

WES INTELLECTUAL DISABILITY DG 2.14

<i>Gene</i>	<i>Median coverage</i>	<i>% covered >10x</i>	<i>% covered >20x</i>	<i>OMIM disease ID</i>
AARS	124.3	100.0	99.6	752
AASS	128.8	99.6	97.4	873
ABAT	92.7	100.0	99.5	753
ABCC9	157.9	99.9	99.2	1
ABCD1	76.0	74.7	68.0	2
ABCD4	143.6	99.9	98.3	3
ABHD5	209.6	100.0	99.9	4
ACAD9	135.2	98.4	95.7	5
ACO2	129.3	95.8	91.8	6
ACOX1	155.3	100.0	100.0	7
ACSF3	128.8	99.9	99.3	8
ACSL4	104.7	97.5	91.8	9
ACTB	129.0	99.1	94.2	10
ACTG1	149.4	100.0	100.0	11
ACVR1	165.1	100.0	100.0	12
ACY1	132.8	99.9	98.3	476
ADAM22	140.5	99.9	98.6	874
ADAR	125.0	100.0	99.8	13
ADAT3	82.1	99.5	97.3	610
ADGRG1	149.7	100.0	100.0	1138;754
ADK	100.4	99.5	96.1	477
ADNP	242.8	100.0	100.0	541
ADSL	183.6	99.2	99.1	15
AFF2	122.8	99.9	98.9	16
AFF4	110.7	99.4	97.3	755

AFG3L2	121.0	91.9	84.9	875
AGA	130.2	100.0	100.0	17
AGO2	128.5	99.1	99.1	689
AGPAT2	109.5	99.0	95.1	18
AGTR2	205.1	100.0	100.0	876
AHCY	124.5	100.0	99.8	19
AHDC1	120.9	98.0	96.3	703
AHI1	139.3	99.2	95.1	20
AIFM1	106.2	100.0	99.7	21
AIMP1	84.8	97.3	89.7	22
AIMP2	119.1	93.6	86.9	1163
AKT3	79.6	97.8	88.6	23
ALDH18A1	131.1	100.0	99.9	24
ALDH3A2	125.7	95.3	94.6	25
ALDH4A1	116.0	100.0	98.6	478
ALDH5A1	87.6	86.4	80.1	26
ALG1	50.9	53.6	48.8	27
ALG11	139.6	96.7	96.0	756
ALG12	156.2	100.0	100.0	28
ALG13	86.7	98.7	94.1	593
ALG2	115.9	100.0	100.0	29
ALG3	132.9	100.0	100.0	30
ALG6	96.4	96.0	93.3	31
ALG8	126.0	96.5	95.1	877
ALG9	124.3	100.0	99.6	32
ALMS1	179.8	99.9	99.7	757
ALX1	153.2	99.9	98.4	479
ALX4	132.7	98.4	92.5	480
AMER1	96.9	99.8	98.9	1069
AMMECR1	72.2	99.0	94.0	878

AMPD2	135.5	99.9	99.2	647
AMT	173.1	100.0	100.0	33
ANK3	155.1	99.1	98.8	537
ANKH	118.6	100.0	99.7	34
ANKLE2	162.5	98.0	94.7	879
ANKRD11	96.3	97.4	94.1	35
ANO10	116.7	98.8	96.5	36
ANTXR1	123.0	98.3	95.7	594
AP1S1	111.3	99.9	99.5	880
AP1S2	65.7	78.6	70.9	37
AP3B1	95.0	97.8	90.2	38
AP3B2	135.1	97.5	94.2	1026
AP3D1	121.0	98.1	97.8	1070
AP4B1	147.4	100.0	99.8	39
AP4E1	98.7	99.7	97.9	40
AP4M1	127.2	99.1	96.4	481
AP4S1	65.8	71.8	69.3	41
AP5Z1	96.8	99.7	96.6	1071
APC2	63.5	93.3	85.3	881
APOPT1	63.8	81.4	78.1	1072
APTX	118.9	94.2	91.1	42
ARFGEF2	154.9	100.0	99.3	43
ARG1	167.8	100.0	100.0	482
ARHGAP31	133.4	99.8	98.3	788
ARHGEF6	133.7	99.1	95.4	44
ARHGEF9	60.2	76.4	74.4	45
ARID1A	150.0	92.2	89.7	46
ARID1B	156.7	94.3	89.5	47
ARID2	216.9	99.2	95.7	723
ARL13B	97.3	98.9	92.8	48

ARL6	85.2	99.8	95.3	49
ARSA	97.8	100.0	99.7	882
ARSE	102.1	99.2	93.0	595
ARX	29.1	75.8	59.5	50
ASAH1	105.9	97.6	92.1	883
ASCL1	213.1	90.2	79.5	884
ASH1L	160.1	98.7	98.5	1058
ASL	114.4	99.9	98.8	51
ASNS	105.8	97.8	90.5	542
ASPA	127.6	99.1	95.8	52
ASPM	101.2	98.0	92.2	53
ASS1	97.9	95.7	87.5	885
ASXL1	159.8	99.1	97.7	54
ASXL2	152.0	98.1	98.0	886
ASXL3	162.9	99.8	98.9	639
ATCAY	146.1	100.0	99.7	758
ATIC	119.5	99.7	99.0	483
ATN1	120.9	99.7	97.7	887
ATP1A2	190.8	100.0	99.6	55
ATP2A2	175.2	100.0	99.9	56
ATP6AP2	46.1	81.2	55.6	57
ATP6V0A2	130.0	100.0	99.3	58
ATP6V1A	144.8	98.2	94.9	1130
ATP6V1B2	137.0	99.9	98.2	888
ATP7A	133.2	99.7	97.8	59
ATP8A2	133.5	100.0	99.5	580
ATPAF2	101.4	100.0	100.0	759
ATR	138.3	99.4	96.9	60
ATRX	82.6	98.2	92.2	61
AUH	90.9	99.9	97.6	62

AUTS2	110.3	96.9	95.5	596
AVPR2	127.5	99.3	97.1	889
B3GALNT2	115.0	92.4	89.7	760
B3GALT6	47.5	76.4	71.7	890
B3GLCT	101.2	97.4	93.4	63
B4GALNT1	151.0	95.6	90.1	891
B4GALT1	105.4	99.9	99.0	64
B4GALT7	104.3	96.1	95.0	65
B4GAT1	120.4	100.0	100.0	761
BBS1	148.9	100.0	100.0	66
BBS10	172.6	100.0	100.0	67
BBS12	208.6	100.0	100.0	68
BBS2	181.8	100.0	99.8	69
BBS4	135.9	99.7	97.3	70
BBS5	81.1	95.8	84.1	71
BBS7	120.7	98.1	91.7	72
BBS9	112.9	96.0	93.8	827
BCAP31	70.6	93.1	82.5	762
BCKDHA	171.5	100.0	99.5	73
BCKDHB	112.6	88.9	81.3	74
BCL11A	139.3	98.2	97.0	708
BCL11B	79.7	96.6	88.6	1125
BCOR	109.7	99.3	96.8	75
BCORL1	137.6	99.8	98.2	1019
BCS1L	182.3	100.0	100.0	76
BLM	116.3	99.4	96.5	77
BRAF	74.4	87.6	77.2	78
BRAT1	108.5	99.8	97.4	763
BRD4	81.7	87.5	77.0	1133
BRF1	100.0	96.6	92.9	764

