

## Product datasheet for **RG223448**

### **NRXN3 (NM\_004796) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NRXN3 (NM_004796) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NRXN3
Synonyms:	C14orf60
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG223448 representing NM_004796 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGGGCTCGGACGACTTCTTCTATGTAGGAGGAAGCCCAAGTACCGCTGACTGCCTGGCTCCCCTG  
TCAGCAACAACCTCATGGGCTGCCTAAAGAGGTTGTTTATAAGAATAATGACATCCGTCTGGAGCTGTC  
TCGCTGGCCCGATTGCGGACACCAAGATGAAAATCTATGGCGAAGTTGTGTTAAGTGTGAGAATGTG  
GCCACACTGGACCCCATCACTTTGAGACCCAGAGGCTTACATCAGCTTGCCCAAGTGGAACTAAAC  
GTATGGGCTCCATCTCCTTTGACTTCCGCACCACAGAGCCAATGGCCTGATCCTCTTCACTCATGGAAA  
GCCCAAGAGAGGAAGGATGCTCGGAGCCAGAAGAATACAAAAGTAGACTTCTTTGCCGTGGAACCTCTC  
GATGGCAACCTGTAAGTGTGCTTACATGGGCTCTGGCACCATCAAAGTAAAAGCCACTCAGAAGAAAG  
CCAATGATGGGAATGGTACCATGTGGACATTCAGCGAGATGGCAGATCAGGTAATATCAGTGAACAG  
CAGGCGCACGCCATTCACCGCCAGTGGGAGAGCGAGATCCTGGACCTGGAAGGAGACATGTACCTGGGA  
GGGCTGCCGAGAAACCGTGTGGCCTTATTCTCCCACCGAGCTGTGGACTGCCATGCTCAACTATGGCT  
ACGTGGGCTGCATCCGCGACCTATTCATTGATGGGCGCAGCAAGAACATTCGACAGCTGGCAGAGATGCA  
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GAACCTGCGAAAAGGGAGGCATCCATCCTGAGCTATGATGGTAGCATGTACATGAAGATCATCATGCCCAT  
GGTCATGCATACTGAGGCAGAGGATGTGCTTCCGCTTCATGTCCAGCGAGCTTATGGGCTGCTGGTG  
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TCATGACTGAGAAAACGCTACATCTCCGTTGTCCCCTCCAGCTTTATTGGCCATCTGCAGAGCCTCATGTT  
TAATGGCCTTCTACTATTGACTTGTGCAAAAATGGTGACATTGATTATTGTGAGCTGAAGGCTCGTTTT



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```
GGACTGAGGAACATCATCGCTGACCCTGTACACCTTTAAGACCAAGAGCAGCTACCTGAGCCTTGCCACTC
TTCAGGCTTACACCTCCATGCACCTCTTCTCCAGTTCAGAGCCACCTCACCAGATGGCTTCATTCTCTT
CAATAGTGGTGATGGCAATGACTTCATTGCAGTCGAGCTTGCAAGGGGTATACACTACGTTTTTGAC
CTCGGAAACGGTCCCAATGTGATCAAAGGCAACAGTGACCGCCCCCTGAATGACAACCAAGTGGCACAATG
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GTGGTGGGCTTATCCTCTACACCTGGCCAGCCAATGACAGGCCAGCACGCGGTCTGACCGCCTTCCGT
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ACTCAGGCGCAAATAGCCATTGGTGGAAAGGACAAAGGACGCCTTCCAAAGCCAACTCTCTGGGCTCT
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TTCAGCCAACATCAGATGATCTTGTTCATCTGCTGAATGTTCAAGTGTGATGAAGACTTTGTTGAATG
TGAGCCGAGTACAGCAAACCCACGGAGCCGGGAATCAGACGGGTTCCGGGGGCTCAGAGGTGATCCGG
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TGTACGCCATGTACAAGTACAGGAACAGGGAGCGGGGTCCTATCAAGTGGACGAGACCGCGAACTACAT
CAGCAACTCCGCCAGAGCAACGGCACGCTCATGAAGGAGAAGCAGCAGAGCTCGAAGAGCGGCCACAAG
AAACAGAAAAACAGGACAGGGAGTATTACGTG
```

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG223448 representing NM\_004796  
 Red=Cloning site Green=Tags(s)

