

Epilepsy, Intellectual Disability, and/or Autism Spectrum Disorders (EPIDASD) panel:

The EPIDASD panel consists of 599 genes previously described as being involved in the development of epilepsy, epileptic encephalopathies, developmental epileptic encephalopathies, mental retardation syndromes, brain malformations and/or autism spectrum disorders. The CHE panel and the former PME are both included in the EPIDASD panel.

This test is relevant for patients with brain malformations and for patients suffering from intellectual disability and/or autism spectrum disorder with or without epilepsy.

Table showing the 599 genes in the EPIDASD panel:

Gene	Reference_NM	OMIM_ID	Gene	Reference_NM	OMIM_ID
ACSL4	NM_004458.2	300157	ARHGEF6	NM_004840.2	300267
ACTB	NM_001101.3	102630	ARHGEF9	NM_015185.2	300429
ACTG1	NM_001614.3	102560	ARID1A	NM_006015.4	603024
ACTL6B	NM_016188.4	612458	ARID1B	NM_020732.3	614556
ACY1	NM_000666.2	104620	ARSA	NM_000487.5	607574
ADAT3	NM_138422.3	615302	ARV1	NM_022786.2	611647
ADCY5	NM_183357.2	600293	ASAH1	NM_177924.4	613468
ADGRG1	NM_005682.6	604110	ASH1L	NM_018489.2	607999
ADNP	NM_015339.4	611386	ASL	NM_000048.3	608310
ADRA2B	NM_000682.6	104260	ASPA	NM_000049.2	608034
ADSL	NM_000026.3	608222	ASPM	NM_018136.4	605481
AFF2	NM_002025.3	300806	ASS1	NM_000050.4	603470
AFF3	NM_002285.2	601464	ASTN1	NM_004319.2	600904
AGA	NM_000027.3	613228	ASXL3	NM_030632.2	615115
AGO1	NM_012199.4	606228	ATN1	NM_001007026.1	607462
AGTR2	NM_000686.4	300034	ATP1A2	NM_000702.3	182340
AHI1	NM_017651.4	608894	ATP1A3	NM_152296.4	182350
AKT3	NM_005465.4	611223	ATP6AP2	NM_005765.2	300556

ALDH18A1	NM_002860.3	138250	ATP6V1A	NM_001690.3	607027
ALDH3A2	NM_000382.2	609523	ATP7A	NM_000052.6	300011
ALDH5A1	NM_001080.3	610045	ATP7B	NM_000053.3	606882
ALDH7A1	NM_001182.4	107323	ATP9A	NM_006045.3	609126
ALG1	NM_019109.4	605907	ATR	NM_001184.3	601215
ALG12	NM_024105.3	607144	ATRX	NM_000489.4	300032
ALG13	NM_00109992.2.2	300776	AUTS2	NM_015570.3	607270
ALG3	NM_005787.5	608750	B3GLCT	NM_194318.3	610308
ALG6	NM_013339.3	604566	BCKDHA	NM_000709.3	608348
AMT	NM_000481.3	238310	BCKDHB	NM_183050.3	248611
ANK3	NM_020987.4	600465	BCKDK	NM_005881.3	614901
ANKH	NM_054027.4	605145	BCOR	NM_017745.5	300485
ANKRD11	NM_013275.5	611192	BPTF	NM_004459.6	601819
ANOS1	NM_000216.3	300836	BRWD3	NM_153252.4	300553
AP1S2	NM_003916.4	300629	BTD	NM_000060.4	609019
AP2M1	NM_00131119.8.1	601024	C12orf57	NM_138425.3	615140
AP4B1	NM_006594.4	607245	CA8	NM_004056.5	114815
AP4E1	NM_007347.4	607244	CACNA1A	NM_00112722.1.1	601011
AP4M1	NM_004722.3	602296	CACNA1C	NM_000719.6	114205
AP4S1	NM_007077.4	607243	CACNA1D	NM_000720.3	114206
ARFGEF2	NM_006420.2	605371	CACNA1E	NM_000721.3	601013
CACNA1G	NM_018896.4	604065	DDHD2	NM_015214.2	615003
CACNB4	NM_000726.4	601949	DDX3X	NM_00119341.6.2	300160
CACNG2	NM_006078.4	602911	DEAF1	NM_021008.3	602635
CAMK2A	NM_015981.3	114078	DEPDC5	NM_00124289.6.1	614191
CAMK2B	NM_001220.4	607707	DHCR7	NM_001360.2	602858