BRPF1	179.1	100.0	99.5	1045
BRWD3	97.1	97.0	92.3	79
BSCL2	113.5	100.0	100.0	80
BTD	166.6	100.0	99.9	484
BUB1B	136.5	98.6	97.9	81
C12orf4	131.3	99.1	94.7	892
C12orf57	152.0	100.0	100.0	485
C12orf65	88.2	97.3	91.9	543
C2CD3	143.1	95.8	95.6	727
C5orf42	122.8	98.6	95.5	82
CA2	140.7	100.0	99.3	83
CA5A	124.1	99.5	94.9	766
CA8	114.6	96.8	93.0	486
CACNA1A	87.8	92.7	89.1	894
CACNA1C	154.6	99.9	99.2	895
CACNA2D1	82.7	93.1	84.4	896
CACNG2	114.9	100.0	99.9	84
CAD	158.9	100.0	99.7	1023
CAMK2A	123.2	100.0	99.9	1034
CAMK2B	103.4	98.7	93.7	1035
CAMTA1	185.9	99.6	98.8	656
CAPN10	95.9	99.9	98.0	897
CARS2	121.1	100.0	99.8	1073
CASK	92.3	98.7	93.7	85
CBL	129.8	96.9	95.7	487
CBS	116.2	97.1	91.1	86
CC2D1A	119.4	99.8	98.3	87
CC2D2A	127.4	99.5	97.1	88
CCBE1	75.9	98.9	95.5	89
CCDC115	59.3	88.0	85.3	1074

CCDC174	133.1	98.1	93.3	768
CCDC22	93.3	97.3	89.4	769
CCDC78	114.9	100.0	100.0	90
CCDC88A	78.9	94.7	84.9	1075
CCDC88C	101.4	99.8	97.4	898
CCND2	152.3	100.0	100.0	770
CCNK	82.4	88.0	76.6	1123
CDC42	97.0	96.7	89.5	1150
CDH15	120.6	99.8	97.2	91
CDK10	114.6	100.0	99.9	1056
CDK13	136.6	95.4	88.1	1049
CDK5RAP2	123.9	99.9	98.7	92
CDKL5	114.4	94.9	91.8	93
CDKN1C	21.1	68.1	51.8	771
CDON	143.8	100.0	99.6	94
CENPF	139.5	99.5	97.6	1076
CENPJ	141.7	99.7	97.8	95
CEP104	119.9	99.0	97.9	1077
CEP120	129.7	99.8	98.1	1078
CEP135	79.2	98.1	89.1	96
CEP152	162.5	97.2	94.5	97
CEP290	66.1	88.4	76.7	98
CEP41	83.5	97.7	89.6	99
CEP89	125.5	94.7	91.4	899
CHAMP1	160.6	100.0	100.0	707
CHD1	95.4	93.7	83.5	1040
CHD2	137.7	99.3	98.5	488
CHD3	106.1	94.7	92.1	772
CHD4	131.3	100.0	99.8	773
CHD7	150.7	99.9	98.9	100

CHD8	148.1	100.0	99.9	538
CHKB	98.5	100.0	99.0	597
CHRNA4	142.1	96.7	95.8	900
CIC	54.2	63.7	60.9	901
CIT	108.6	99.9	98.2	902
CKAP2L	161.3	98.9	96.6	774
CLCN4	123.0	100.0	99.8	775
CLIC2	72.5	99.3	95.2	489
CLIP1	131.7	99.7	97.8	903
CLN3	114.9	92.5	90.7	490
CLN5	146.1	98.2	92.2	491
CLN6	131.6	98.9	95.3	492
CLN8	163.9	83.5	83.5	493
CLP1	182.4	100.0	99.8	904
CLPB	140.2	100.0	99.5	736
CLTC	171.5	99.8	99.2	1064;1141
CNKS2	98.1	96.5	89.7	712
CNNM2	188.4	100.0	99.2	776
CNPY3	87.1	99.8	96.7	1160
CNTNAP2	148.0	100.0	99.9	101
COASY	168.5	100.0	100.0	777
COG1	124.2	100.0	99.9	102
COG4	123.8	100.0	99.9	778
COG5	107.0	97.4	93.8	779
COG6	78.4	95.0	85.9	611
COG7	125.1	100.0	100.0	103
COG8	122.4	99.9	98.4	104
COL4A1	92.8	97.9	94.0	105
COL4A2	96.8	98.5	93.9	106
COL4A3BP	121.6	98.3	92.7	661

COLEC11	203.0	100.0	100.0	107
COQ2	89.3	96.1	93.2	108
COQ4	89.8	88.4	84.9	719
COQ8A	134.3	100.0	99.1	14
COQ9	91.4	99.9	96.6	780
COX10	241.9	100.0	99.6	628
COX15	98.6	100.0	99.7	109
COX6B1	159.6	100.0	100.0	781
CPLX1	79.8	99.9	97.9	1159
CPS1	143.8	100.0	99.8	494
CRADD	115.2	99.9	98.5	564
CRBN	130.7	87.8	83.8	110
CREBBP	123.5	99.4	96.7	111
CRLF1	105.6	90.9	89.2	905
CSNK2A1	126.4	94.1	86.2	695
CSPP1	112.0	99.8	97.8	782
CSTB	82.5	97.1	82.7	1079
CTBP1	93.4	96.1	85.0	906
CTCF	158.4	98.6	96.7	544
CTDP1	105.0	86.6	83.6	112
CTNNB1	163.8	100.0	99.9	113
CTNND1	153.8	100.0	99.9	720
CTNND2	113.7	93.2	91.0	907
CTSA	134.1	100.0	99.4	495
CTSD	163.7	98.0	95.3	496
CTTNBP2	140.7	99.6	97.3	581
CUBN	127.8	99.8	98.4	598
CUL4B	72.8	98.0	88.5	114
CUX1	109.2	94.6	91.9	1120
CUX2	85.6	99.8	97.9	1080

CWF19L1	119.1	99.5	96.7	867
CXorf56	91.8	99.7	95.5	1116
CYB5R3	147.3	98.0	98.0	115
CYP27A1	175.1	98.3	96.1	908
CYP2U1	119.2	93.7	91.2	909
D2HGDH	134.5	97.5	95.2	116
DAG1	220.8	100.0	100.0	783
DARS2	122.3	100.0	99.6	117
DBT	102.1	97.3	93.8	118
DCAF17	91.9	95.6	89.3	497
DCC	138.5	100.0	99.9	1030
DCHS1	160.1	99.8	99.2	784
DCPS	143.8	100.0	99.8	731
DCX	113.2	100.0	99.7	119
DDC	101.0	99.1	95.0	785
DDHD2	149.7	99.9	98.0	120
DDX11	113.9	86.0	81.0	582
DDX3X	80.5	85.9	82.1	565
DEAF1	125.9	88.3	83.7	583
DENND5A	123.0	99.8	97.9	1025
DEPDC5	148.3	99.8	99.3	910
DHCR24	183.0	100.0	100.0	121
DHCR7	158.3	100.0	100.0	122
DHDDS	93.5	97.8	94.8	1154
DHFR	48.4	91.1	72.0	123
DHTKD1	141.0	99.6	98.2	124
DHX30	160.6	99.9	99.2	1047
DIAPH1	120.7	99.3	97.8	721
DIP2B	160.3	99.2	98.1	125
DKC1	111.9	99.6	98.1	126

