

Product datasheet for **KN215381**

Neurexin 1 (NRXN1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Neurexin 1
Locus ID:	9378
Components:	<p>KN215381G1, Neurexin 1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GACGGCGCTGCTCCAGCGCG</p> <p>KN215381G2, Neurexin 1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGCCTCTCGCTGCTGCTCC</p> <p>KN215381D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

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GCCCTAAAGA GGCAAGCATC CCTTTCTCCG TTCTGCTGTA AGACACCACA TCTGAAGGAG ACAGACTTGA
GGCATTACACA AGCATCCAAG GATACTGGCT CACTGCTGGC TTCCTGTACT TTCTTGAGAA AAGTGTTTTC
TTTTTACTGA CTCTCACTGC TTCCTTTTGG CCTGGTACCA CTGGTGGAACT CTGGCAGATA ATGGGATTTG
AGGAGTTAAG TATCTGTTGA CACTGCAGAT ACTCTAAAT TAGTTAATCA GACTCAAATG GGTCACTGCT
TTCCCTTGAT CTTTGTGTTGA AGCCTTTTCC AGAACGTTGT CTCCAAAGTG CATCCTCCCT TTGGTCTGGA
AGTTCTGTGG CTACCCTGTA CCACTGGGGT CAACGTTTTT CAGTTGGAAG AGGACTACAG GGAGAGAGGG
CGGGGTTATT GGAAGAAGAA GAAGAAAAAA AGAACTAGAT AAAGGAGGGC ACATCCCTCT CACTCCCGCC
TTTCCCCTTA CCTTTCTGTC TCTCGGGACC CTTATTTCTT CGTCACGGTG TCCAGGACCA TTTTGACCCT
GTCGGCCCCG GCACCCCCC GCCGCACCCC AGCCCCGAGC GGCAGCGGGC TGGAGTTTCC GGGCGCCGAG
GGCCAATGGA CGCGCTTCCC CAAGTGGAAAC GCCTGCTGCG AGAGCGAGAT GAGCTTCCAG CTCAAGACTC
GCAGCGCCCG CGCCTCGTG CTCTACTTCG ACGACGAGGG CTTCTGCGAC TTCCTGGAGC TGATTCTGAC
GCGCGGCGGC CGCCTGCAGC TCAGCTTCTC CATCTTCTGC GCTGAGCCTG CGACGCTCCT GGCCGACACG
CCGGTTAACG ACGGCGCCTG GCACAGCGTG CGCATCCGCC GCCAGTCCCG CAACACCACG CTCTTCATCG
ACCAGGTGGA GGCCAAGTGG GTGGAGGTCA AGTCCAAGCG CAGGGACATG ACGGTGTTC ACGGCCTTTT
CGTCGGGGGG CTGCCCCCGG AACTGCGCGC CGCGGCGCTC AAGCTCACCC TGGCCTCGGT GAGGGAGCGG
GAGCCCTTCA AGGGGTGGAT TCGTGACGTG AGGGTCAACT CCTCGCAGGT CCTGCCCGTG GACAGCGGCG
AGGTGAAGCT GGACGATGAG CCGCCCAACA GCGGCGGGGG AAGCCCGTGC GAGGCGGGGC AGGAGGGCGA
GGGCGGGGTG

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GE100003, scramble sequence in pCas-Guide vector



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Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq: [NM_001135659](#), [NM_001320156](#), [NM_001320157](#), [NM_001330077](#), [NM_001330078](#), [NM_001330079](#), [NM_001330081](#), [NM_001330082](#), [NM_001330083](#), [NM_001330084](#), [NM_001330085](#), [NM_001330086](#), [NM_001330087](#), [NM_001330088](#), [NM_001330089](#), [NM_001330090](#), [NM_001330091](#), [NM_001330092](#), [NM_001330093](#), [NM_001330094](#), [NM_001330095](#), [NM_001330096](#), [NM_001330097](#), [NM_004801](#), [NM_138735](#)

UniProt ID: [Q9ULB1](#)

Synonyms: Hs.22998; PTHSL2; SCZD17

Summary: This gene encodes a single-pass type I membrane protein that belongs to the neurexin family. Neurexins are cell-surface receptors that bind neuroligins to form Ca²⁺-dependent neurexin/neuroligin complexes at synapses in the central nervous system. This complex is required for efficient neurotransmission and is involved in the formation of synaptic contacts. Three members of this gene family have been studied in detail and are estimated to generate over 3,000 variants through the use of two alternative promoters (alpha and beta) and extensive alternative splicing in each family member. Recently, a third promoter (gamma) was identified for this gene in the 3' region. Mutations in this gene are associated with Pitt-Hopkins-like syndrome-2 and may contribute to susceptibility to schizophrenia. [provided by RefSeq, Aug 2016]

Product images:

