OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC326389

Neurexin 1 (NRXN1) (NM_001135659) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neurexin 1 (NRXN1) (NM_001135659) Human Untagged Clone
Tag:	Tag Free
Symbol:	Neurexin 1
Synonyms:	Hs.22998; PTHSL2; SCZD17
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_001135659 edited
ATGGGGACGGCGCTGCTCCAGCGCGGGGGCTGTTTTCTTCTGTGCCTCTCGCTGCTGCTC
CTGGGCTGCTGGGCGGAGCTGGGCAGCGGGCTGGAGTTTCCGGGCGCCGAGGGCCAATGG
ACGCGCTTCCCCAAGTGGAACGCCTGCTGCGAGAGCGAGATGAGCTTCCAGCTCAAGACT
CGCAGCGCCCGCGGCCTCGTGCTCTACTTCGACGACGAGGGCTTCTGCGACTTCCTGGAG
CTGATTCTGACGCGCGGCGGCCGCCTGCAGCTCAGCTTCTCCATCTTCTGCGCTGAGCCT
GCGACGCTCCTGGCCGACACGCCGGTTAACGACGGCGCCTGGCACAGCGTGCGCATCCGC
CGCCAGTTCCGCAACACCACGCTCTTCATCGACCAGGTGGAGGCCAAGTGGGTGGAGGTC
AAGTCCAAGCGCAGGGACATGACGGTGTTCAGCGGCCTTTTCGTCGGGGGGCTGCCCCCG
GAACTGCGCGCCGCGGCGCTCAAGCTCACCCTGGCCTCGGTGAGGGAGCGGGAGCCCTTC
AAGGGGTGGATTCGTGACGTGAGGGTCAACTCCTCGCAGGTCCTGCCCGTGGACAGCGGC
GAGGTGAAGCTGGACGATGAGCCGCCCAACAGCGGCGGGGGAAGCCCGTGCGAGGCGGGC
GAGGAGGGCGAGGGCGGGGTGTGCCTCAACGGAGGTGTGTGCTCCGTGGTGGACGACCAG
GCCGTGTGCGACTGCTCGCGAACCGGCTTCCGCGGCAAGGACTGCAGCCAAGAAATAAAA
TTCGGTCTTCAGTGTGTTTTGCCGGTGCTGTTACATGACAATGACCAAGGAAAATACTGT
TGTATAAATACAGCAAAGCCTCTAACAGAAAAAGACAACAATGTGGAAGGTCTGGCGCAC
CTGATGATGGGCGACCAAGGTAAAAGTAAAGGAAAAGAAGAATATATTGCCACGTTCAAA
GGATCTGAATACTTCTGCTACGACTTGTCTCAAAACCCCATTCAAAGCAGCAGTGATGAA
ATAACTCTGTCATTTAAAACCCTTCAGAGGAATGGACTGATGCTTCACACTGGGAAATCG
GCTGATTATGTCAATCTTGCCCTGAAAAATGGAGCTGTCTCTCTGGTCATTAATTTGGGA
TCAGGGGCCTTTGAAGCACTAGTGGAGCCTGTGAATGGAAAGTTTAATGATAATGCCTGG
CATGATGTGAAAGTCACCAGGAATCTGCGTCAGCACTCAGGCATTGGACACGCTATGGTA
AACAAACTACATTGTTCGGTGACAATATCAGTGGATGGGATTCTTACCACAACGGGCTAC
ACGCAAGAAGATTATACCATGCTGGGGTCTGATGACTTTTTCTATGTTGGAGGCAGTCCC
AGCACAGCCGACCTTCCAGGGTCACCAGTCAGTAACAACTTTATGGGCTGTCTCAAAGAG
GTTGTATATAAAAATAATGATGTGAGGCTGGAATTATCTCGACTTGCCAAGCAAGGAGAT
CCTAAGATGAAGATCCATGGAGTGGTGGCATTTAAATGTGAGAATGTTGCAACTTTAGAC

View online »