DLD	123.5	99.9	98.6	127
DLG3	90.0	99.3	94.3	128
DLG4	170.4	100.0	99.4	690
DMD	112.4	99.4	97.4	129
DMPK	117.7	99.9	97.9	130
DNAJC12	129.3	87.4	87.3	1020
DNAJC19	97.9	98.5	90.0	131
DNM1	156.7	89.3	87.5	709
DNMT3A	115.5	98.8	95.8	566
DNMT3B	124.8	100.0	100.0	132
DOCK6	119.9	98.9	96.5	786
DOCK7	114.4	97.9	95.6	789
DOLK	202.9	100.0	99.9	911
DONSON	104.9	83.9	78.3	1018
DPAGT1	110.7	100.0	100.0	133
DPF2	102.4	100.0	97.9	1115
DPH1	157.1	100.0	99.7	790
DPM1	131.1	91.7	86.7	134
DPP6	145.5	96.5	94.5	662
DPYD	158.3	95.6	93.7	135
DPYS	133.5	100.0	99.5	912
DYM	101.3	97.2	94.8	136
DYNC1H1	179.8	100.0	99.6	137
DYRK1A	159.6	100.0	100.0	138
EBF3	130.4	100.0	99.1	1032
EBP	83.3	100.0	98.0	633
ECHS1	112.8	99.8	97.8	1081
EDC3	144.7	100.0	99.6	866
EEF1A2	177.7	98.8	93.8	724
EFNB2	179.7	99.8	97.7	1132

EFTUD2	124.2	100.0	99.4	139
EHMT1	141.4	94.0	92.9	140
EIF2AK3	147.1	95.1	91.3	141
EIF2S3	84.9	97.0	89.8	1082
EIF4A3	106.8	100.0	99.9	791
EIF4G1	135.0	100.0	99.5	573
ELAC2	123.8	100.0	99.3	913
ELOVL4	91.9	99.9	98.0	142
ELP2	125.5	99.2	96.9	914
EMC1	124.3	100.0	99.8	792
EMX2	118.0	100.0	100.0	143
ENTPD1	165.1	100.0	99.4	915
EP300	199.7	99.6	97.9	144
EPB41L1	128.7	99.9	97.7	145
EPG5	126.0	99.3	97.7	1029
ERCC2	123.7	100.0	99.7	146
ERCC3	113.2	99.9	98.9	147
ERCC5	139.8	100.0	99.4	498
ERCC6	191.3	100.0	99.9	148
ERCC8	89.5	92.9	78.4	149
ERLIN2	156.0	100.0	99.3	150
ESCO2	105.2	97.3	90.4	151
ETFB	126.6	100.0	100.0	574
ETHE1	85.5	99.3	95.8	152
EXOC8	174.4	100.0	100.0	1083
EXOSC2	142.0	100.0	100.0	916
EXOSC3	88.5	97.3	89.4	599
EXOSC9	129.8	97.5	87.4	1146
EZH2	139.5	99.8	97.6	652
FA2H	94.1	87.9	79.9	917

FAM126A	125.2	97.3	95.2	499
FAR1	80.4	96.3	92.4	793
FARSB	76.6	96.0	93.4	1148
FAT4	224.5	100.0	99.9	794
FBXL4	189.8	100.0	100.0	795
FBXO11	75.9	93.7	84.9	1039
FBXO31	108.8	93.5	89.0	669
FGD1	85.7	92.7	86.5	153
FGF12	95.5	99.6	96.3	871
FGF14	190.1	100.0	99.7	918
FGFR1	148.0	99.7	98.3	500
FGFR2	140.1	97.4	96.4	154
FGFR3	110.2	99.6	97.0	155
FH	146.4	91.7	87.6	156
FIBP	123.3	100.0	100.0	919
FIGN	169.6	100.0	99.9	567
FKRP	94.5	100.0	99.7	157
FKTN	120.0	99.2	94.2	158
FLNA	138.1	100.0	99.5	159
FLVCR1	139.5	99.2	95.8	545
FMN2	86.6	83.1	77.7	666
FMR1	78.9	94.0	84.7	160
FOXG1	157.5	84.8	81.0	161
FOXP1	129.6	100.0	99.9	162
FOXP2	160.2	98.9	96.9	600
FRAS1	147.8	100.0	99.7	163
FREM2	182.4	100.0	99.5	796
FRMD4A	116.7	91.4	90.3	920
FRMPD4	114.1	99.7	98.0	921
FRRS1L	103.1	68.3	63.4	797

FTCD	89.8	94.6	89.8	798
FTO	118.9	83.7	82.5	164
FTSJ1	128.3	98.1	94.5	165
FUCA1	135.0	100.0	99.5	166
FUT8	166.1	99.9	98.8	1147
GABBR2	136.0	95.2	92.4	1037
GABRA1	179.5	100.0	100.0	675
GABRA3	110.3	99.6	97.7	1118
GABRB1	174.1	100.0	99.9	1027
GABRB2	148.9	100.0	100.0	1152
GABRB3	140.5	98.1	93.7	922
GAD1	128.7	99.9	98.4	167
GALC	100.6	98.9	94.6	1122
GALE	154.8	100.0	100.0	168
GALT	168.7	100.0	100.0	169
GAMT	93.5	90.9	80.7	170
GATAD2B	129.8	100.0	99.8	171
GATM	150.6	100.0	100.0	172
GCDH	147.6	99.9	99.1	923
GCH1	74.4	97.0	86.5	173
GCSH	34.2	83.1	67.8	174
GDI1	152.0	98.9	97.3	175
GFAP	102.6	91.7	90.3	176
GFM2	118.6	98.7	93.4	924
GJA1	246.4	100.0	100.0	925
GJB1	229.8	100.0	99.8	1084
GJC2	41.9	68.9	58.6	177
GK	43.6	74.0	54.7	178
GLB1	94.3	99.6	97.0	501
GLDC	78.9	90.6	82.7	179

GLI2	138.5	99.4	97.4	180
GLI3	154.2	100.0	99.7	181
GLYCTK	202.6	100.0	99.5	799
GM2A	139.6	100.0	100.0	502
GMPPA	136.8	100.0	99.9	657
GMPPB	228.5	100.0	100.0	601
GNAO1	167.8	93.8	93.8	546
GNAS	141.0	98.5	95.9	182
GNB1	189.0	100.0	100.0	739
GNB5	125.9	99.9	98.3	926
GNPAT	133.6	99.4	96.4	183
GNPTAB	167.7	98.3	97.4	800
GNS	107.9	96.9	92.0	184
GPC3	85.1	98.6	92.6	185
GPHN	167.2	98.4	96.9	186
GPT2	138.0	98.2	90.9	672
GRIA3	98.2	99.3	94.7	187
GRIA4	148.3	99.8	98.1	1155
GRID2	175.4	100.0	99.9	653
GRIK2	133.2	96.0	94.7	188
GRIN1	150.7	100.0	99.5	189
GRIN2A	159.1	100.0	100.0	190
GRIN2B	189.4	99.9	99.3	191
GRIN2D	73.1	69.1	62.1	1050
GRIN3B	118.3	82.0	75.1	640
GRIP1	130.8	100.0	99.9	801
GRM1	185.8	100.0	99.9	192
GRN	184.5	100.0	100.0	1085
GSE1	101.5	99.9	98.8	612
GSS	104.0	100.0	99.8	193