CAMTA1	NM_015215.3	611501	DHDDS	NM_024887.3	608172
CASK	NM_003688.3	300172	DIP2B	NM_173602.2	611379
CASR	NM_000388.3	601199	DKC1	NM_001363.4	300126
CBS	NM_000071.2	613381	DLAT	NM_001931.4	608770
CC2D1A	NM_017721.4	610055	DLD	NM_000108.4	238331
CCDC22	NM_014008.4	300859	DLG2	NM_00114269 9.1	603583
CDH15	NM_004933.2	114019	DLG3	NM_021120.3	300189
CDK5RA P2	NM_018249.5	608201	DMD	NM_004006.2	300377
CDK6	NM_001259.6	603368	DNM1	NM_004408.3	602377
CDKL5	NM_003159.2	300203	DNM3	NM_015569.4	611445
CENPJ	NM_018451.4	609279	DNMT3A	NM_175629.2	602769
CEP152	NM_014985.3	613529	DOCK3	NM_004947.4	603123
CERS1	NM_021267.4	606919	DOCK7	NM_00127199 9.1	615730
CERS2	NM_181746.3	606920	DOCK8	NM_203447.3	611432
CHAMP1	NM_00116414 4.2	616327	DPAGT1	NM_001382.3	191350
CHD2	NM_001271.3	602119	DPM1	NM_003859.2	603503
CHD7	NM_017780.3	608892	DSCAM	NM_001389.3	602523
CHD8	NM_00117062 9.1	610528	DYNC1H 1	NM_001376.4	600112
CHRNA2	NM_000742.3	118502	DYRK1A	NM_001396.4	600855
CHRNA4	NM_000744.6	118504	EEF1A2	NM_001958.3	602959
CHRNA2	NM_000748.2	118507	EFTUD2	NM_004247.3	603892
CLCN2	NM_004366.5	600570	EHMT1	NM_024757.4	607001
CLCN4	NM_001830.3	302910	EIF2B1	NM_001414.3	606686
CLIC2	NM_001289.5	300138	EIF2B2	NM_014239.3	606454
CLIP1	NM_002956.2	179838	EIF2B3	NM_020365.4	606273
CLN3	NM_00104243 2.1	607042	EIF2B4	NM_015636.3	606687
CLN5	NM_006493.2	608102	EIF2B5	NM_003907.2	603945
CLN6	NM_017882.2	606725	EIF2S3	NM_001415.3	300161
CLN8	NM_018941.3	607837	EIF4E	NM_00113067 9.2	133440
CLTC	NM_00128865 3.1	118955	ELP2	NM_00124287 5.2	616054
CNKS1R	NM_006314.2	603272	EN2	NM_001427.3	131310
CNKS2R	NM_014927.4	300724	EP300	NM_001429.3	602700

CNOT3	NM_014516.3	604910
CNTNAP 2	NM_014141.5	604569
COG5	NM_006348.3	606821
COL4A1	NM_001845.5	120130
COL4A3 BP	NM_00113010 5.1	604677
COL6A2	NM_001849.3	120240
CPS1	NM_001875.4	608307
CRADD	NM_003805.4	603454
CRBN	NM_016302.3	609262
CREBBP	NM_004380.2	600140
CSTB	NM_000100.3	601145
CTNNB1	NM_001904.3	116806
CTSF	NM_003793.3	603539
CUL4B	NM_003588.3	300304
CUX1	NM_00120254 3.1	116896
CUX2	NM_015268.3	610648
CYP27A1	NM_000784.3	606530
CYP2U1	NM_183075.2	610670
D2HGDH	NM_152783.4	609186
DBT	NM_001918.3	248610
DCX	NM_178153.2	300121
GABBR2	NM_005458.7	607340
GABRA1	NM_000806.5	137160
GABRA3	NM_000808.3	305660
GABRA5	NM_000810.3	137142
GABRB2	NM_021911.2	600232
GABRB3	NM_000814.5	137192
GABRD	NM_000815.4	137163
GABRG2	NM_000816.3	137164
GALNT2	NM_004481.4	602274
GALT	NM_000155.3	606999
GAMT	NM_000156.5	601240
GATAD2 B	NM_020699.3	614998

EPB41L1	NM_012156.2	602879
EPG5	NM_020964.2	615068
EPM2A	NM_005670.3	607566
ERLIN2	NM_007175.6	611605
ERMARD	NM_018341.2	615532
EZR	NM_003379.4	123900
FBXL3	NM_012158.4	605653
FBXO31	NM_024735.4	609102
FGD1	NM_004463.2	300546
FLNA	NM_001456.3	300017
FMN2	NM_020066.4	606373
FMR1	NM_002024.5	309550
FOLR1	NM_016725.2	136430
FOXG1	NM_005249.4	164874
FOXP1	NM_032682.5	605515
FOXP2	NM_014491.3	605317
FRMPD4	NM_014728.3	300838
FTCD	NM_006657.2	606806
FTSJ1	NM_012280.3	300499
FUCA1	NM_000147.4	612280
GABBR1	NM_001470.3	603540
IER3IP1	NM_016097.4	609382
IGBP1	NM_001551.2	300139
IGF1	NM_000618.4	147440
IGF1R	NM_000875.4	147370
IL1RAPL 1	NM_014271.3	300206
IQSEC2	NM_00111112 5.2	300522
IRF2BPL	NM_024496.3	611720
ITPA	NM_033453.3	147520
ITPR1	NM_002222.5	147265
IVD	NM_002225.3	607036
KANSL1	NM_00119346 6.1	612452
KARS	NM_00113008 9.1	601421

GATM	NM_001482.2	602360
GBA	NM_00100574 1.2	606463
GCDH	NM_000159.3	608801
GCH1	NM_000161.2	600225
GCSH	NM_004483.4	238330
GDI1	NM_001493.2	300104
GK	NM_000167.5	300474
GLDC	NM_000170.2	238300
GLRA1	NM_000171.3	138491
GLRB	NM_000824.4	138492
GLUD1	NM_005271.4	138130
GNAO1	NM_020988.2	139311
GOSR2	NM_004287.4	604027
GPAA1	NM_003801.3	603048
GPC3	NM_004484.3	300037
GRIA3	NM_000828.4	305915
GRID2	NM_001510.3	602368
GRIK2	NM_021956.4	138244
GRIN1	NM_007327.3	138249
GRIN2A	NM_000833.4	138253
GRIN2B	NM_000834.3	138252
GRIN3A	NM_021150.3	606650
GRIN3B	NM_138690.2	606651
GRIP1	NM_021150.3	604597
GUSB	NM_000181.3	611499
HACE1	NM_020771.3	610876
HAL	NM_002108.3	609457
HCCS	NM_005333.4	300056
HCFC1	NM_005334.2	300019
HCN1	NM_021072.3	602780
HDAC4	NM_006037.3	605314
HDAC8	NM_018486.2	300269

KAT6B	NM_012330.3	605880
KCNA1	NM_000217.2	176260
KCNA2	NM_004974.3	176262
KCNB1	NM_004975.3	600397
KCNC1	NM_00111274 1.1	176258
KCND2	NM_012281.2	605410
KCNH1	NM_172362.2	603305
KCNH5	NM_139318.4	605716
KCNH8	NM_144633.2	608260
KCNJ10	NM_002241.4	602208
KCNK9	NM_00128253 4.1	605874
KCNMA1	NM_002247.3	600150
KCNQ2	NM_172107.3	602235
KCNQ3	NM_004519.3	602232
KCNQ5	NM_00116013 3.1	607357
KCNT1	NM_020822.2	608167
KCNT2	NM_198503.3	610044
KCTD7	NM_153033.4	611725
KDM5C	NM_004187.3	314690
KDM6A	NM_021140.3	300128
KIAA202 2	NM_00100853 7.2	300524
KIF11	NM_004523.3	148760
KIF1A	NM_004321.7	601255
KIF2A	NM_00109851 1.2	602591
KIF4A	NM_012310.4	300521
KIF5C	NM_004522.2	604593
KIRREL3	NM_032531.3	607761
KLF8	-	300286
KLHL15	NM_030624.2	300980
KMT2A	NM_00119710 4.1	159555
KMT2C	NM_170606.2	606833
KMT2D	NM_003482.3	602113

