.0	99.0	201100
SLC39A5	130.2	100.0	99.4	615946
SLC39A8	140.9	100.0	99.8	616721
SLC3A1	144.5	100.0	99.4	220100
SLC40A1	120.8	100.0	99.8	606069
SLC44A4	113.9	100.0	99.4	617606
SLC45A1	141.0	100.0	100.0	617532

SLC45A2	115.2	100.0	99.8	606574
SLC46A1	111.1	99.9	98.4	229050
SLC4A1	139.2	100.0	99.8	612653;166900;611590;179800;185020
SLC4A11	157.4	100.0	100.0	217700;217400;613268
SLC4A4	113.9	99.8	98.3	604278
SLC52A1	198.3	100.0	100.0	615026
SLC52A2	185.4	100.0	100.0	614707
SLC52A3	118.8	100.0	99.8	2115;211500
SLC5A1	110.7	100.0	99.3	606824
SLC5A2	135.0	100.0	100.0	233100
SLC5A5	105.7	100.0	99.9	274400
SLC5A7	100.2	100.0	99.9	158580;6171
SLC6A1	126.0	100.0	100.0	616421
SLC6A17	149.8	100.0	100.0	616269
SLC6A19	129.3	100.0	100.0	242600;138500;234500
SLC6A2	122.3	100.0	99.9	604715
SLC6A20	151.9	100.0	99.8	2426;138500
SLC6A3	133.0	100.0	99.9	613135
SLC6A5	128.7	100.0	100.0	614618
SLC6A8	53.5	96.1	83.8	300352
SLC6A9	148.8	100.0	100.0	617301
SLC7A14	145.3	100.0	100.0	615725
SLC7A7	105.5	100.0	99.6	222700
SLC7A9	119.8	100.0	98.8	220100
SLC9A1	142.4	100.0	100.0	616291
SLC9A3	161.7	100.0	99.8	616868
SLC9A3R1	142.8	100.0	100.0	612287
SLC9A6	101.0	98.6	94.3	300243
SLC9A7	83.6	97.9	91.3	301024
SLCO1B1	53.5	97.4	89.9	237450

SLCO1B3	50.9	97.5	87.9	237450
SLCO2A1	97.7	99.9	98.2	614441
SLFN14	172.0	100.0	100.0	616913
SLITRK1	131.8	100.0	100.0	6132;137580
SLITRK6	169.5	100.0	100.0	221200
SLURP1	100.1	100.0	99.4	248300
SLX4	124.2	100.0	99.7	613951
SMAD3	126.7	100.0	99.8	613795
SMAD4	108.9	100.0	99.9	175050;260350;174900;139210
SMAD6	180.5	98.8	89.1	614823
SMAD9	110.0	100.0	100.0	615342
SMARCA2	105.9	96.8	95.9	601358
SMARCA4	150.9	100.0	99.4	614609
SMARCAD1	93.5	99.5	96.7	129200;181600;136000
SMARCAL1	113.2	100.0	99.6	242900
SMARCB1	179.1	100.0	99.9	609322;6146
SMARCC2	98.0	99.8	97.9	618362
SMARCD2	92.3	87.3	85.8	617475
SMARCE1	66.5	94.4	84.2	616938
SMC1A	87.8	99.9	97.8	300590
SMC3	84.0	96.0	89.7	610759
SMCHD1	100.1	99.7	97.3	158901;6035
SMG9	94.5	100.0	100.0	616920
SMN1	97.6	99.8	96.9	271150;253400;253550;253300
SMO	140.4	99.9	98.3	6055;601707
SMOC1	115.1	99.8	98.2	206920
SMOC2	88.7	77.0	75.7	125400
SMPD1	146.4	100.0	99.2	6076;257200
SMPX	63.9	99.8	97.0	300066
SMS	63.0	88.9	73.1	309583