GTF2H5	113.6	100.0	99.1	194
GTPBP2	156.8	96.5	94.7	1161
GTPBP3	137.4	100.0	99.7	802
GUSB	116.1	92.2	89.4	195
HACE1	125.3	99.2	95.0	733
HAX1	136.5	100.0	100.0	196
HCCS	106.6	99.9	99.2	197
HCFC1	105.8	99.3	96.1	198
HCN1	122.4	99.9	97.8	643
HDAC4	111.9	99.9	99.3	199
HDAC6	118.7	99.7	97.0	503
HDAC8	131.9	100.0	99.8	200
HECTD1	172.0	98.8	96.1	641
HECW2	133.1	99.9	98.6	927
HEPACAM	142.3	81.4	76.1	803
HERC1	173.7	99.9	99.4	706
HERC2	114.4	80.9	77.9	547
HESX1	57.6	99.2	92.6	201
HEXA	118.3	93.8	92.2	504
HEXB	129.7	99.4	94.0	505
HGSNAT	101.0	86.4	85.7	1086
HIST1H4C	108.2	100.0	100.0	1038
HIVEP2	191.2	100.0	100.0	722
HLCS	172.8	100.0	100.0	202
HMGCL	143.3	100.0	99.9	928
HNMT	135.0	100.0	99.7	730
HNRNPH2	170.8	100.0	100.0	929
HNRNPK	71.7	86.9	78.4	930
HNRNPU	126.6	99.3	97.9	931
HOXA1	165.3	100.0	100.0	203

HPD	137.8	100.0	100.0	204
HPRT1	58.2	96.0	84.8	205
HRAS	164.7	99.8	98.1	206
HSD17B10	117.1	100.0	99.2	207
HSPA9	91.6	91.1	85.9	870
HSPD1	96.5	98.3	93.2	506
HUWE1	98.4	99.2	97.0	507
IARS	148.8	99.8	98.6	804
IARS2	131.5	100.0	99.9	1087
IDS	111.3	99.6	98.3	208
IDUA	123.0	88.1	80.0	209
IER3IP1	73.0	93.2	82.2	210
IFIH1	113.5	99.6	97.1	741
IFT172	116.5	100.0	99.6	558
IFT81	92.9	88.3	81.2	932
IGBP1	118.3	99.8	97.7	508
IGF1	122.5	100.0	100.0	211
IKBKG	52.5	84.6	73.2	212
IL1RAPL1	116.8	99.7	98.0	213
IMPA1	71.4	97.1	85.8	933
INPP5E	89.1	95.8	90.0	214
INPP5K	108.3	100.0	99.6	1021
IQSEC2	61.2	92.1	82.5	215
ISCA2	92.0	99.7	96.9	1088
ISPD	104.4	95.2	84.8	216
ITGA7	129.6	99.6	97.6	934
ITPA	120.2	100.0	100.0	1089
ITPR1	161.4	100.0	99.9	676
IVD	114.9	100.0	100.0	805
JAG1	148.4	98.1	97.5	629

JAM3	158.6	100.0	100.0	217
JMJD1C	144.5	99.8	97.7	935
KALRN	149.0	100.0	99.5	936
KANK1	166.2	100.0	100.0	539
KANSL1	172.3	99.9	99.2	218
KAT6A	169.3	100.0	99.8	655
KAT6B	192.3	99.6	98.5	219
KATNB1	141.7	100.0	100.0	806
KCNA2	157.7	100.0	99.9	807
KCNA4	153.1	100.0	100.0	937
KCNB1	145.0	100.0	99.9	808
KCNC1	199.2	100.0	100.0	1090
KCNC3	144.0	68.5	59.0	718
KCNH1	185.8	98.7	98.7	651
KCNJ10	213.4	89.3	89.1	509
KCNJ11	299.5	100.0	100.0	220
KCNJ6	156.6	100.0	99.9	809
KCNK9	193.7	100.0	100.0	221
KCNQ2	85.4	90.1	86.5	222
KCNQ3	110.7	98.9	95.5	938
KCNQ5	158.0	96.2	94.2	691
KCNT1	112.0	95.3	92.3	223
KCTD7	166.7	95.0	95.0	224
KDM1A	129.7	96.2	93.4	734
KDM5B	138.0	98.8	96.9	1143
KDM5C	112.6	97.9	95.1	225
KDM6A	109.0	93.2	84.3	226
KIAA0586	114.7	98.2	92.7	939
KIAA1109	144.1	99.1	97.2	613
KIDINS220	155.4	99.9	99.5	940

KIF11	83.8	97.2	94.2	228
KIF14	111.3	98.1	89.9	1157
KIF1A	114.0	99.2	96.1	229
KIF1BP	159.7	96.2	96.1	227
KIF2A	105.2	97.7	88.7	810
KIF4A	92.4	98.2	93.7	725
KIF5C	116.3	99.9	99.1	575
KIF7	85.7	93.5	88.9	230
KIRREL3	136.3	100.0	99.7	231
KLF7	144.3	100.0	99.5	1137
KLHL15	178.1	100.0	99.9	941
KMT2A	152.5	99.3	98.6	510
KMT2B	120.3	94.0	91.2	942
KMT2C	170.2	91.0	88.6	943
KMT2D	142.1	99.9	99.0	264
KMT5B	202.3	100.0	99.6	1062
KNL1	113.7	98.3	95.2	767
KPTN	112.1	100.0	99.9	658
KRAS	64.7	99.9	98.7	232
L1CAM	133.3	99.8	98.4	233
L2HGDH	129.1	98.4	97.0	234
LAMA1	137.5	100.0	99.6	615
LAMA2	143.5	99.9	99.5	235
LAMC3	130.5	98.3	96.1	236
LAMP2	106.1	92.7	91.2	237
LARGE1	143.0	100.0	99.6	238
LARP7	56.3	80.5	63.7	239
LAS1L	90.2	99.7	97.7	944
LIAS	133.7	99.5	97.1	811
LIG4	165.6	100.0	99.6	240

