

Product datasheet for SC127539

Neurexin 1 (NRXN1) (NM_004801) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neurexin 1 (NRXN1) (NM_004801) Human Untagged Clone
Tag:	Tag Free
Symbol:	Neurexin 1
Synonyms:	Hs.22998; PTHSL2; SCZD17
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_004801, the custom clone sequence may differ by one or more nucleotides

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GGTGGACTTCTTTGCTATTGAGATGCTAGATGGCCACCTCTACCTCCTCCTGGACATGGGGTCAGGTA
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 AAGGATAAAGAGTATTATGTCTGA

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004801.2](#), [NP_004792.1](#)

RefSeq Size: 9368 bp

RefSeq ORF: 4434 bp

Locus ID: 9378

UniProt ID: [Q9ULB1](#)

Cytogenetics: 2p16.3

Domains: LamG, EGF, EGF

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

Gene 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 Ca(2+)-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]

Transcript Variant: This variant (alpha1) results from the use of the 5'-most promoter, referred to as alpha. It lacks two in-frame exons and uses an alternate in-frame donor splice site at an internal exon compared to variant alpha2. The resulting isoform (alpha1) is shorter missing a few internal protein segments compared to isoform alpha2. This isoform contains EGF-like, several laminin G, and syndecan domains. **Sequence Note:** The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.