SNAI2	102.7	99.9	99.1	172800;6089
SNAP25	119.0	99.9	99.7	616330
SNAP29	168.4	100.0	100.0	609528
SNCA	105.0	100.0	100.0	168601;127750;605543
SNCB	97.5	100.0	99.9	127750
SNIP1	131.0	100.0	99.2	614501
SNORD118				614561
SNRNP200	118.8	99.7	98.3	610359
SNRPB	77.7	99.9	97.6	117650
SNRPE	73.0	98.1	89.9	615059
SNRPN	91.5	100.0	98.3	176270
SNTA1	94.2	97.5	89.0	612955
SNX10	131.4	96.2	95.7	615085
SNX14	84.1	99.0	95.4	616354
SOBP	182.7	98.8	97.8	613671
SOD1	123.6	100.0	100.0	105400
SOHLH1	101.7	99.9	97.5	617690;6181
SON	126.8	98.9	95.2	617140
SOS1	102.0	99.6	97.4	135300;6107
SOS2	99.7	99.7	97.9	616559
SOST	182.9	100.0	99.6	239100;122860;269500
SOX10	88.2	100.0	99.1	609136;611584;613266
SOX11	196.2	100.0	100.0	615866
SOX17	124.8	100.0	100.0	613674
SOX18	50.0	91.5	76.2	6078;137940
SOX2	230.0	100.0	100.0	206900
SOX3	74.0	97.7	92.9	312;300123
SOX5	89.4	99.7	97.6	616803
SOX9	159.9	100.0	100.0	114290
SP110	109.3	100.0	99.8	235550

SP7	148.4	100.0	99.3	613849
SPAG1	101.6	99.1	95.3	615505
SPARC	134.3	100.0	100.0	616507
SPART	132.6	99.8	98.2	275900
SPAST	95.4	99.8	97.7	182601
SPATA16	136.8	100.0	99.2	102530
SPATA5	139.5	100.0	99.8	616577
SPATA7	122.7	99.4	97.4	604232
SPECC1L	127.5	100.0	99.8	145410;145420;600251
SPEG	128.6	99.2	97.1	615959
SPG11	116.1	99.7	98.4	604360;602099;616668
SPG21	120.6	99.7	96.8	248900
SPG7	115.2	99.3	96.4	607259
SPINK1	85.0	100.0	99.4	167800;6082
SPINK2	106.2	99.3	98.9	618091
SPINK5	128.0	99.9	99.5	256500
SPINT2	68.8	99.7	90.0	270420
SPR	145.7	100.0	99.8	612716
SPRED1	146.5	99.8	98.8	611431
SPRTN	160.6	100.0	100.0	616200
SPRY4	164.5	100.0	99.6	615266
SPTA1	105.2	99.9	98.6	270970;130600;266140
SPTAN1	112.0	99.1	98.3	613477
SPTB	142.9	100.0	100.0	616649;6179
SPTBN2	126.2	100.0	99.7	6154;600224
SPTBN4	103.8	99.8	98.1	617519
SPTLC1	108.6	98.5	93.4	162400
SPTLC2	142.8	100.0	99.9	613640
SQSTM1	117.8	99.9	99.2	617145;617158;167250;616437
SRC	124.1	100.0	99.5	6169;114500

SRCAP	153.0	100.0	99.6	136140
SRD5A2	85.6	100.0	98.1	264600
SRD5A3	139.9	99.8	98.3	612379;6127
SRP72	69.2	95.7	85.6	614675
SRPX2	61.6	99.4	93.6	300643
SRY	31.6	50.0	50.0	4;400044
SSR4	109.5	100.0	99.7	300934
SSTR5	173.7	100.0	100.0	-
SSX1	84.7	82.0	79.7	300813
SSX2	57.2	62.9	58.4	300813
ST14	154.8	100.0	99.9	602400
ST3GAL3	134.7	100.0	99.5	615;611090
ST3GAL5	101.8	89.0	84.9	609056
STAC3	114.7	100.0	100.0	255995
STAG1	111.1	99.6	97.2	617635
STAG2	74.0	96.8	89.0	301022
STAG3	99.7	93.5	92.5	615723
STAMPB	93.7	99.8	97.9	614261
STAR	135.0	100.0	100.0	201710
STAT1	117.8	99.6	97.7	614162;614892;613796
STAT2	110.0	100.0	99.8	616636
STAT3	103.2	100.0	99.0	147060;616
STAT5B	114.1	99.8	97.8	2456;102578
STEAP3	166.9	100.0	99.4	615234
STIL	154.1	100.0	99.8	612703
STIM1	120.7	99.8	96.8	185070;160565;612783
STK11	131.0	100.0	100.0	260350;273300;175200
STK4	122.5	100.0	99.7	614868
STN1	82.2	100.0	99.6	617341
STOX1	146.5	89.6	89.5	609404