LINGO1	230.8	100.0	99.8	1044
LINS1	147.8	99.9	98.0	945
LMAN2L	127.9	100.0	99.8	745
LONP1	141.5	97.9	96.4	812
LRP2	176.3	100.0	99.8	241
LRPPRC	127.3	99.4	97.2	242
LZTFL1	109.1	99.1	95.3	813
LZTR1	134.0	100.0	99.4	1091
MAB21L2	245.6	100.0	100.0	1092
MAF	60.2	77.5	72.7	946
MAG	146.5	100.0	99.5	1093
MAGEL2	83.4	90.6	81.2	568
MAGT1	101.8	98.4	95.8	243
MAN1B1	128.9	100.0	99.7	244
MAN2B1	122.3	99.1	96.2	245
MANBA	119.9	99.7	97.2	246
MAOA	113.8	99.9	98.7	247
MAP1B	142.0	100.0	99.5	1164
MAP2K1	92.3	99.8	95.6	248
MAP2K2	107.9	97.6	89.2	249
MAPRE2	205.7	100.0	99.5	814
MASP1	148.6	100.0	99.6	947
MAT1A	185.4	99.7	97.5	250
MBD5	196.2	99.9	99.6	251
MBOAT7	91.8	99.3	94.7	869
MBTPS2	113.4	99.6	97.6	511
MCCC1	151.7	100.0	99.4	252
MCCC2	131.1	99.9	98.9	253
MCOLN1	150.2	98.8	97.0	254
MCPH1	148.6	99.9	98.1	255

MDH2	123.3	98.0	97.9	1022
MECP2	87.3	99.1	93.1	256
MECR	108.1	98.8	96.1	1017
MED12	105.7	98.0	94.8	257
MED13	167.6	99.9	99.4	1129
MED13L	134.6	100.0	99.6	585
MED17	118.0	95.2	91.7	258
MED23	131.2	98.7	96.9	259
MED25	103.9	99.1	95.7	948
MEF2C	137.7	97.9	93.5	260
MEIS2	138.2	100.0	99.9	949
METTL23	145.0	100.0	100.0	670
MFF	93.7	90.4	87.6	1094
MFSD2A	115.1	98.8	95.9	950
MFSD8	125.1	99.9	98.4	951
MGAT2	157.2	100.0	99.9	261
MICU1	134.2	96.0	88.8	815
MID1	164.6	99.8	98.4	262
MID2	141.0	99.6	97.3	726
MKKS	208.5	83.2	83.1	263
MKS1	114.5	99.9	98.5	952
MLC1	103.4	100.0	99.8	816
MLYCD	75.6	91.3	86.9	265
MMAA	183.2	100.0	99.6	266
MMAB	101.2	100.0	99.9	1095
MMACHC	205.8	100.0	100.0	267
MMADHC	77.0	89.3	75.0	677
MOCS1	87.4	98.4	93.0	268
MOCS2	139.5	99.6	99.6	269
MOGS	121.6	99.8	99.1	635

MPDU1	111.8	100.0	99.7	270
MPDZ	149.0	98.7	96.6	602
MPLKIP	72.5	97.1	79.3	893
MRPL3	66.3	91.2	77.9	817
MRPS22	138.8	95.3	91.8	1156;271
MSL3	69.8	94.5	82.7	1051
MTFMT	124.6	99.3	96.2	953
MTHFR	126.1	98.4	97.2	636
MTOR	140.0	100.0	99.8	732
MTR	140.9	99.8	98.8	272
MTRR	139.1	100.0	99.2	273
MUT	121.8	99.2	95.1	274
MVK	124.3	92.1	90.4	275
MYCN	94.1	94.9	84.8	276
MYH9	130.5	99.4	98.1	678
MYO5A	125.3	99.5	97.4	277
MYT1L	178.3	100.0	99.7	679
NAA10	102.4	98.7	96.7	278
NAA15	86.6	96.5	90.9	1061
NACC1	167.7	100.0	99.9	1016
NAGA	139.4	100.0	100.0	279
NAGLU	108.7	92.4	90.4	280
NALCN	139.5	99.8	97.5	512
NANS	106.1	100.0	99.9	818
NARS2	120.0	97.4	97.1	954
NBEA	128.4	90.8	89.4	1031
NBN	80.6	99.1	94.6	281
NDE1	100.9	100.0	99.5	282
NDP	116.8	100.0	100.0	283
NDST1	201.4	100.0	100.0	668

NDUFA1	166.8	100.0	99.6	284
NDUFA11	86.9	99.5	95.8	285
NDUFA12	160.2	100.0	100.0	286
NDUFA2	133.9	100.0	100.0	955
NDUFAF3	120.8	100.0	100.0	956
NDUFAF5	95.7	98.8	94.5	819
NDUFS1	132.2	99.8	98.6	287
NDUFS2	117.8	100.0	100.0	288
NDUFS3	142.4	90.7	90.6	289
NDUFS4	147.3	100.0	99.1	290
NDUFS6	119.1	99.9	99.4	957
NDUFS7	118.4	100.0	99.7	291
NDUFS8	141.4	100.0	99.9	292
NDUFV1	136.7	99.7	97.8	293
NDUFV2	69.5	78.7	53.9	958
NECAP1	116.9	100.0	99.9	820
NECTIN1	145.4	100.0	100.0	981
NEDD4L	105.2	71.7	70.5	680
NEU1	148.1	99.4	97.1	294
NEXMIF	139.2	99.9	99.0	614
NF1	125.9	92.3	89.3	295
NFATC1	136.4	99.2	96.7	642
NFIA	145.1	100.0	99.3	681
NFIX	165.3	97.7	94.9	559
NGLY1	128.0	100.0	99.5	959
NHS	127.1	94.3	93.3	296
NIPBL	116.1	96.5	94.5	297
NKX2-1	52.0	96.6	83.3	298
NLGN3	128.8	100.0	99.0	630
NLGN4X	193.6	99.4	97.1	299

NLRP3	150.4	100.0	100.0	300
NONO	93.8	99.7	96.4	821
NPC1	147.9	99.2	97.8	960
NPC2	140.7	100.0	99.9	961
NPHP1	117.6	98.8	96.4	301
NR2F1	201.6	99.9	98.4	548
NR4A2	149.2	100.0	100.0	1128
NRAS	188.4	100.0	100.0	513
NRXN1	160.9	96.8	95.7	302
NSD1	155.2	100.0	99.9	303
NSD2	136.9	99.7	97.8	1060
NSDHL	169.2	99.9	98.2	304
NSUN2	114.7	95.3	92.2	305
NTRK1	130.6	99.7	97.7	306
NTRK2	170.8	100.0	100.0	1153
NUP62	111.6	100.0	99.9	822
NUS1	69.6	62.0	40.7	1063;1140
OAT	89.2	77.7	70.5	962
OCLN	220.7	100.0	100.0	307
OCRL	122.2	98.8	96.3	308
OFD1	51.5	84.0	67.8	309
OGT	125.9	100.0	99.4	1041
OPHN1	89.0	99.1	96.2	310
ORC1	106.7	99.9	98.9	311
OSGEP	120.5	100.0	99.6	1052
OTC	123.3	99.9	99.4	514
OTUD6B	123.4	99.9	98.2	1033
PACS1	117.4	97.5	95.7	312
PACS2	150.7	98.4	95.9	1117
PAFAH1B1	105.2	89.1	81.4	313

