

Product datasheet for **RG215381**

Neurexin 1 (NRXN1) (NM_138735) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neurexin 1 (NRXN1) (NM_138735) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Neurexin 1
Synonyms:	Hs.22998; PTHSL2; SCZD17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG215381 representing NM_138735. Blue=ORF Red=Cloning site Green=Tag(s)

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GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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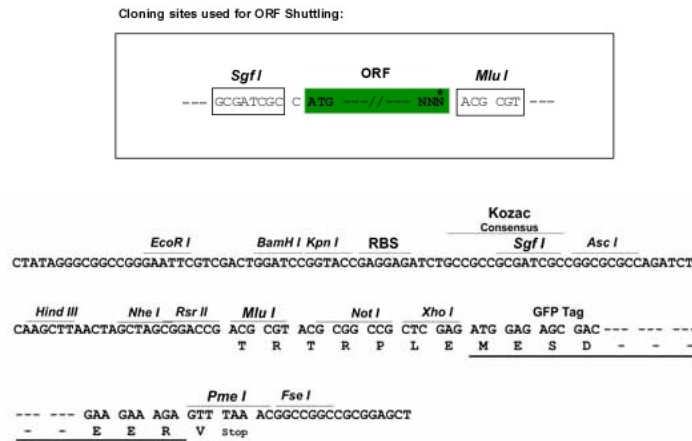
[View online >](#)

Protein Sequence: >Peptide sequence encoded by RG215381
 Blue=ORF Red=Cloning site Green=Tag(s)

MYQRMLRCGAELGSPGGGGGGGGGAGGRLALLWIVPLTSLGLGVAWGASSLGAHHIHHFHGSSKHH
 SVPIAIYRSPASLRGGHAGTTYIFSKGGGQITYKWPNDPSTRADRLAIGFSTVQKEAVLVRVDSSG
 LGDYLELHHQKIGVKFNVGTDDIAIEESNAIINDGKYHVVRFRSGGNATLQVDSWPVIERYPAGRQ
 LTI FNSQATIIIGGKEQGPFQGLSGLYINGLKVLNMAAENDANIAIVGNVRLVGEVPSSMTTESTAT
 AMQSEMSTSIMETTTTLATSTARRGKPPKPEISQTTDDILVASAECPSDDEDIDPCEPSSGGLANPTR
 AGGREPYPGSAEVIRESSTTGMVVGIVAAAALCILILLYAMYKYRNRDEGSYHVDESRYISNSAQS
 N GAVVKEKQPSSAKSSNKNKNKDKKEYYV
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_138735

ORF Size: 1326 bp

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_138735.4](#)

RefSeq Size: 3712 bp

RefSeq ORF: 1329 bp

Locus ID: 9378

UniProt ID: [P58400](#)

Cytogenetics: 2p16.3

Domains: LamG

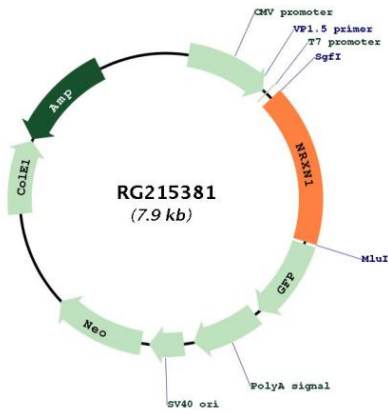
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

MW: 46.9 kDa

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]

Product images:



Circular map for RG215381