STRA6	117.6	100.0	99.8	601186
STRADA	108.6	100.0	98.8	611087
STRC	99.0	99.9	98.1	603720
STS	78.7	99.3	95.2	308100
STT3A	123.1	100.0	99.9	615596
STT3B	127.4	99.9	99.6	615597
STUB1	173.9	100.0	99.5	6181;615768
STX11	298.3	100.0	100.0	603552
STX16	111.0	99.9	98.5	603233
STX1B	157.7	100.0	100.0	616172
STXBP1	103.7	96.8	96.4	612164
STXBP2	100.2	83.7	80.4	613101
SUCLA2	58.8	91.7	82.6	612073
SUCLG1	102.9	99.9	99.6	245400
SUFU	132.8	100.0	99.9	155255;109400;617757
SUGCT	127.1	99.4	95.8	231690
SULT2B1	124.7	100.0	100.0	617571
SUMF1	89.7	99.7	96.8	272200
SUMO1	20.0	62.3	46.0	613705
SUN5	98.3	100.0	99.8	617187
SUOX	167.2	100.0	100.0	272300
SURF1	84.8	91.3	88.4	6167;256000
SYCE1	114.0	99.9	98.2	616947;617
SYCP3	84.4	99.7	97.9	270960
SYN1	66.6	90.6	79.1	300491
SYNE1	121.6	98.3	97.8	613;610743
SYNE2	110.7	99.6	98.0	612999
SYNE4	83.7	99.9	98.5	615540
SYNGAP1	140.7	98.4	97.7	612621
SYNJ1	126.6	99.9	98.5	6174;615530

SYP	79.9	99.9	98.1	300802
SYT1	149.6	99.9	99.1	618218
SYT14	104.1	60.3	58.0	614229
SYT2	96.0	99.8	98.4	616040
SZT2	135.6	99.6	99.4	615476
T	144.8	99.8	97.6	615709
TAB2	170.6	99.9	99.5	614980
TAC3	61.8	99.9	95.4	614839
TACO1	93.9	99.5	95.3	220110
TACR3	146.1	100.0	99.7	614840
TACSTD2	268.7	100.0	99.9	204870
TAF1	86.8	99.1	95.5	300966;3143
TAF13	100.1	100.0	99.9	617432
TAF2	113.9	99.8	98.5	615599
TAF4B	122.5	99.0	94.4	615841
TAF6	127.3	100.0	99.3	617126
TAL1	58.5	95.1	85.9	613065
TAL2	108.0	100.0	100.0	613065
TALDO1	148.2	100.0	99.6	606003
TANGO2	127.3	100.0	100.0	616878
TAP1	117.7	99.9	97.3	604571
TAP2	93.0	99.6	98.4	604571
TAPBP	116.6	96.6	96.5	604571
TAPT1	89.2	97.9	92.2	616897
TARDBP	123.8	100.0	99.9	612069
TARS2	89.0	99.7	96.4	615918
TAT	115.0	100.0	100.0	276600
TAZ	114.5	99.3	95.8	302060
TBC1D20	115.7	96.3	93.8	615663
TBC1D23	92.7	99.2	95.4	617695

TBC1D24	177.7	100.0	100.0	614617;616044;605021;220500;615338
TBC1D7	99.6	99.8	99.3	248000
TBCD	136.2	98.2	94.3	617193
TBCE	116.4	98.7	94.7	241410;244460;617207
TBCK	101.6	99.5	96.1	616900
TBK1	101.6	99.5	97.6	616439
TBL1XR1	62.9	94.5	80.8	6169;602342
TBP	99.5	99.9	99.7	607136
TBR1	166.2	100.0	100.0	606053
TBX1	101.2	93.0	86.9	187500;217095;188400;192430
TBX15	106.3	100.0	99.7	260660
TBX18	103.3	99.6	97.6	143400
TBX19	156.9	100.0	99.9	201400
TBX2	158.2	100.0	100.0	618223
TBX20	108.2	100.0	99.9	611363
TBX21	110.5	99.9	97.9	208550
TBX22	105.0	99.4	94.8	3034;302905
TBX3	100.7	99.8	98.2	181450
TBX4	175.9	99.5	97.5	147891
TBX5	135.3	100.0	100.0	142900
TBX6	124.4	99.7	96.5	122600
TBXAS1	128.8	100.0	100.0	231095
TCAP	100.1	100.0	100.0	601954;6075
TCF12	137.7	99.9	99.9	615314
TCF3	91.1	99.1	95.6	616941
TCF4	109.2	100.0	99.8	6133;610954
TCHH	162.8	100.0	99.9	617252
TCIRG1	131.4	99.2	96.6	259700
TCN2	148.5	100.0	100.0	275350
TCOF1	111.6	99.9	99.1	154500

