

Product datasheet for **RC219376**

Neurexin 1 (NRXN1) (NM_004801) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neurexin 1 (NRXN1) (NM_004801) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Neurexin 1
Synonyms:	Hs.22998; PTHSL2; SCZD17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219376 representing NM_004801 Red=Cloning site Blue=ORF Green=Tags(s)

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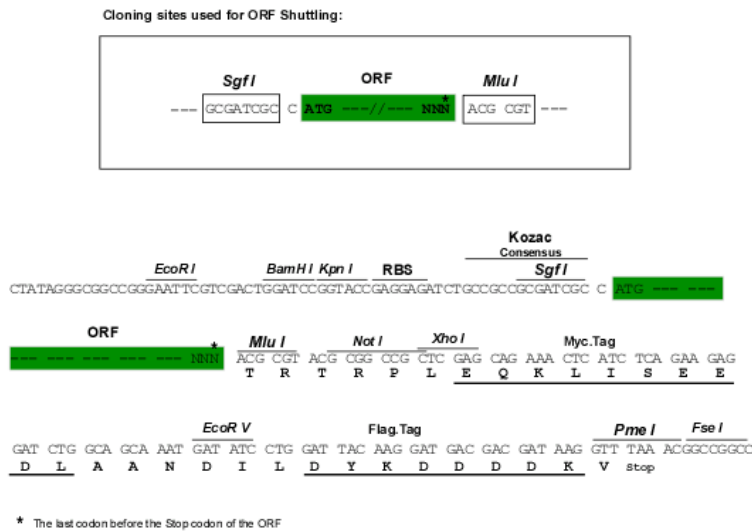
Protein Sequence: >RC219376 representing NM_004801
 Red=Cloning site Green=Tags(s)

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 STARRGPPPTKEPISQTTDDILVASAECPSDDEDIDPCEPSSGGLANPTRAGGREPYPGSAEVIRESSST
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 KDKEYYY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004801

ORF Size: 4431 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 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_004801.5](#)

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

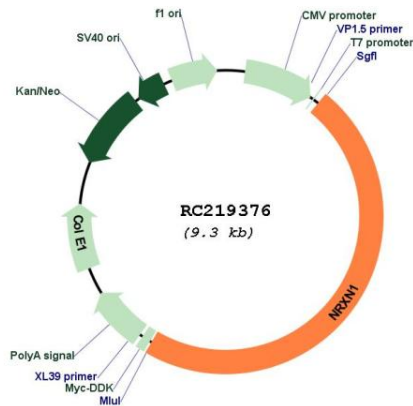
Protein Pathways: Cell adhesion molecules (CAMs)

MW: 161.9 kDa

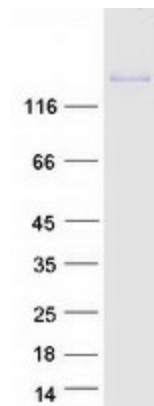
Gene Summary:

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 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:



Circular map for RC219376



Coomassie blue staining of purified NRXN1 protein (Cat# [TP319376]). The protein was produced from HEK293T cells transfected with NRXN1 cDNA clone (Cat# RC219376) using MegaTran 2.0 (Cat# [TT210002]).