

Product datasheet for **MG226542**

Nrxn1 (NM_020252) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nrxn1 (NM_020252) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nrxn1
Synonyms:	1700062G21Rik; 9330127H16Rik; A230068P09Rik; mKIAA0578
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226542 representing NM_020252 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGGGACGGCGCTGGTCCAGCGCGGGGGCTGCTGTCTCCTCTGCCTGTCGCTGCTGCTGCTGGGCTGCTGGGCAGAGCTGGGCAGCGGGCTGGAGTCCCGGGCGCCGAGGGCCAGTGGACGCGCTTCCCCAAGTGGAACGCGTGTGCGAGAGCGAGATGAGCTTCCAGCTGAAGACGCGCAGTGCCCGGGCCTCGTGTCTACTTCGACGACGAGGGCTTCTGCGACTTCTCGAGCTCATCTGACGCGCGGGCGCCGCTGCAGCTCAGCTTCTCCATCTTCTGCGCCGAGCCCGCCACGCTGTTGGCCGACACGCCGGTCAACGACGGCGCCTGGCACAGCGTGGCATCCGCGCCAGTTCGGCAACACCACGCTCTACATCGACCGCGCCGAGGCCAAGTGGGTGGAGGTC AAGTCCAAGCGCAGGGACATGACGGTGTTCAGCGGGCTCTTCGTGGGCGGCCGTCACCCGAACTGCGCGCCGCGGCCCTCAAGCTCACGCTGGCCTCGGTGCGCGAGCGGAGCCCTCAAGGGCTGGATCCGTGACGTCCGGGTCAACTCGTCACAGGCCCTGCCGGTGGACGGCGGCGAGGTCAAGCTGGACGACGAGCCTCCCAACAGCGGTGGCGGGAGCCATGCGAGGCGGGCAAGAAGGCGAGGGCGGCGTGTGCCCAACGGGGCGTGTGCTCCGTGGTTCGACGACGAGCCGATGCGACTGCTCGAGGACCGGCTCCGTGGCAAGGACTGCAGCCAAGAAGACAACAATGTGGAAGGCTGGCACACCTGATGATGGGCGACCAAGGTAAGGAAAAAGAAAGATATTTGCCACGTTCAAGGATCTGAATACTTCTGCTACGACTTATCTCAAAACCCATTCAAAGCAGATGATGAAATAACTCTGTCTTTAAACTCTTCAAAGGAACGACTGATGCTTACACAGGGAAATCAGCTGATTATGTCAATCTTGCAATGAAAAATGGAGCTGTCTCTGGTCATTAATTTGGGATCAGGGGCC TTTGAAGCACTAGTGGAGCCTGTGAATGAAAAGTTAATGATAATGCCTGGCATGATGTAAAGTACCAAGGAATCTGCGTCAGCACTCAGGCATTGGACACGCTATGGTGACAAATCAGTGGATGGAATTTCTACCAACACGGGCTACACGCAAGAAGATTACACCATGCTGGGGTCTGATGACTTTTTCTATGTTGGAGGCAGCCCCAGCACAGCCGACCTTCCAGGGTACCAGTCAGTAACAACCTTATGGGCTGTCTCAAAGAGGTTGTATATAAAAATAATGATGTAAGGCTGGAATATCGCGACTTGCCAAGCAAGGAGATCCTAAGATGAAGATTCACGGTGTGGTGGCTTTAAGTGTGAAAATGTGGCAACCTTAGACCAATAACTTTTGAGACCCCGAATCTTTT

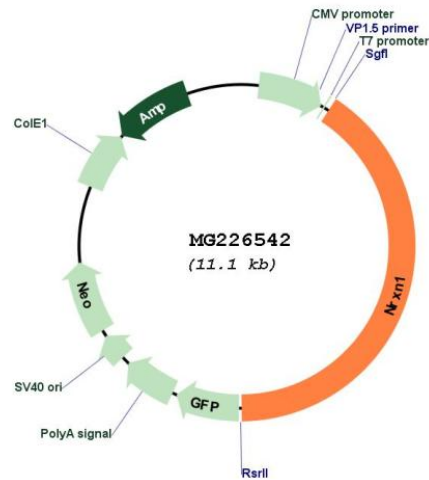


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 CCAACAAAAACAAGAAAAACAAGGATAAGGAGTATTACGTC

AGCGGACCGACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Plasmid Map:



ACCN: NM_020252

ORF Size: 4521 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_020252.3](#), [NP_064648.3](#)

RefSeq Size: 9040 bp

RefSeq ORF: 4524 bp

Locus ID: 18189

UniProt ID: [Q9CS84](#)

Cytogenetics: 17 E5

Gene Summary: This gene encodes a single-pass type I membrane protein that belongs to the neurexin family. Neurexins are synaptic transmembrane receptors that bind endogenous ligands that include neuroligins, dystroglycan, and neurexophilins. Neurexin complexes are required for efficient neurotransmission and are involved in synaptogenesis. In vertebrates, alternate promoter usage results in multiple isoform classes, of which the alpha and beta classes are the best characterized. In humans, allelic variants in this gene are associated with Pitt-Hopkins-like syndrome-2, while deletions have been associated with autism and schizophrenia. Mouse knockouts display decreased spontaneous and evoked vesicle release resulting in impaired synaptic transmission. In addition, knockout mice show altered social approach, reduced social investigation, reduced locomotor activity, and in males, increased aggression. Alternative splicing and promoter usage result in multiple transcript variants. [provided by RefSeq, Nov 2016]