TCTEX1D2	123.6	100.0	99.4	617405
TCTN1	94.8	95.6	92.3	614173
TCTN2	122.4	99.9	99.0	6167;613885
TCTN3	116.3	100.0	99.9	6148;258860
TDGF1	120.9	99.7	94.8	-
TDP1	103.9	99.9	99.5	607250
TDP2	173.0	99.9	99.4	616949
TDRD7	136.7	99.8	98.7	613887
TDRD9	112.8	99.9	98.4	618110
TEAD1	132.3	100.0	99.6	108985
TECPR2	137.2	100.0	100.0	615031
TECR	124.9	100.0	99.6	614020
TECRL	75.0	97.1	90.3	614021
TECTA	164.9	100.0	99.9	6036;601543
TEK	148.0	100.0	99.7	600195;6173
TELO2	122.6	99.8	97.5	616954
TENM3	148.6	99.8	99.3	615145
TENM4	119.9	100.0	99.6	616736
TERC				127550
TET2	169.7	100.0	99.9	614286
TEX11	72.7	92.6	85.2	309120
TEX14	97.0	99.8	97.8	617707
TEX15	116.5	99.9	99.3	617960
TF	101.6	100.0	99.7	209300
TFAM	67.1	94.2	74.5	617156
TFAP2A	112.7	99.8	98.0	113620
TFAP2B	168.3	99.2	96.8	169100;617
TFE3	88.1	99.7	96.3	300854
TFG	106.2	96.8	95.3	604484;6157
TFR2	124.0	99.6	98.3	604250

TFRC	132.0	99.9	99.0	616740
TG	117.0	99.9	99.1	274700
TGDS	88.3	99.4	96.6	616145
TGFB1	102.1	100.0	99.6	131300;6182
TGFB2	173.2	99.9	99.0	614816
TGFB3	140.4	100.0	100.0	107970;6156
TGFBI	114.1	99.9	98.6	121820;602082;122200;608471;607541;608470;121900
TGFBR1	156.4	95.4	93.8	609192
TGFBR2	156.8	100.0	100.0	610168;133239;614331
TGIF1	141.2	100.0	100.0	142946
TGM1	141.0	100.0	99.9	242300
TGM3	137.1	99.9	98.4	617251
TGM5	144.8	100.0	99.9	609796
TGM6	130.2	99.9	98.7	613908
TH	96.3	100.0	98.2	605407
THAP1	141.3	100.0	100.0	602629
THBD	181.1	100.0	100.0	614486
THOC2	83.9	98.9	93.6	300957
THOC6	228.9	100.0	100.0	613680
THPO	97.3	100.0	99.7	187950
THRA	170.6	100.0	100.0	614450
THRB	141.2	99.9	99.3	188570;274300;145650
TIA1	131.8	99.7	97.2	604454
TIMM50	122.9	99.9	98.7	617698
TIMM8A	46.3	94.6	79.9	304700
TIMMDC1	161.4	100.0	100.0	618251
TIMP3	137.5	100.0	100.0	136900
TINF2	177.1	100.0	100.0	614;268130
TJP2	109.3	94.0	93.4	6159;607748
TK2	103.8	100.0	99.2	609560;6171

TKT	115.6	98.7	98.1	617044
TLE6	116.7	99.9	98.6	616814
TLK2	89.3	97.9	92.3	618050
TLL1	129.8	100.0	99.9	613087
TMC1	110.1	99.8	97.5	600974;6067
TMC6	91.1	100.0	99.7	226400
TMC8	133.0	100.0	99.7	618231
TMCO1	81.7	88.0	87.5	213980
TMEM106B	121.4	99.7	98.9	617964
TMEM107	148.7	100.0	100.0	6176;617562
TMEM126A	104.8	96.2	82.8	612989
TMEM126B	87.8	99.5	95.9	618250
TMEM138	82.7	100.0	99.2	614465
TMEM165	148.2	100.0	99.8	614727
TMEM173	95.3	99.1	94.0	615934
TMEM199	118.4	100.0	99.8	616829
TMEM216	88.0	99.7	95.7	603194;6081
TMEM231	101.1	100.0	99.3	6154;614970
TMEM237	117.7	100.0	99.2	614424
TMEM240	163.9	100.0	100.0	607454
TMEM260	117.5	99.6	97.6	617478
TMEM38B	107.9	100.0	99.0	615066
TMEM43	131.0	99.9	98.0	6143;604400
TMEM5	159.1	99.7	97.8	615041
TMEM67	83.1	99.1	94.6	607361;602152;216360;613550;610688
TMEM70	117.9	99.8	97.6	614052
TMEM94	164.7	100.0	100.0	618316
TMEM98	124.4	99.2	96.5	615972
TMIE	104.5	100.0	99.7	600971
TMPRSS15	106.6	98.5	95.1	226200