PAH	151.7	100.0	100.0	515
PAK3	82.8	97.6	91.8	314
PANK2	146.6	99.3	93.1	315
PANX1	169.0	100.0	100.0	963
PAX1	132.4	87.7	82.4	569
PAX6	119.9	100.0	99.9	316
PAX8	94.1	100.0	99.9	516
PBX1	111.8	99.3	95.2	1043
PC	149.3	97.7	94.6	317
PCCA	103.1	96.4	89.2	964
PCCB	129.8	98.7	96.4	965
PCDH19	224.1	100.0	99.3	318
PCGF2	94.5	99.9	98.4	710
PCLO	165.2	99.7	98.5	966
PCNT	117.6	98.9	96.0	319
PDE4D	101.2	92.8	88.3	682
PDHA1	109.8	98.1	92.1	320
PDP1	209.6	100.0	100.0	967
PDSS1	116.7	88.8	78.7	321
PDSS2	126.8	96.5	93.5	322
PEPD	116.0	99.6	98.5	323
PET100	94.5	88.8	74.8	823
PEX1	115.8	97.7	95.4	324
PEX10	111.8	96.1	90.1	325
PEX11B	105.7	99.7	98.3	326
PEX12	168.3	100.0	100.0	517
PEX13	197.6	99.8	98.7	327
PEX16	137.0	97.1	93.1	518
PEX19	92.9	99.9	99.2	519
PEX2	147.1	100.0	100.0	520

PEX26	76.4	100.0	99.8	328
PEX3	98.1	99.1	94.3	521
PEX5	111.7	99.9	98.3	329
PEX6	94.5	90.4	86.1	522
PEX7	113.5	89.6	82.0	330
PGAP1	98.1	94.9	88.6	671
PGAP2	158.4	100.0	100.0	523
PGAP3	72.8	62.5	58.0	659
PGK1	54.5	93.3	81.6	331
PHF6	62.8	92.6	83.7	332
PHF8	94.0	99.8	97.7	333
PHGDH	115.6	100.0	99.8	334
PHIP	124.5	95.9	91.0	586
PI4KA	112.8	93.6	89.4	968
PIGA	90.5	90.4	81.3	824
PIGC	129.0	99.7	96.4	969
PIGG	167.4	100.0	99.7	746
PIGL	121.8	99.9	99.3	570
PIGN	111.3	92.6	87.1	335
PIGO	147.0	100.0	99.9	336
PIGT	171.3	98.1	98.0	549
PIGV	145.5	100.0	100.0	337
PIGW	147.6	100.0	99.9	970
PIGY	121.4	100.0	99.9	825
PIK3CA	120.7	99.9	99.1	971
PIK3R2	86.2	89.1	86.1	338
PLA2G6	117.5	99.9	98.4	524
PLCB1	142.8	100.0	99.7	339
PLK4	145.5	99.5	96.3	1096
PLP1	129.2	100.0	99.4	340

PLXND1	110.8	96.9	93.1	714
PMM2	141.1	99.9	99.4	341
PMPCA	120.8	99.4	96.8	972
PMPCB	121.0	99.7	97.8	1162
PNKP	93.0	99.8	97.7	342
PNP	151.4	100.0	99.5	343
PNPLA6	122.1	99.7	98.5	1097
POC1A	133.8	100.0	100.0	344
POGZ	168.2	99.4	99.2	626
POLG	114.4	100.0	99.5	576
POLR3A	137.4	100.0	99.9	345
POLR3B	146.4	99.9	98.5	346
POMGNT1	127.6	99.7	97.1	347
POMGNT2	259.6	100.0	100.0	826
POMK	205.1	100.0	100.0	729
POMT1	155.7	99.7	98.1	348
POMT2	111.1	98.9	97.5	349
PORCN	117.7	100.0	99.3	350
POU1F1	106.3	98.2	94.7	603
POU3F3	30.1	67.7	57.2	743
PPM1D	166.7	100.0	99.8	1098
PPOX	96.1	99.7	98.2	351
PPP1CB	96.6	99.6	98.4	973
PPP1R15B	133.4	99.4	98.0	974
PPP2R1A	134.0	91.7	91.6	663
PPP2R5B	111.3	99.6	95.1	975
PPP2R5C	107.6	95.1	88.2	976
PPP2R5D	143.2	100.0	99.8	665
PPP3CA	123.8	99.0	92.9	1048
PPT1	144.5	90.0	87.3	525

PQBP1	186.1	100.0	100.0	352
PRF1	122.5	91.2	90.8	1055
PRKAR1A	90.7	99.1	93.9	977
PRMT7	138.7	100.0	99.8	978
PRODH	83.8	84.9	82.3	353
PRPS1	149.5	100.0	100.0	354
PRR12	75.0	94.6	86.2	1059
PRSS12	153.3	99.9	98.5	355
PSAP	114.4	99.9	99.0	526
PSAT1	53.2	91.4	75.8	1099
PSEN1	160.7	100.0	99.9	577
PSMD12	76.3	98.1	90.9	1121
PSPH	128.9	98.8	95.4	1100
PTCH1	114.6	98.4	95.9	356
PTCHD1	157.2	100.0	99.8	654
PTDSS1	127.2	100.0	100.0	604
PTEN	143.2	99.6	96.0	357
PTPN11	103.1	97.9	92.5	358
PTRH2	279.6	100.0	100.0	979
PTRHD1	144.0	100.0	100.0	980
PTS	107.2	99.6	94.1	828
PUF60	173.4	99.9	98.3	650
PUM1	158.0	100.0	99.9	1065
PURA	121.8	94.5	87.2	550
PUS1	127.2	98.6	93.9	359
PUS3	192.0	100.0	100.0	748
PUS7	136.5	99.8	98.0	749
PYCR1	86.3	99.4	94.3	360
PYCR2	127.6	100.0	97.6	829
QARS	166.6	100.0	100.0	830

QDPR	92.3	100.0	99.5	831
QRICH1	165.9	99.9	98.9	1145
RAB11B	249.8	100.0	100.0	1042
RAB18	82.7	97.1	86.4	361
RAB27A	143.9	100.0	99.9	362
RAB39B	113.0	100.0	99.7	363
RAB3GAP1	124.2	99.4	98.8	364
RAB3GAP2	94.1	98.4	93.9	365
RAB40AL	174.9	100.0	100.0	366
RAC1	117.9	97.6	92.8	696
RAD21	78.5	98.8	94.7	367
RAF1	127.3	100.0	99.7	368
RAI1	146.3	100.0	99.7	369
RARB	118.7	100.0	100.0	982
RARS2	107.2	100.0	99.1	370
RBFOX1	136.7	89.1	87.8	983
RBM10	112.1	99.4	95.4	527
RBM28	138.7	100.0	100.0	371
RBPJ	89.2	94.1	86.4	787
RCBTB1	123.7	100.0	99.7	984
RELN	155.6	100.0	99.8	372
RERE	71.4	94.9	88.2	738
REV3L	133.3	97.1	94.5	713
RFT1	108.3	99.8	97.3	373
RHEB	39.4	88.7	75.1	616
RHOBTB2	227.5	100.0	100.0	1136
RIT1	165.6	100.0	100.0	528
RLIM	149.6	99.6	97.8	832
RMND1	137.2	99.8	97.3	374
MRP				375