HEPACAM	NM_152722.4	611642	KMT2E	NM_182931.2	608444
HESX1	NM_003865.2	601802	L1CAM	NM_000425.4	308840
HEXA	NM_000520.5	606869	LAGE3	NM_006014.4	300060
HGSNAT	NM_152419.2	610453	LAMA1	NM_005559.3	150320
HIVEP2	NM_006734.3	143054	LAMC3	NM_006059.3	604349
HNRNPU	NM_031844.2	602869	LAMP2	NM_002294.2	309060
HOXA1	NM_005522.4	142955	LARS2	NM_015340.3	604544
HPRT1	NM_000194.2	308000	LAS1L	NM_031206.4	300964
HRAS	NM_005343.3	190020	LGI1	NM_005097.3	604619
HSD17B10	NM_004493.2	300256	LINS1	NM_001040616.2	610350
HUWE1	NM_031407.6	300697	LRP1	NM_002332.2	107770
IDH2	NM_002168.3	147650	LRP2	NM_004525.2	600073
IDS	NM_000202.7	300823	LRP4	NM_002334.3	604270
IDUA	NM_000203.4	252800	LSS	NM_001001438.2	600909
MAGT1	NM_032121.5	300715	NSD1	NM_022455.4	606681
MAN1B1	NM_016219.4	604346	NSDHL	NM_015922.2	300275
MAN2B1	NM_000528.3	609458	NSUN2	NM_017755.5	610916
MANBA	NM_005908.3	609489	NTNG1	NM_014917.3	608818
MAOA	NM_000240.3	309850	NTRK2	NM_006180.4	600456
MAP2K1	NM_002755.3	176872	NUS1	NM_138459.3	610463
MAPK8IP1	NM_005456.3	604641	OCRL	NM_000276.3	300535
MAPK8IP2	NM_012324.6	607755	OFD1	NM_003611.2	300170
MAPK8IP3	NM_001040439.1	605431	OGT	NM_181672.2	300255
MBD5	NM_018328.4	611472	OPHN1	NM_002547.2	300127
MBOAT7	NM_024298.4	606048	OSGEP	NM_017807.3	610107
MBTPS2	NM_015884.3	300294	OTC	NM_000531.5	300461
MCPH1	NM_024596.4	607117	OTUD6B	NM_016023.3	612021
MECP2	NM_004992.3	300005	P4HTM	NM_177938.2	614584
MED12	NM_005120.2	300188	PACS1	NM_018026.3	607492
MED13L	NM_015335.4	608771	PACS2	NM_001100913.2	610423
MED17	NM_004268.4	603810	PAFAH1B1	NM_000430.3	601545
MED23	NM_015979.3	605042	PAH	NM_000277.1	612349

MEF2C	NM_002397.4	600662
MFSD8	NM_152778.2	611124
MICU1	NM_006077.3	605084
MID1	NM_000381.3	300552
MID2	NM_012216.3	300204
MMACH C	NM_015506.2	609831
MOCS1	NM_005943.5	603707
MOCS2	NM_176806.3	603708
MPC1	NM_016098.3	614738
MPI	NM_002435.2	154550
MTHFR	NM_005957.4	607093
MTOR	NM_004958.3	601231
MTR	NM_000254.2	156570
MT-TL1	-	590050
MUT	NM_000255.3	609058
MYCN	NM_005378.5	164840
MYT1L	NM_015025.3	613084
NAA10	NM_003491.3	300013
NAA15	NM_057175.3	608000
NAGLU	NM_000263.3	609701
NBEA	NM_015678.4	604889
NDE1	NM_00114397 9.1	609449
NDP	NM_000266.3	300658
NDST1	NM_001543.4	600853
NDUFA1	NM_004541.3	300078
NECAP1	NM_015509.3	611623
NEDD4L	NM_015277.5	606384
NF1	NM_000267.3	613113
NFIX	NM_00127104 3.2	164005
NHLRC1	NM_198586.2	608072
NHS	NM_198270.3	300457
NIPBL	NM_133433.3	608667
NLGN3	NM_018977.3	300336
NLGN4X	NM_020742.3	300427