TMPRSS3	98.5	100.0	99.4	601072
TMPRSS6	107.0	100.0	99.4	206200
TMTC3	92.8	99.5	97.6	617255
TNC	143.1	100.0	99.7	615629
TNFAIP3	149.4	100.0	100.0	616744
TNFRSF10B	109.1	100.0	99.9	275355
TNFRSF11A	131.0	96.1	95.2	174810;6123
TNFRSF11B	172.4	100.0	100.0	239000
TNFRSF13B	100.8	100.0	99.7	240500;6095
TNFRSF13C	98.4	96.2	82.4	613494
TNFRSF1A	106.8	92.5	89.7	142680
TNFRSF4	79.8	99.5	96.8	615593
TNFSF11	129.8	100.0	100.0	259710
TNIK	106.3	99.9	98.7	617028
TNNC1	150.1	100.0	100.0	6132;611879
TNNI2	150.5	100.0	100.0	601680
TNNI3	107.3	99.6	94.9	115210;611880;613690;613286
TNNI3K	105.8	99.9	99.3	616117
TNNT1	104.4	99.9	98.5	605355
TNNT2	106.4	100.0	100.0	115195;612422;601494
TNNT3	146.3	100.0	99.8	601680
TNPO3	115.2	100.0	99.7	608423
TNRC6A	127.5	100.0	99.5	618074
TNXB	105.6	99.5	95.8	606408;616
TOE1	141.1	100.0	99.8	614969
TOP1	95.1	99.7	97.6	-
TOP2A	120.9	100.0	99.2	-
TOP3A	121.0	99.8	97.5	618097;6181
TOPORS	182.2	100.0	100.0	609923
TOR1A	142.4	100.0	100.0	128100

TOR1AIP1	133.3	99.5	97.2	617072
TP53	89.2	99.8	98.5	114480;618165;260350;114550;151623;607107
TP53RK	81.3	99.7	96.1	617730
TP63	162.8	100.0	100.0	103285;604292;129400;603543;605289;618149;106260
TPI1	112.1	99.9	96.4	615512
TPK1	94.0	100.0	98.7	614458
TPM1	113.0	100.0	99.2	115196;6119
TPM2	105.2	100.0	99.7	609285;601680;108120
TPM3	74.3	89.5	88.0	255310;6093
TPO	137.6	100.0	99.6	274500
TPP1	123.7	100.0	99.9	204500;6093
TPRKB	59.4	80.3	73.9	617731
TPRN	98.7	91.5	86.7	613307
TRAC	127.5	100.0	100.0	615387
TRAF3IP1	84.2	99.4	97.1	616629
TRAF3IP2	111.1	100.0	98.3	615527
TRAF7	161.7	99.8	98.1	618164
TRAIP	123.4	100.0	100.0	616777
TRAK1	149.3	100.0	99.6	618201
TRAPPC11	125.6	99.9	99.0	615356
TRAPPC12	162.3	100.0	100.0	617669
TRAPPC2	59.2	86.5	67.4	313400
TRAPPC2L	198.9	100.0	100.0	618331
TRAPPC6B	79.0	99.9	98.2	617862
TRAPPC9	125.2	100.0	99.7	613192
TRDN	82.7	97.5	88.4	615441
TREH	141.3	98.2	93.2	612119
TREM2	127.0	100.0	99.9	618193
TREX1	233.4	100.0	100.0	192315;225750;610448
TRHR	174.8	99.9	99.1	-

TRIM2	136.6	93.9	93.6	615490
TRIM32	123.0	100.0	100.0	254110;616
TRIM36	136.0	99.9	99.0	206500
TRIM37	113.8	98.5	97.4	253250
TRIM44	113.5	100.0	100.0	617142
TRIO	121.9	99.0	96.9	617061
TRIOBP	156.9	99.1	97.5	609823
TRIP11	90.9	97.5	92.6	2006;184260
TRIP12	132.2	99.9	99.4	617752
TRIP13	127.4	100.0	99.9	617598
TRIP4	103.3	99.8	98.5	616866;6171
TRIT1	107.9	100.0	99.9	617873
TRMT1	117.1	99.7	97.6	618302
TRMT10A	119.5	99.9	99.2	616033
TRMT10C	138.5	100.0	100.0	616974
TRMT5	175.7	99.8	98.7	616539
TRMU	100.0	100.0	99.4	613070
TRNT1	101.5	99.2	96.5	616084;617
TRPA1	83.8	95.5	88.7	615040
TRPC3	146.8	99.8	98.5	616410
TRPC6	91.4	98.0	96.0	603965
TRPM1	128.8	100.0	99.0	613216
TRPM4	137.4	100.0	99.9	604559
TRPM6	126.6	99.9	99.1	602014
TRPS1	154.0	100.0	99.9	190350;1904
TRPV3	122.8	99.9	98.5	6164;614594
TRPV4	138.4	100.0	99.8	156530;168400;617383;113500;184095;181405;184252;600175;606071;606835
TRPV6	144.3	100.0	99.9	618188
TSC1	112.5	99.6	98.2	607341;606690;191100
TSC2	140.5	100.0	99.9	607341;606690;613254

TSEN15	89.8	99.7	96.4	617026
TSEN2	95.6	99.9	98.9	612389
TSEN34	77.6	98.7	93.6	612390
TSEN54	114.4	99.4	96.8	277470;225753;610204
TSFM	120.0	100.0	99.2	610505
TSGA10	112.8	99.8	99.2	617961
TSHB	229.7	100.0	100.0	275100
TSHR	153.0	100.0	99.0	275200;603373;609152
TSHZ1	147.6	98.9	98.7	607842
TSPAN12	135.3	100.0	99.4	613310
TSPAN7	107.3	100.0	99.0	300210
TSPEAR	139.3	100.0	99.8	614861;6182
TSPYL1	144.9	100.0	100.0	608800
TSR2	76.1	100.0	99.4	300946
TTBK2	108.4	99.9	96.8	604432
TTC19	83.4	97.0	82.6	615157
TTC21B	119.5	99.7	98.8	613819;6138
TTC25	93.7	100.0	99.6	617092
TTC37	135.1	99.9	99.2	222470
TTC7A	115.0	99.8	98.0	243150
TTC8	115.2	99.8	98.8	613464;616
TTI2	96.2	100.0	99.9	615541
TTLL5	136.1	100.0	98.7	615860
TTN	163.0	98.6	98.1	608807;611705;604145;603689;600334;613765
TTPA	109.2	97.6	92.5	277460
TTR	122.6	94.6	94.6	105210;1154
TUB	103.4	100.0	99.4	616188
TUBA1A	77.6	99.8	97.1	611603
TUBA3D	103.6	99.3	95.9	617928
TUBA4A	159.8	100.0	100.0	616208

TUBA8	126.1	100.0	99.5	613180
TUBB	112.9	98.2	94.2	156610;6158
TUBB1	150.0	100.0	100.0	613112
TUBB2A	77.1	99.7	97.2	615763
TUBB2B	78.2	100.0	99.7	610031
TUBB3	121.3	99.8	98.4	600638;614
TUBB4A	101.2	97.1	95.6	128101;6124
TUBB4B	86.1	100.0	99.9	617879
TUBB6	88.6	91.9	90.0	617732
TUBB8	21.9	88.0	51.9	616780
TUBG1	154.3	100.0	100.0	615412
TUBGCP4	104.6	98.0	94.7	616335
TUBGCP6	155.1	100.0	99.5	251270
TUFM	130.6	100.0	99.2	610678
TULP1	117.9	100.0	99.6	6138;600132
TUSC3	155.1	99.9	99.5	611093
TWIST1	160.2	100.0	99.6	180750;101400;123100;617746
TWIST2	132.6	100.0	100.0	200110;227260;209885
TWNK	159.6	100.0	100.0	609286;271245;616138
TXN2	61.4	100.0	99.8	616811
TXNL4A	122.6	99.5	98.3	608572
TXNRD2	111.6	96.7	95.2	617825
TYK2	129.9	100.0	99.5	611521
TYMP	120.9	100.0	100.0	603041
TYR	147.9	100.0	99.9	103470;203100;606952
TYROBP	83.3	100.0	100.0	221770
TYRP1	152.3	100.0	100.0	203290
UBA1	130.5	99.6	98.1	301830
UBA5	79.9	97.7	86.6	617132;6171
UBE2A	117.9	99.9	96.4	300860

UBE2T	91.1	100.0	99.3	616435
UBE3A	81.5	98.6	93.3	105830
UBE3B	113.5	100.0	99.7	244450
UBIAD1	187.7	99.8	97.4	121800
UBQLN2	124.1	100.0	99.6	300857
UBR1	119.9	99.8	99.0	243800
UBTF	116.6	100.0	99.6	617672
UCHL1	98.7	99.5	95.4	615491
UFC1	121.3	100.0	100.0	618076
UFM1	104.9	73.2	69.6	617899
UFSP2	130.7	100.0	99.5	142669;618
UGT1A1	184.1	100.0	100.0	218800;237900;606785
UMOD	110.4	97.6	94.8	609886;603860;162000
UMPS	149.3	100.0	98.8	258900
UNC119	115.7	100.0	99.7	615518
UNC13D	108.2	99.8	98.7	608898
UNC45B	114.7	99.9	99.2	616279
UNC80	111.2	100.0	99.5	616801
UNG	116.8	99.5	95.6	608106
UPB1	143.0	100.0	100.0	613161
UPF3B	61.6	95.3	84.8	300676
UQCC2	132.2	100.0	98.1	615824
UQCC3	123.0	100.0	99.9	616111
UQCRB	106.0	99.2	95.4	615158
UQCRC2	105.3	99.6	97.2	615160
UQCRQ	158.9	100.0	100.0	615159
UROC1	132.8	100.0	99.9	276880
UROD	130.8	98.9	95.6	176100
UROS	103.8	100.0	99.7	263700
USB1	118.2	99.8	97.2	604173

USH1C	92.5	99.9	99.2	6021;276904
USH1G	191.3	99.9	98.8	606943
USH2A	129.3	100.0	99.7	6138;276901
USP18	144.4	95.9	95.9	617397
USP27X	155.1	100.0	100.0	300984
USP8	64.9	98.0	89.8	219090
USP9X	93.9	98.3	92.3	301;300919
UVSSA	122.6	99.2	98.9	614640
VAC14	98.9	99.8	98.6	617054
VAMP1	135.4	100.0	100.0	108600;6183
VANGL1	149.8	100.0	99.9	600145
VANGL2	159.2	100.0	99.6	182940
VAPB	92.2	99.9	99.0	6086;182980
VARS	129.8	100.0	99.9	617802
VARS2	120.1	100.0	99.8	615917
VAX1	95.1	99.5	95.7	614402
VCAN	153.1	100.0	100.0	143200
VCL	100.5	99.9	98.9	6133;611407
VCP	100.3	100.0	99.2	613954;616687;167320
VDR	108.8	99.1	96.0	277440
VEGFC	161.7	100.0	100.0	615907
VHL	169.6	100.0	98.3	193300;171300;144700;263400
VIM	129.2	99.7	98.3	116300
VIPAS39	114.7	100.0	99.9	613404
VKORC1	146.5	100.0	99.9	6075;122700
VLDLR	141.4	100.0	99.9	224050
VMA21	89.6	99.5	93.0	310440
VPS11	119.6	95.4	93.1	616683
VPS13A	78.2	99.2	95.3	200150
VPS13B	134.5	99.3	98.0	216550

VPS13C	110.2	99.5	97.0	616840
VPS13D	138.0	100.0	99.7	607317
VPS33A	103.9	96.2	94.4	617303
VPS33B	107.2	100.0	99.9	208085
VPS37A	64.3	91.3	79.3	614898
VPS45	126.5	97.3	94.4	615285
VPS53	111.3	91.1	89.6	615851
VRK1	129.6	99.8	98.7	607596
VSX1	66.6	97.8	89.5	6142;148300
VSX2	120.2	100.0	99.8	6101;610092
VWA3B	124.9	99.9	98.9	616948
VWF	98.2	99.9	99.1	193400;277480;613554
WAC	146.3	100.0	99.2	616708
WARS	97.6	99.5	97.0	617721
WARS2	132.3	99.9	99.1	617710
WAS	70.4	94.2	83.6	313900;300299;301000
WASHC4	108.9	99.3	95.9	615817
WASHC5	134.2	99.9	99.5	6036;220210
WBP2	94.3	100.0	99.9	617639
WDFY3	124.6	99.9	99.3	617520
WDPCP	106.7	97.8	94.9	217085;616
WDR11	115.0	97.5	96.2	614858
WDR19	126.8	100.0	99.2	614376;614377;614378;616307
WDR26	98.2	99.5	97.4	617616
WDR34	116.1	100.0	100.0	615633
WDR35	141.8	99.7	98.4	6141;613610
WDR36	125.1	99.8	97.6	609887
WDR4	142.2	100.0	100.0	618346;6183
WDR45	68.7	96.8	88.9	300894
WDR45B	72.7	97.5	90.1	617977