```
MLGSDDFVYVGGSPSTADLPGSPVSNFMGCLKEVYKNNDIRLEL SRLARIADTKMKIYGEVVFKECENV
ATLDPIINFETPEAYISLPKWNTKRMGSI SFDRTTEPNGLILFTHGKPQERKDARSQKNTKVDFFAVELL
DGNLYLLLDMGSGTIKVKATQKKANDGEWYHVDIQRDGRSGTISVNSRRTPFASGESEILDLEGDMYLG
GLPENRAGLILPTELWTAMLNYGVGCI RDLFIDGRSKNIRQLAEMQNAAGVKSSCSRMSAKQCDSYPCK
NNAVCKDGWNRFICDCTGTGYWGRTCEREASILSYDGSMMYMKIIMPMMHTEAEDVSFRFMSQRAYLLV
ATTSRDSADTLRLELDGGRVKLMVNLDCIRINCNSKGPETLYAGQKLNDEWHTVRVRRGKSLKLTVD
DDVAEGTMVGDHTRLEFHNIETGIMTEKRYISVVPSSF IGHQLSLMFNGLLYIDLCKNGDIDYCELKARF
GLRNIIADPVTFKTKSSYLSLATLQAYTSMHLFFQFKTSPDGFILFNSGDGNDFI AVELVKGYIHVYFD
LGNGPNVIKGNDRPLNDNQWHNVVITRDNSENTHSLKVDTKVVTQVINGAKNLDLKGDL YMAGLAQGMYS
NLPKLVASRDGFQGLASVDLNGRPLDLINDALHRSGQIERGCEGPSTTCQEDSCANQGVCMQQWEGFTC
DCSMTSYSGNQCNDPGATYIFGKSGGL ILYTWPANDRPSTRSDRLAVGFSTTVKDGILV RIDSAPGLGDF
LQLHIEQKIGVVFNIGTVDISIKEERTPVNDGKYHVVRFRNNGGNATLQVDNWPNEHYPTGRQLTIFN
TQAQIAIGGKDKGRLFQQLSGLYYDGLKVLNMAAENPNINIKINGSVRLVGEVPSILGTTQTTSMPPEMS
TTVMETTTTMTTTRKNRSTASIQPTSDDL VSSAECSSDDEDFVECEPSTANPTEPGIRRVP GASEVIR
ESSSTTGMVVGIVAAAALCILILLYAMYKYRNRDEGSYQVDETRNYISNSAQSNGLMKEKQSSKSGHK
KQKNKDREYVV
```

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_004796

**ORF Size:** 3183 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\\_004796.6](#)

**RefSeq Size:** 6148 bp

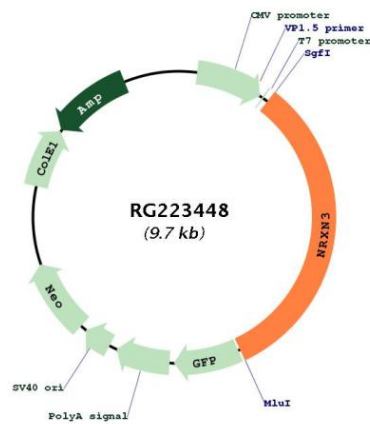
**RefSeq ORF:** 3186 bp

**Locus ID:** 9369

**UniProt ID:** [Q9Y4C0](#)  
**Cytogenetics:** 14q24.3-q31.1  
**Domains:** LamG, EGF, EGF  
**Protein Families:** Druggable Genome, Transmembrane  
**Protein Pathways:** Cell adhesion molecules (CAMs)

**Gene Summary:** This gene encodes a member of a family of proteins that function in the nervous system as receptors and cell adhesion molecules. Extensive alternative splicing and the use of alternative promoters results in multiple transcript variants and protein isoforms for this gene, but the full-length nature of many of these variants has not been determined. Transcripts that initiate from an upstream promoter encode alpha isoforms, which contain epidermal growth factor-like (EGF-like) sequences and laminin G domains. Transcripts initiating from the downstream promoter encode beta isoforms, which lack EGF-like sequences. Genetic variation at this locus has been associated with a range of behavioral phenotypes, including alcohol dependence and autism spectrum disorder. [provided by RefSeq, Dec 2012]

**Product images:**



Circular map for RG223448