SIMONS SEARCHLIGHT

Gene List

Updated May 2024

The Simons Searchlight gene list contains 164 gene changes (blue) and 24 copy number variants (orange) that are known to be associated with autism and other neurodevelopmental disorders.

Genetic Disorders We Study

- 1q21.1
- 2p16.3 deletion
- 2q34 duplication
- 2q37 deletion
- 2q37.3 deletion
- 5p deletion
- 5q35
- 6q16 deletion
- 7q11.23 duplication
- 9q34 duplication
- 15q11.2 BP1-BP2 deletion
- 15q13.3 deletion
- 15q15 deletion
- 15q24 deletion
- 16p11.2 (proximal and distal)
- 16p12.2 deletion
- 16p13.11 deletion
- 16p13.3 deletion
- 17p13.3 duplication
- 17q11.2 duplication
- 17q12
- 17q21.31
- Xp11.22 duplication
- Xq28 duplication

ACTB
ACTL6B
ADNP
ADSL
AFF2
AHDC1
ANK2
ANK3
ANKRD11
ARHGEF9
ARID1B
ARX
ASH1L
ASXL3
ATRX
AUTS2
BCKDK
BCL11A
BRSK2
CACNA1C
CAPRIN1
CASK
CASZ1
CHAMP1
CHD2
CHD3
CHD8
CIC
CLCN4
CNOT3
CREBBP
CSDE1
CSNK2A1
CSNK2B
CTBP1
CTCF
CTNNB1
CUL3
DDX3X
DEAF1
DLG4
DNMT3A
DSCAM
DYNC1H1
DYRK1A
EBF3
EHMT1
EIF3F
EP300
FBXO11
FOXP1
GIGYF1
GNB1
GRIA1
GRIA2
GRIA3
GRIK2
GRIN1
GRIN2A
GRIN2B
GRIN2D
HECW2
HIVEP2
HNRNPC
HNRNPD
HNRNPH2
HNRNPK
HNRNPR
HNRNPU
HNRNPUL2
IQSEC2
IRF2BPL
JARID2
KANSL1
KCNB1
KDM3B
KDM5B
KDM6B
KMT2A
KMT2C
KMT2E
KMT5B
MAOA
MAOB
MBD5
MBOAT7
MED12
MED13
MED13L
MEF2C
MEIS2
MYT1L
NAA15
NBEA
NCKAP1
NEXMIF
NIPBL
NLGN2
NLGN3
NLGN4X
NR3C2
NR4A2
NRXN1
NRXN2
NSD1
PACS1
PACS2
PHF21A
PHF3
PHIP
POGZ
POMGNT1
PPP1R9A
PPP2CA
PPP2R1A
PPP2R5C
PPP2R5D
PPP3CA
PSMD12
PTCHD1
RALGAPB
RELN
RERE
REST
RFX3
RIMS1
RORB
SCN1A
SCN1B
SCN2A
SETBP1
SETD2
SETD5
SIN3A
SLC6A1
SLC9A6
SMARCA4
SMARCC2
SON
SOX5
SPAST
SRCAP
STXBP1
SYNCRIP
SYNGAP1
TANC2
TAOK1
TBR1
TCF20
TCF7L2
TLK2
TRIO
TRIP12
UPF3B
USP9X
VAMP2,
VPS13B
WAC
WDFY3
YWHAG
YY1
ZBTB20
ZNF292
ZNF462