WDR60	108.1	99.7	98.1	615503
WDR62	152.6	100.0	99.8	604317
WDR66	118.9	100.0	99.8	618152
WDR72	123.8	96.8	96.1	613211
WDR73	153.2	100.0	99.9	251300
WDR81	184.8	100.0	100.0	610185;618
WEE2	97.9	99.9	98.7	617996
WFS1	189.9	100.0	99.9	600965;614296;116400;222300
WHRN	132.8	99.9	99.0	6114;607084
WIPF1	89.1	100.0	99.1	614493
WISP3	119.2	100.0	100.0	208230
WNK1	134.4	100.0	99.5	6145;201300
WNK4	143.3	99.9	99.5	614491
WNT1	255.8	100.0	99.8	615220
WNT10A	141.8	100.0	99.9	224750;150400;257980
WNT10B	157.0	100.0	100.0	225300;6171
WNT2B	132.0	99.6	97.1	618168
WNT3	169.3	100.0	99.8	273395
WNT4	226.5	99.5	97.3	6118;158330
WNT5A	159.0	100.0	100.0	180700
WNT7A	195.8	100.0	100.0	2768;228930
WRAP53	162.8	100.0	100.0	613988
WRN	124.8	99.7	98.8	277700
WT1	90.1	100.0	99.3	194070;194080;608978;156240;136680;256370
WVOX	116.1	100.0	99.9	133239;616211;614322
XDH	93.8	100.0	99.7	278300
XIAP	89.4	93.3	87.9	300635
XIST				300087
XK	85.4	100.0	99.4	300842
XPA	74.7	99.7	98.2	278700

XPC	143.5	100.0	99.8	278720
XPNPEP3	99.9	100.0	99.4	613159
XPR1	126.0	100.0	99.6	616413
XRCC1	111.4	99.9	99.1	617633
XRCC2	171.8	99.8	96.5	617247
XRCC4	143.0	99.9	99.0	616541
XYLT1	128.1	99.9	98.2	615777
XYLT2	147.5	99.7	98.1	605822
YAP1	91.1	98.2	92.3	120433
YARS	105.5	100.0	99.2	608323
YARS2	175.2	99.9	99.6	613561
YME1L1	103.9	98.2	93.5	617302
YWHAG	167.1	100.0	100.0	617665
YY1	128.4	100.0	98.4	617557
YY1AP1	143.6	98.6	97.1	602531
ZAP70	186.1	100.0	99.9	269840;617
ZBTB11	164.8	100.0	99.7	618383
ZBTB16	148.4	100.0	100.0	612447
ZBTB18	177.3	99.9	99.2	612337
ZBTB20	180.2	100.0	100.0	259050
ZBTB24	155.5	100.0	100.0	614069
ZBTB42	131.4	100.0	100.0	616248
ZC3H14	152.9	99.8	98.5	617125
ZC4H2	72.4	99.8	95.9	314580
ZDHHC15	85.9	98.9	95.1	300577
ZDHHC9	48.8	97.7	87.0	300799
ZEB1	151.3	100.0	99.8	6133;609141
ZEB2	140.1	99.7	98.4	235730
ZFHX2	129.9	100.0	99.8	147430
ZFHX3	119.1	100.0	99.8	176807

ZFP57	106.5	99.9	98.9	601410
ZFPM2	155.6	100.0	99.8	610187;616067;187500
ZFYVE26	104.8	99.9	98.7	270700
ZFYVE27	110.4	100.0	100.0	610244
ZIC1	279.6	100.0	100.0	616602
ZIC2	165.6	97.5	95.4	609637
ZIC3	140.9	100.0	99.8	306955;3144
ZMPSTE24	128.7	100.0	99.6	6086;275210
ZMYND10	123.0	100.0	100.0	615444
ZMYND11	119.9	99.9	99.5	616083
ZMYND15	148.8	100.0	99.8	615842
ZNF141	120.8	100.0	100.0	615226
ZNF148	157.2	100.0	99.8	617260
ZNF335	134.2	100.0	99.8	615095
ZNF341	118.8	98.9	96.8	618282
ZNF408	144.5	100.0	100.0	6165;616468
ZNF423	192.9	100.0	100.0	614844
ZNF469	157.6	100.0	100.0	229200
ZNF513	135.3	100.0	100.0	613617
ZNF644	155.4	99.9	99.8	614167
ZNF687	169.9	100.0	100.0	616833
ZNF711	114.4	99.7	98.1	300803
ZNF750	176.9	100.0	99.9	610227
ZNHIT3	136.0	74.4	74.4	260565
ZP1	178.3	100.0	100.0	615774
ZP2	115.2	99.8	98.8	618353
ZP3	144.7	100.0	100.0	617712
ZSWIM6	120.9	96.4	93.7	6179;603671

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