

**COMPUTATIONAL INSIGHTS INTO TAXIFOLIN'S  
THERAPEUTIC MECHANISMS FOR ALZHEIMER'S DISEASE**

Ashif Anjukandan, Rajaganapathy Kaliyaperumal

**Supplementary Table 1**

Gene	Total	10234
APP	GDA Greater than	
ACE	0.1	673
MAPT		
TREM2		
APOE		
GSK3B		
PSEN1		
HFE		
ADAM10		
PLAU		
BCL2		
BDNF		
LEP		
BACE1		
NPY		
INSR		
IDE		
CASP3		
IL1B		
IGF2		
IGF1R		
ATP5F1A		
INS		
BAX		
CD2AP		
PICALM		
TOMM40		
BIN1		
APOC1		
CLU		
ABCA7		
NOS3		
CR1		
MPO		
PSEN2		
A2M		



EPHA1  
SORL1  
VSNL1  
INPP5D  
NECTIN2  
MS4A4A  
PCDH11X  
CASS4  
CST3  
CYP46A1  
CHRNA7  
IL6  
TNF  
VEGFA  
NCSTN  
IGF1  
MTHFR  
HMOX1  
DPYSL2  
CD33  
MAOB  
ACHE  
TFAM  
BCHE  
DHCR24  
ESR1  
PRNP  
RELN  
CYP2D6  
MIR146A  
PPARG  
CRH  
SOD2  
UNC5C  
PLCG2  
ABI3  
WVOX  
TF  
CHRNA2  
SLC30A6  
ARC  
EIF2S1  
F2  
PGRMC1  
CALM1  
HLA-DRB5  
ENO1



TPI1  
IGF2R  
AMFR  
SLC30A4  
SNAR-I  
MIR375  
MIR296  
MIR100  
IQCK  
SLC2A4  
PYY  
PTGS2  
GAPDH  
CTNNB1  
S100B  
AGER  
MIR766  
SOD1  
MIR505  
GAPDHS  
NGB  
MAPK14  
CDK5  
CHAT  
IRS1  
MIR708  
PPARGC1A  
ADAMTS1  
SYP  
MIR4467  
NGF  
MAP2  
LRP1  
MIR3622B  
MME  
NFE2L2  
TPP1  
NGFR  
NOS2  
PIN1  
NTRK2  
CAV1  
PTGS1  
ADAM17  
APLP2  
MFN2  
DNM1



HSF1  
IL33  
GSR  
CCR5  
HSPD1  
CASP8  
CIB1  
HSPB1  
IKBKB  
SERPINF1  
ATP7A  
CASP9  
MT2A  
ADAM9  
INS-IGF2  
BCL2L2  
ABCA1  
GAB2  
FERMT2  
PLCB1  
PTK2B  
GRN  
SQSTM1  
CASP12  
HLA-DRB1  
NFIC  
MS4A6A  
APOB  
HSPG2  
CSF1R  
MARK4  
CELF1  
SYNJ1  
VCP  
ZCWPW1  
EXOC3L2  
APH1B  
MS4A4E  
APOC2  
F13A1  
PLXNA4  
LAMP1  
MADD  
DST  
PILRA  
AKAP9  
ADAMTS4



FRMD4A  
IL6R  
DCHS2  
SPON1  
SPI1  
MTHFD1L  
BCL3  
AICDA  
TGFB2  
COL18A1  
CADPS2  
IL34  
GLIS3  
SLC24A4  
TRIP4  
MEGF10  
TLN2  
ALDH1A2  
NDUFAF6  
FMN2  
ST6GAL1  
CELF2  
SGK1  
OTOF  
SLC16A7  
DSG2  
ZAP70  
EXOC4  
RBFOX1  
AP2A2  
PTPRG  
UBE2L3  
EPHX2  
OSBPL6  
LUZP2  
SUCLG2  
SORCS3  
CDH13  
TCF7L2  
LAMA1  
TSPOAP1-AS1  
SPPL2A  
MAPK7  
SYBU  
EPDR1  
TMED9  
L3MBTL4



BECN1  
PPARA  
PON1  
UBXN11  
PDE5A  
AP4M1  
POLD1  
LRAT  
CYCS  
TENM3-AS1  
CRADD  
CACNA1G  
SUCLA2  
PTPA  
GGACT  
STK32B  
HERC2  
PRKAA1  
FAM181A  
CDKAL1  
MPZL1  
BCAS3  
RMDN3  
PRKAA2  
CCRL2  
CDK5R1  
PRKAB1  
WDR41  
TMEM132C  
ELMO1  
RNF165  
OGG1  
SLC4A8  
SCARB1  
SERPINE1  
ITSN2  
CD36  
FHL5  
PRKCB  
APH1A  
RAB3D  
CLOCK  
CD40  
CDK1  
HDAC9  
NOS1  
ST18



CD68  
PHF14  
FNIP1  
MICAL2  
NPC1  
NRGN  
RMDN1  
GSTO1  
PIK3CB  
PIK3CD  
PIK3CG  
CD14  
PLA2G1B  
SST  
MSC  
PLG  
PMS2P1  
STRADA  
PIK3CA  
ABCB1  
KL  
DCTN4  
ITM2B  
GRAP2  
WAC  
LIPG  
SNX9  
ADIPOQ  
LARS1  
RAPGEF6  
INSIG1  
IL6-AS1  
REST  
VDR  
ZNF862  
UTRN  
CSMD1  
LINC01184  
PINK1  
SLC1A2  
UCHL1  
SLC6A3  
POTEM  
ANO3  
CX3CL1  
TFEB  
CALB1



ACTB  
AHNAK  
ROS1  
ZNF232  
SORT1  
CCL2  
VLDLR  
SLC6A4  
SNAP25  
TNFRSF1B  
ACTG1  
TLR4  
TLR2  
TCF3  
THY1  
TSPO  
TFF1  
TGFB1  
TP53  
BRCA2  
C3  
SNCB  
SNCA  
UBB  
SNCG  
SOAT1  
TYROBP  
MEIKIN  
TTR  
ACTG2  
TH  
REN  
EDEM2  
KAT8  
CASP6  
CASP1  
NIT2  
CAPN1  
CEACAM19  
CDC42SE2  
HYI  
TULP4  
MVP  
CAT  
EIF2AK2  
ABCB11  
PRKCA



RUNX1T1  
MAPK1  
NDUFA12  
MAPK8  
KHSRP  
DENR  
AGPS  
SETD7  
PDCD1LG2  
PVALB  
ANKRD55  
PVR  
SAP30L  
PPP1R3B  
RAC1  
YWHAZ  
MOK  
AIMP2  
GEMIN7  
CLMN  
PTPRA  
SP6  
CCDC134  
THSD4  
DSCAML1  
ARHGAP20  
SH3RF1  
VAT1L  
TMC5  
EHMT1  
RELB  
CEACAM20  
CTSB  
CTSD  
RMDN2  
CUX1  
SLC25A48  
NKAIN2  
CYP8B1  
CYP19A1  
DAPK1  
FSIP1  
DBN1  
DMXL1  
BMPER  
DLG4  
DLX5



CTNNA2  
IGSF23  
ZNF813  
CNR2  
COL4A4  
COL12A1  
COMT  
CP  
CR1L  
CREB1  
CRK  
CRMP1  
CRP  
PARP1  
CSF2  
LINC00343  
TCAM1P  
DPP4  
RCAN1  
AGT  
CCDC89  
KDM1B  
FCN2  
ATXN7L1  
ADGRF2  
FGF10  
SIRT2  
DKK1  
MYO16  
ZNF292  
HECW1  
COLGALT2  
FBXL7  
PRRC2C  
KAZN  
CCDC83  
FANCD2  
DYRK1A  
PLPP4  
AIF1  
ABCA2  
SPRED2  
C3orf67  
ENO2  
C9orf72  
EPHB2  
EPO