RNASEH2A	142.1	100.0	99.9	376
RNASEH2B	103.8	93.2	87.5	377
RNASEH2C	209.2	100.0	99.9	378
RNASET2	96.4	91.9	88.3	529
RNF113A	144.8	100.0	100.0	985
RNF125	177.8	100.0	99.1	986
ROGDI	112.2	97.9	95.3	379
RORA	129.8	92.1	87.7	1131
RPGRIP1L	126.2	96.4	93.9	380
RPL10	85.9	99.1	93.1	631
RPS6KA3	79.3	94.2	83.3	381
RSPRY1	168.9	100.0	99.9	987
RTEL1	110.9	99.2	95.1	605
RTTN	129.5	97.2	94.7	833
RUBCN	104.1	98.0	97.5	634
RUSC2	182.3	100.0	99.9	988
SALL1	138.5	99.3	98.4	382
SATB2	110.5	98.5	93.4	383
SBDS	212.3	100.0	99.9	834
SC5D	198.4	100.0	99.2	571
SCAPER	135.9	96.0	93.6	1139
SCN1A	135.2	99.6	98.0	384
SCN1B	168.3	97.1	96.1	1024
SCN2A	156.7	99.0	96.4	385
SCN8A	198.3	100.0	99.7	386
SCO1	109.6	97.9	94.3	989
SCO2	113.1	100.0	100.0	387
SCYL1	143.2	98.6	96.3	1101
SDHA	122.2	84.8	80.8	388
SEMA3E	142.6	99.9	99.0	990

SEPSECS	159.3	100.0	100.0	835
SERAC1	112.5	98.8	94.6	389
SET	55.4	89.9	79.4	1119
SETBP1	151.7	97.6	96.1	390
SETD1A	119.2	98.6	96.6	744
SETD1B	133.3	96.5	94.6	1134
SETD2	147.8	100.0	99.6	673
SETD5	184.5	100.0	99.7	551
SF1	79.1	84.1	75.4	697
SGSH	129.0	95.1	93.6	637
SHANK2	128.1	100.0	99.8	578
SHANK3	84.8	81.2	73.5	391
SHH	117.5	99.0	94.0	392
SHOC2	140.4	100.0	99.4	393
SHROOM4	100.8	99.8	98.2	394
SIK1	85.6	97.0	92.4	836
SIL1	154.4	99.8	98.0	395
SIN3A	137.9	100.0	99.4	617
SIX3	145.3	100.0	98.9	396
SKI	85.3	96.4	90.8	397
SLC12A6	141.8	100.0	99.9	398
SLC13A5	164.1	100.0	100.0	837
SLC16A2	60.3	92.8	82.1	399
SLC17A5	119.6	96.8	92.9	400
SLC19A3	186.4	100.0	99.9	716
SLC1A1	174.2	100.0	99.9	560
SLC1A2	128.0	99.9	99.4	1028
SLC1A4	156.5	98.9	94.9	704
SLC25A12	150.5	99.8	98.4	838
SLC25A15	192.5	98.8	95.0	401

SLC25A22	108.7	99.5	96.9	402
SLC25A24	115.8	98.6	96.3	1149
SLC2A1	190.1	92.9	92.8	403
SLC33A1	140.9	96.8	90.1	404
SLC35A1	124.0	99.9	97.7	991
SLC35A2	108.8	99.7	96.8	552
SLC35C1	230.2	99.9	98.4	405
SLC39A12	113.6	99.0	94.5	698
SLC39A8	128.5	100.0	99.7	839
SLC4A4	122.3	99.0	97.1	406
SLC6A1	143.6	100.0	100.0	992
SLC6A17	189.8	100.0	100.0	667
SLC6A3	145.7	100.0	99.8	606
SLC6A8	56.5	89.8	79.1	407
SLC7A7	123.9	100.0	99.9	561
SLC9A6	104.2	97.6	91.3	408
SMAD4	125.5	100.0	100.0	409
SMAD6	100.5	80.0	72.0	1102
SMARCA2	113.8	95.7	93.7	410
SMARCA4	143.8	100.0	99.5	411
SMARCB1	214.3	100.0	100.0	412
SMARCC2	105.7	99.3	97.1	587
SMARCE1	73.6	96.5	86.8	683
SMC1A	99.4	99.9	98.8	638
SMC3	81.4	93.8	87.6	413
SMG9	101.8	100.0	99.9	1103
SMOC1	129.8	99.5	97.3	414
SMPD1	123.5	99.6	97.9	415
SMS	67.8	88.3	73.9	416
SNAP25	133.7	100.0	99.9	993

SNAP29	153.5	100.0	100.0	417
SNIP1	139.3	99.2	96.7	553
SNRPB	75.2	99.8	97.4	1104
SNRPN	116.8	99.4	95.0	737
SNX14	70.1	95.2	82.9	705
SOBP	130.7	92.9	85.4	418
SON	159.7	98.4	94.4	701
SOS1	94.3	96.7	90.3	419
SOS2	97.1	98.5	92.8	868
SOX10	65.8	98.2	91.3	420
SOX11	118.2	99.7	96.8	664
SOX2	128.8	98.3	93.1	607
SOX3	37.7	86.4	71.5	421
SOX5	107.3	99.1	96.2	649
SPART	132.4	99.8	98.2	1066
SPAST	63.8	93.1	81.9	994
SPATA5	132.0	99.9	99.2	840
SPECC1L	157.9	100.0	100.0	1105
SPG11	129.2	99.2	96.9	530
SPOCK1	118.7	100.0	99.8	995
SPRED1	164.3	98.7	96.7	422
SPTAN1	125.5	99.1	98.6	423
SPTBN2	118.0	99.9	99.3	841
SRCAP	153.9	99.8	99.1	424
SRD5A3	135.9	100.0	99.7	425
SRPX2	81.8	100.0	98.5	426
SSR4	89.8	100.0	98.8	996
ST3GAL3	144.5	100.0	99.9	427
ST3GAL5	121.9	84.4	84.2	588
STAG1	104.4	98.8	95.5	632

STAMPB	112.3	99.3	96.5	842
STIL	157.2	99.8	98.6	428
STRA6	116.5	100.0	99.9	429
STT3A	156.2	100.0	100.0	572
STT3B	125.1	99.2	96.0	554
STX1B	152.2	100.0	98.4	717
STXBP1	124.5	96.8	96.8	430
SUCLA2	64.9	93.3	82.8	562
SUCLG1	101.3	99.6	95.4	843
SUMF1	103.3	98.6	91.1	997
SUOX	212.6	100.0	100.0	431
SURF1	96.2	88.3	88.3	432
SYN1	64.2	74.0	63.2	433
SYNCRIP	58.8	92.9	85.2	702
SYNE1	136.6	98.2	97.6	684
SYNGAP1	141.3	98.4	98.0	434
SYP	72.0	99.8	94.0	435
SYT1	171.3	99.8	98.6	1124
SYT14	113.5	59.9	53.8	436
SZT2	149.5	99.5	99.2	844
TAF1	112.4	99.4	96.6	845
TAF13	81.8	100.0	99.9	1068
TAF2	112.8	98.8	94.7	618
TAF6	130.0	99.9	98.6	1106
TANC2	159.1	99.9	99.3	1114
TANGO2	145.3	100.0	100.0	1107
TAT	143.1	100.0	100.0	437
TBC1D20	145.7	94.2	94.1	846
TBC1D24	179.2	100.0	100.0	438
TBC1D7	105.5	99.6	96.6	619