CCAATCACCTTTGAAACCCCAGAGTCTTTCATCTCTTTGCCTAAATGGAATGCAAAGAAA
ACTGGCTCCATATCATTTGATTTCCGTACAACAGAGCCAAATGGCCTCATCTTATTTAGC
CATGGCAAGCCAAGACATCAGAAAGATGCCAAGCACCCACAGATGATAAAGGTGGACTTC
TTTGCTATTGAGATGCTAGATGGCCACCTCTACCTCCTCCTGGACATGGGGTCAGGTACT
ATAAAAATAAAAGCCCTGTTGAAGAAAGTGAATGATGGAGAATGGTATCATGTGGACTTC
CAGAGAGACGGACGGTCAGGTACCATTTCTGTCAACACGTTGCGTACTCCCTACACTGCT
CCTGGTGAGAGTGAGATTCTGGACCTGGATGATGAGTTGTACCTGGGGGGGCTGCCAGAA
AATAAAGCTGGCCTTGTCTTCCCCACCGAGGTGTGGACTGCTCTGCTCAACTATGGCTAC
GTGGGCTGCATCAGGGATTTGTTCATCGATGGCCAAAGCAAAGATATCCGGCAAATGGCT
GAAGTTCAAAGTACTGCTGGAGTGAAGCCTTCCTGCTCAAAGGAAACAGCAAAACCGTGC
CTTAGCAACCCTTGCAAAAACAATGGCATGTGCAGGGATGGGTGGAACAGATATGTCTGT
GATTGTTCCGGAACAGGCTATCTTGGCAGGTCCTGTGAGAGAGAGGCAACGGTTTTGAGC
TATGATGGGAGCATGTTTATGAAAATTCAGCTCCCCGTAGTCATGCATACGGAGGCTGAG
GATGTTTCCTTACGGTTCCGATCCCAGCGTGCATATGGCATTCTGATGGCAACCACTTCT
AGAGACTCTGCTGACACCCTCCGCCTGGAGCTAGACGCAGGACGTGTGAAACTGACGGTC
AATCTAGATTGTATCAGGATTAACTGTAATTCCAGCAAAGGTCCCGAGACTCTTTTTGCT
GGCTATAACCTCAATGATAACGAGTGGCACACAGTGCGTGTAGTTCGGCGTGGAAAAAGT
TTAAAGTTAACAGTGGATGACCAACAGGCCATGACAGGTCAAATGGCAGGTGATCATACT
AGGCTGGAGTTCCATAACATAGAGACTGGCATCATCACAGAACGACGGTATCTTTCTTCT
GTCCCCTCCAACTTCATTGGACACCTGCAGAGCTTGACATTTAATGGAATGGCATACATT
GACCTGTGTAAAAATGGCGACATAGATTACTGTGAGCTTAATGCCAGATTTGGCTTCAGG
AACATCATAGCAGATCCTGTCACCTTCAAGACCAAATCGAGCTATGTTGCCTTAGCTACC
TTGCAAGCCTACACTTCTATGCATCTTTTTTTCCAGTTCAAGACAACATCCCTAGATGGA
TTAATTCTATATAACAGTGGGGATGGAAATGACTTTATTGTGGTTGAATTAGTTAAAGGG
TACTTACATTACGTGTTTGATTTGGGAAATGGTGCTAACCTCATCAAAGGAAGCTCAAAT
AAACCTCTCAATGACAATCAGTGGCACAACGTGATGATATCAAGGGACACCAGCAACCTC
CACACTGTAAAGATTGACACAAAAATCACAACGCAAATCACCGCCGGAGCCAGGAACTTA
GACCTCAAGAGTGACTTATATATAGGAGGAGTAGCTAAAGAAACATACAAATCCTTACCA
AAACTTGTACATGCCAAAGAAGGCTTTCAAGGCTGCCTGGCATCAGTTGATTTAAATGGA
CGGCTTCCGGACCTCATCTCCGATGCTCTTTTCTGCAACGGACAGATCGAGAGAGGATGT
GAAGGGCCCAGCACAACCTGCCAAGAGGACTCATGTTCCAATCAAGGTGTGTGCTTGCAA
CAATGGGATGGCTTCAGCTGTGACTGTAGTATGACTTCCTTCAGTGGACCACTCTGCAAT
GACCCTGGGACGACATATATCTTTAGCAAAGGTGGTGGACAAATCACGTATAAGTGGCCT
CCTAATGACCGACCCAGTACACGAGCAGACAGACTGGCCATAGGTTTTAGCACTGTTCAG
AAAGAAGCCGTATTGGTGCGAGTGGACAGTTCTTCAGGCTTGGGTGACTACCTAGAACTG
CATATACACCAGGGAAAAATTGGAGTTAAGTTTAATGTTGGGACAGATGACATCGCCATT
GAAGAATCCAATGCAATCATTAATGATGGGAAATACCATGTAGTTCGTTTCACGAGGAGT
GGTGGCAATGCCACGTTGCAGGTGGACAGCTGGCCAGTGATCGAGCGCTACCCTGCAGGA
AACAATGATAACGAGCGCCTGGCGATTGCTAGACAGCGAATTCCATATCGACTTGGTCGA
GTAGTTGATGAATGGCTACTCGACAAAGGGCGTCAGCTCACAATCTTCAATAGCCAAGCA
ACCATAATAATTGGCGGGAAAGAGCAGGGCCAGCCCTTCCAGGGCCAGCTCTCTGGGCTG
TACTACAATGGCTTGAAAGTTCTGAATATGGCAGCCGAAAACGATGCCAACATCGCCATA
GTGGGAAATGTGAGACTGGTTGGTGAAGTGCCTTCCTCTATGACAACTGAGTCAACAGCC
ACTGCCATGCAATCAGAGATGTCCACATCAATTATGGAGACTACCACGACCCTGGCTACT
AGCACAGCCAGAAGAGGAAAGCCCCCGACAAAAGAACCCATTAGCCAGACCACAGATGAC
ATCCTTGTGGCCTCAGCAGAGTGTCCCAGCGATGATGAGGACATTGACCCCTGTGAGCCG
AGCTCAGGTGGGTTAGCCAACCCAACCCGAGCAGGCGGCAGAGAGCCGTATCCAGGCTCA
GCAGAAGTGATCCGGGAGTCCAGCAGCACCACGGGTATGGTCGTTGGGATAGTAGCCGCT
GCCGCCCTGTGCATCCTTATCCTCCTCTATGCCATGTACAAGTACAGAAACCGGGATGAA
GGCTCATACCATGTGGACGAGAGTCGAAACTACATCAGTAACTCAGCACAGTCCAATGGG
GCTGTTGTAAAGGAGAAACAACCCAGCAGTGCGAAAAGCTCCAACAAAAATAAGAAAAAC
AAGGATAAAGAGTATTATGTCTGA

Restriction Sites:	Please inquire
ACCN:	NM_001135659
Insert Size:	4600 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
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_001135659.1, NP_001129131.1
RefSeq Size:	9578 bp
RefSeq ORF:	4644 bp
Locus ID:	9378
UniProt ID:	Q9ULB1
Cytogenetics:	2p16.3
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 (alpha2) results from the use of the 5'-most promoter, referred to as alpha. It represents the longest transcript that encodes the longest isoform (alpha2) of the representative RefSeq variants. 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.