PAK3	NM_002578.4	300142
PANK2	NM_153638.3	606157
PAX6	NM_000280.4	607108
PCCA	NM_000282.3	232000
PCCB	NM_000532.4	232050
PCDH19 0.1	NM_00118488 0.1	300460
PCNT	NM_006031.5	605925
PDHA1	NM_000284.3	300502
PDHB	NM_000925.3	179060
PDHX	NM_003477.2	608769
PDP1	NM_018444.3	605993
PEX1	NM_000466.2	602136
PEX12	NM_000286.2	601758
PEX16	NM_004813.2	603360
PEX6	NM_000287.3	601498
PEX7	NM_000288.3	601757
PGAP1	NM_024989.3	611655
PGAP2	NM_00125624 0.1	615187
PGAP3	NM_033419.4	611801
PHF6	NM_032458.2	300414
PHF8	NM_015107.2	300560
PHGDH	NM_006623.3	606879
PHIP	NM_017934.6	612870
PIGA	NM_002641.3	311770
PIGG	NM_00112717 8.2	616918
PIGL	NM_004278.3	605947
PIGM	NM_145167.2	610273
PIGN	NM_176787.4	606097
PIGO	NM_032634.3	614730
PIGP	NM_153682.2	605938
PIGQ	NM_004204.3	605754
PIGT	NM_015937.5	610272
PIGV	NM_017837.3	610274
PIGW	NM_178517.4	610275

NPC1	NM_000271.4	607623	PIGX	NM_00116630 4.1	610276
NPC2	NM_006432.3	601015	PIGY	NM_00104261 6.2	610662
NPRL2	NM_006545.4	607072	PIK3CA	NM_006218.3	171834
NPRL3	NM_00107735 0.2	600928	PLCB1	NM_015192.3	607120
NRXN1	NM_00113565 9.2	600565	PLP1	NM_000533.4	300401
NRXN2	NM_138732.2	600566	PMM2	NM_000303.2	601785
PMPCB	NM_004279.2	603131	SHH	NM_000193.3	600725
PNKP	NM_007254.3	605610	SHROO M4	NM_020717.3	300579
PNPO	NM_018129.3	603287	SIX3	NM_005413.3	603714
POGZ	NM_015100.3	614787	SKI	NM_003036.3	164780
POLG	NM_002693.2	174763	SLC12A5	NM_020708.4	606726
POMGN T1	NM_017739.3	606822	SLC13A5	NM_177550.4	608305
PORCN	NM_203475.2	300651	SLC16A2	NM_006517.4	300095
POU1F1	NM_000306.3	173110	SLC17A5	NM_012434.4	604322
PPM1D	NM_003620.3	605100	SLC1A1	NM_004170.5	133550
PPP2R5 D	NM_006245.3	601646	SLC1A2	NM_004171.3	600300
PPP3CA	NM_000944.4	114105	SLC25A1 3	NM_014251.2	603859
PPT1	NM_000310.3	600722	SLC25A1 5	NM_014252.3	603861
PQBP1	NM_005710.2	300463	SLC25A2 2	NM_024698.5	609302
PRICKLE 1	NM_153026.2	608500	SLC2A1	NM_006516.2	138140
PRICKLE 2	NM_198859.3	608501	SLC35A2	NM_00104249 8.2	314375
PRKRA	NM_003690.4	603424	SLC35A3	NM_012243.2	605632
PRODH	NM_016335.4	606810	SLC35C1	NM_018389.4	605881
PROSC	NM_007198.4	604436	SLC46A1	NM_080669.5	611672
PRPS1	NM_002764.3	311850	SLC6A1	NM_003042.3	137165
PRRT2	NM_145239.2	614386	SLC6A4	NM_001045.5	182138
PRSS12	NM_003619.3	606709	SLC6A5	NM_004211.4	604159
PSAP	NM_002778.3	176801	SLC6A8	NM_005629.3	300036

PTCHD1	NM_173495.2	300828
PTEN	NM_000314.6	601728
PTPN11	NM_002834.4	176876
PTS	NM_000317.2	612719
PURA	NM_005859.4	600473
QARS	NM_005051.2	603727
QRICH1	NM_017730.3	617387
RAB11A	NM_004663.4	605570
RAB39B	NM_171998.3	300774
RAI1	NM_030665.3	607642
RBM10	NM_005676.4	300080
RELN	NM_005045.3	600514
RFC1	NM_00120474 7.1	102579
RHOBTB 2	NM_00116003 6.1	607352
RLIM	NM_183353.2	300379
RNF135	NM_032322.3	611358
RORA	NM_134260.2	600825
RORB	NM_006914.3	601972
RPL10	NM_006013.4	312173
RPS6KA3	NM_004586.2	300075
SATB2	NM_015265.3	608148
SCARB2	NM_005506.3	602257
SCN1A	NM_00116596 3.1	182389
SCN1B	NM_001037.4	600235
SCN2A	NM_021007.2	182390
SCN3A	NM_006922.3	182391
SCN8A	NM_014191.3	600702
SERAC1	NM_032861.3	614725
SERPINI1	NM_005025.4	602445
SETBP1	NM_015559.2	611060
SETD2	NM_014159.6	612778

SLC9A6	NM_006359.2	300231
SMARCA 2	NM_003070.4	600014
SMARCA 4	NM_00112884 9.1	603254
SMARCB 1	NM_003073.4	601607
SMARCE 1	NM_003079.4	603111
SMC1A	NM_006306.3	300040
SMC3	NM_005445.3	606062
SMS	NM_004595.4	300105
SNAP25	NM_003081.4	600322
SOBP	NM_018013.3	613667
SON	NM_032195.2	182465
SOX11	NM_003108.3	600898
SOX5	NM_006940.4	604975
SPAST	NM_014946.3	604277
SPTAN1	NM_00113043 8.2	182810
SRCAP	NM_006662.2	611421
SRD5A3	NM_024592.4	611715
ST3GAL3	NM_006279.3	606494
ST3GAL5	NM_003896.3	604402
STAMBP	NM_006463.5	606247
STIL	NM_003035.2	181590
STX1A	NM_004603.3	186590
STX1B	NM_052874.4	601485
STXBP1	NM_003165.3	602926
SYNE1	NM_033071.3	608441
SYNGAP 1	NM_006772.2	603384
SYP	NM_003179.2	313475
SYT1	NM_005639.2	185605
TAF1	NM_004606.4	313650
TAF2	NM_003184.3	604912
TANGO2	NM_152906.5	616830

SETD5	NM_00108051 7.2	615743
SGSH	NM_000199.3	605270
SHANK1	NM_016148.3	604999
SHANK2	NM_012309.4	603290
SHANK3	NM_033517.1	606230
TECR	NM_138501.5	610057
TGIF1	NM_173208.2	602630
TIMM8A	NM_004085.3	300356
TMLHE	NM_018196.3	300777
TNK2	NM_00101093 8.1	606994
TP53RK	NM_033550.3	608679
TPP1	NM_000391.3	607998
TPRKB	NM_016058.2	608680
TRAPPC9	NM_031466.7	611966
TREX1	NM_033629.4	606609
TRIO	NM_007118.3	601893
TRIP12	NM_004238.2	604506
TRRAP	NM_003496.3	603015
TSC1	NM_000368.4	605284
TSC2	NM_000548.4	191092
TSPAN7	NM_004615.3	300096
TTI2	NM_00110240 1.2	614426
TUBA1A	NM_006009.3	602529
TUBA8	NM_018943.2	605742
TUBB2B	NM_178012.4	612850
TUBB3	NM_006086.3	602661
TUBG1	NM_001070.4	191135
TUSC3	NM_006765.3	601385
UBE2A	NM_003336.3	312180
UBE3A	NM_130838.1	601623

TBC1D2 4	NM_00119910 7.1	613577
TBL1XR1	NM_024665.5	608628
TBR1	NM_006593.3	604616
TBX1	NM_080647.1	602054
TCF4	NM_00108396 2.1	602272
UPB1	NM_016327.2	606673
UPF3B	NM_080632.2	300298
UROC1	NM_144639.2	613012
USP27X	NM_00114507 3.2	300975
USP9X	NM_00103959 0.2	300072
VAMP2	NM_00133012 5.1	185881
VAR5	NM_006295.2	192150
VCP	NM_007126.3	601023
VLDLR	NM_003383.4	192977
VPS13B	NM_017890.4	607817
WASHC4	NM_015275.2	615748
WDFY3	NM_014991.4	617485
WDR45	NM_007075.3	300526
WDR62	NM_00108396 1.1	613583
WWOX	NM_016373.3	605131
YWHAG	NM_012479.3	605356
ZBTB18	NM_205768.2	608433
ZBTB20	NM_00116434 2.2	606025
ZC3H14	NM_024824.4	613279
ZDHHC1 5	NM_144969.2	300576
ZDHHC9	NM_016032.3	300646
ZEB2	NM_014795.3	605802
ZIC2	NM_007129.3	603073
ZMYM3	NM_201599.2	300061
ZMYND1 1	NM_006624.5	608668

UBE3B	NM_130466.3	608047
UBR1	NM_174916.2	605981
UGDH	NM_003359.3	603370
UNC80	NM_032504.1	612636

ZNF41	NM_153380.3	314995
ZNF711	NM_021998.4	314990
ZSWIM6	NM_020928.1	615951