TBCD	152.9	95.5	92.3	998
TBCE	128.0	99.9	98.2	439
TBCK	86.5	95.7	89.3	740
TBL1XR1	79.4	91.5	73.0	751
TBP	129.5	100.0	98.1	999
TBR1	120.8	100.0	99.1	685
TCF20	144.3	100.0	100.0	692
TCF4	128.0	99.9	99.5	440
TCF7L2	150.4	99.6	96.5	699
TCN2	175.6	100.0	100.0	1000
TCTN3	127.6	100.0	99.8	847
TDP2	165.1	99.9	98.8	1001
TECPR2	161.1	100.0	99.9	1002
TECR	94.6	99.9	97.9	441
TELO2	98.1	97.4	93.7	848
TFAP2A	109.3	100.0	99.3	608
TGDS	82.4	98.1	88.8	1108
TGFBR1	173.4	93.7	93.6	442
TGFBR2	193.5	100.0	99.9	443
TGIF1	138.3	100.0	100.0	686
TH	68.2	97.6	88.7	711
THOC2	77.9	96.2	86.6	849
THOC6	248.6	100.0	99.9	620
THRB	167.4	100.0	99.5	444
TIMM8A	46.0	94.5	78.8	445
TINF2	184.0	100.0	100.0	850
TKT	114.1	98.7	97.7	1057
TLK2	113.0	98.8	94.7	693;1142
TMCO1	78.7	88.0	86.5	446
TMEM165	113.9	99.8	98.1	447

TMEM231	111.5	100.0	99.9	448
TMEM237	100.7	99.8	98.3	449
TMEM240	112.2	99.8	97.4	851
TMEM67	72.9	93.3	83.4	450
TMEM70	138.7	94.6	90.3	852
TMLHE	100.9	99.9	97.6	555
TNIK	111.1	99.9	99.3	747
TOE1	165.1	100.0	100.0	872
TP53RK	37.4	91.3	76.5	1053
TPI1	103.0	99.2	96.7	1003
TPO	134.8	99.9	98.5	1004
TPP1	146.3	100.0	100.0	531
TPRKB	56.7	79.3	67.1	1054
TRAF7	147.2	98.3	95.0	1126
TRAIP	141.6	100.0	100.0	1109
TRAPPC11	126.2	99.4	96.4	645
TRAPPC6B	61.8	99.4	94.4	1144
TRAPPC9	135.0	100.0	99.9	451
TREX1	242.4	100.0	100.0	452
TRIM32	141.2	100.0	100.0	563
TRIO	134.3	97.9	95.4	621
TRIP12	139.8	99.5	98.8	700
TRIP4	113.5	100.0	98.8	1110
TRIT1	119.4	100.0	99.8	1151
TRMT1	108.0	99.8	97.4	1005
TRMT10A	135.2	100.0	99.4	589
TRNT1	104.6	97.8	92.3	1111
TSC1	128.8	99.8	98.8	453
TSC2	131.2	100.0	99.0	454
TSEN15	74.2	99.0	93.6	1006

TSEN54	82.9	95.9	92.9	627
TSHB	271.7	100.0	100.0	1007
TSPAN7	120.7	99.9	98.6	455
TTC19	92.1	80.6	72.5	853
TTC37	124.0	99.6	98.1	854
TTC8	106.9	97.9	92.0	456
TTI2	104.5	100.0	99.7	556
TUBA1A	113.2	99.9	97.8	457
TUBA8	177.1	99.9	99.7	532
TUBB	158.6	99.3	97.4	855
TUBB2B	100.0	100.0	100.0	458
TUBB3	136.1	98.1	96.9	856
TUBB4A	121.2	96.0	95.3	728
TUBG1	164.2	100.0	100.0	857
TUBGCP4	130.8	99.1	96.2	858
TUBGCP6	152.2	99.9	98.9	590
TUSC3	136.4	100.0	98.3	459
TWIST1	134.4	96.6	87.2	609
TWNK	178.8	100.0	100.0	765
UBA5	75.4	94.1	77.1	1008
UBE2A	100.5	99.9	96.9	460
UBE3A	89.8	97.8	91.4	461
UBE3B	127.8	100.0	99.9	622
UBR1	128.2	99.2	96.0	462
UBTF	123.6	99.9	99.0	1036
UNC13A	140.8	99.1	97.8	1135
UNC80	133.4	99.9	99.1	735
UPB1	157.4	100.0	100.0	463
UPF3B	47.4	91.2	76.6	464
UQCRQ	131.3	100.0	99.9	859

UROC1	132.0	99.9	99.0	860
USP27X	248.7	100.0	100.0	1009
USP7	99.4	93.2	88.0	694
USP9X	108.2	97.2	91.1	625
VLDLR	200.9	99.9	99.4	465
VPS11	144.9	95.3	93.2	1010
VPS13B	143.8	98.6	96.8	466
VPS37A	73.6	86.6	66.4	861
VPS53	129.2	91.4	90.4	862
VRK1	124.8	97.5	94.2	533
VWA3B	141.5	99.8	98.4	1011
WAC	165.5	99.7	96.7	646
WASF1	85.6	100.0	99.2	1127
WASHC4	91.8	95.3	89.6	584;1067
WDR13	122.6	99.9	98.9	674
WDR19	132.1	99.8	98.1	687
WDR26	97.5	98.3	94.6	1046
WDR45	75.0	97.4	90.1	534
WDR45B	85.5	95.8	85.6	1158
WDR62	161.5	100.0	99.7	467
WDR73	138.9	100.0	100.0	715
WDR81	163.3	99.9	99.4	648
WFS1	251.4	100.0	99.7	1012
WVOX	130.9	100.0	99.7	644
XPA	52.9	98.5	88.9	468
XPNPEP3	134.0	100.0	99.2	535
XRCC4	103.2	99.7	97.3	1112
XYLT1	132.5	90.4	87.1	557
XYLT2	136.3	98.9	94.9	1113
YAP1	95.6	87.8	81.6	660

YME1L1	105.3	97.7	91.9	1013
YWHAE	114.6	99.7	96.1	688
YY1	134.8	100.0	98.6	623
ZBTB16	151.4	100.0	100.0	536
ZBTB18	222.7	99.7	99.0	592
ZBTB20	216.9	100.0	100.0	742
ZBTB24	178.1	100.0	100.0	863
ZC3H14	184.1	99.6	97.2	750
ZC4H2	78.6	99.8	98.1	1014
ZDHHC15	89.8	97.9	92.6	591
ZDHHC9	55.5	98.4	89.4	469
ZEB2	157.0	99.8	98.8	470
ZFYVE26	120.3	99.9	99.4	540
ZIC1	231.1	100.0	100.0	864
ZIC2	122.5	90.5	78.9	471
ZMYND11	137.0	100.0	99.8	579
ZNF292	134.7	98.8	97.2	624
ZNF407	176.8	99.2	98.4	1015
ZNF41	103.3	100.0	99.7	472
ZNF592	150.1	100.0	99.9	473
ZNF711	137.7	98.7	95.5	474
ZNF81	90.3	98.9	95.6	475
ZSWIM6	150.9	93.1	89.1	865

Gene symbols used follow HGNC 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