AKT1  
EYA4  
ESR2  
ALB  
ALDH2  
CLEC16A  
ZGLP1  
COX10-AS1  
OVCH1-AS1  
G3BP1  
FARP1  
STAG3L5P  
STAG3L5P-PVRIG2P-PILRB  
LINC02653  
LINC01712  
LINC01725  
LINC01508  
LINC02268  
LINC02325  
MEF2C-AS1  
TSHZ1  
DCAF7  
GPC6  
DNM1L  
SLC8A1-AS1  
LINC00476  
INHCAP  
HDAC6  
TRIM51CP  
LINC00271  
SDR42E2  
BACE1-AS  
PGAM5P1  
LINC01672  
ARL17B  
KRBOX1  
ALOX12-AS1  
AZIN1-AS1  
APOC4-APOC2  
SIGMAR1  
BCKDK  
RTN3  
PSIP1  
CHN2  
CDCA5  
ACOT7  
CHRNA2



CHRNA4  
NLRP3  
MED12L  
ARAP2  
C10orf71  
SERPINA3  
LRRK2  
CLPTM1  
ANO4  
AGBL1  
CHI3L1  
CLASRP  
ABCA8  
CDR1  
GEMIN7-AS1  
UPK3B  
LINC00972  
LINC02008  
AHS1  
KHDRBS1  
MTCO2P12  
CETP  
STAG3  
AHCYL1  
LINC01965  
TPPP  
AKR1C4  
ACKR2  
WWC1  
HSP90AA1  
FAS  
IL1A  
IL2RB  
IL4  
CXCL8  
IL10  
IL12A  
IL17A  
IL18  
AQP4  
ALPK2  
EIF3E  
IRF2  
SIMC1  
PNPLA7  
GPR141  
CASTOR3



APOA1  
HTR2A  
HTR6  
IAPP  
TAS2R62P  
TAS2R64P  
APOC1P1  
RSPO4  
TGM6  
MCIDAS  
ACTBL2  
IFNG  
APOC4  
APOD  
IGFALS  
KCNN2  
KNG1  
SH2D4B  
MIR34A  
MAOA  
ARVCF  
AFF1  
TRPM1  
MMP9  
MNAT1  
MOBP  
POTEKP  
PMS2CL  
MSH2  
PALM2AKAP2  
MT3  
COX2  
RNR2  
MIR29A  
MIR132  
SCIMP  
CEACAM22P  
BLOC1S3  
BHMGI  
LAMC2  
RPSA  
LCN2  
LDLR  
LINC01567  
LINC01185  
LPA  
LPL



LTBP2  
BCAM  
MIR107  
NEFL  
ACSL6  
GABRA2  
PCSK9  
ANKRD31  
STEAP1B  
GABRG3  
QPCT  
BACE2  
RNF19A  
GAP43  
CNTNAP2  
POLDIP2  
TRPC4AP  
GATA1  
GCG  
GCHFR  
GABPA  
CALHM1  
SZT2  
SIRT3  
SIRT1  
NCS1  
TARDBP  
SMUG1  
DAPK2  
CBLC  
NUP62  
PLD3  
SGK3  
ALOX5  
STH  
MTOR  
FYN  
TSPAN16  
GDNF  
GFAP  
DDX25  
GRM5  
GTF2H1  
PARVB  
GULOP  
IL19  
UBQLN1



ANXA1  
HSD17B10  
HCLS1  
HCRT  
CFH  
APBB1  
AGFG2  
HRES1  
NR3C1  
GRIN2B  
GIP  
SIGLEC7  
PDE7B  
HPGDS  
TNRC6A  
GOLIM4  
GLP1R  
FAM181A-AS1  
PPP1R37  
NKPD1  
EPHA1-AS1  
TRIQQ  
NKAIN3  
PPP1R42  
BZW2  
HSPA4