

Product datasheet for **RG210408**

Nicotinic Acetylcholine Receptor beta 2 (CHRNA2) (NM_000748) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nicotinic Acetylcholine Receptor beta 2 (CHRNA2) (NM_000748) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nicotinic Acetylcholine Receptor beta 2
Synonyms:	EFNL3; nAChRB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG210408 representing NM_000748
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCCCGGCTGCGGCCCGTGGCGCTGCTCCTTGGCTTCGGCCTCCTCCGGTGTGCTCAGGGGTGT
 GGGGTACGGATACAGAGGAGCGGCTGGTGGAGCATCTCCTGGATCCTTCCGCTACAACAAGCTTATCCG
 CCCAGCCACCAATGGCTCTGAGCTGGTACAGTACAGCTTATGGTGTCACTGGCCAGCTCATCAGTGTG
 CATGAGCGGGAGCAGATCATGACCACCAATGTCTGGTGACCCAGGAGTGGGAAGATTATCGCCTCACCT
 GGAAGCCTGAAGAGTTTGACAACATGAAGAAAGTTCGGCTCCCTTCCAAACACATCTGGCTCCAGATGT
 GGTCTGTACAACATGTGACGGCATGTACGAGGTGTCCTTCTATTCCAATGCCGTGGTCTCCTATGAT
 GGCAGCATCTTCTGGCTGCCGCTGCCATCTACAAGAGCGCATGCAAGATTGAAGTAAAGCACTTCCCAT
 TTGACCAGCAGAACTGCACCATGAAGTTCGGTTCGTGGACCTACGACCGCACAGAGATCGACTTGGTGT
 GAAGAGTGAGGTGGCCAGCCTGGACGACTTCACACCTAGTGGTGTGAGTGGGACATCGTGGCGCTGCCGGC
 CGGCGCAACGAGAACCCGACGACTCTACGTACGTGGACATCACGTATGACTTATCATTGCGCCGAAGC
 CGCTCTTCTACACCATCAACCTCATATCCCCTGTGTGCTCATCACCTCGTAGCCATCCTTGTCTTCTA
 CCTGCCATCCGACTGTGGCGAGAAGATGACGTTGTGCATCTCAGTGTGCTGGCGCTCACGGTCTTCTCTG
 CTGCTCATCTCCAAGATCGTGCCCTCCACCTCCCTCGACGTGCCGCTCGTCGGCAAGTACCTCATGTTCA
 CCATGGTGCTTGTACCTTCTCCATCGTACCAGCGTGTGCGTGTCAACGTGCACCACCGCTCGCCAC
 CACGCACACCATGGCGCCCTGGGTGAAGTGTCTTCTGGAGAAGTGGCCGCGCTGCTTTCATGCGAG
 CAGCCACGCCATCATTGCGCCCGTACGCGCTGCGCCTGCGGCGACGCCAGCGTGAGCGCGAGGGCGCTG
 GAGCCCTCTTCTCCGCGAAGCCAGGGCCGACTCCTGCACGTGCTTTCGTCAACCGCGCTCGGTGTA
 GGGTGGCCGGGCGCTTCGGGGCTGAGCCTGCACCAGTGGCGGGCCCGGGCGCTCAGGGGAGCCGTGT
 GGCTGTGGCCTCCGGGAGGCGGTGGACGCGTGCCTTTCATCGCAGACCACATGCGGAGCGAGGACGATG
 ACCAGAGCGTGAGTGAGGACTGGAAGTACGTGCGCATGGTGTGATCGACCGCTTCTCTGATCTTTGT
 CTTTGTCTGTCTTTGGACCATCGGCATGTTCTGACGCTCTCTCCAGAATACACCACCACCACC
 TTCCTCCACTCAGACCACTCAGCCCCAGCTCCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG210408 representing NM_000748
 Red=Cloning site Green=Tags(s)

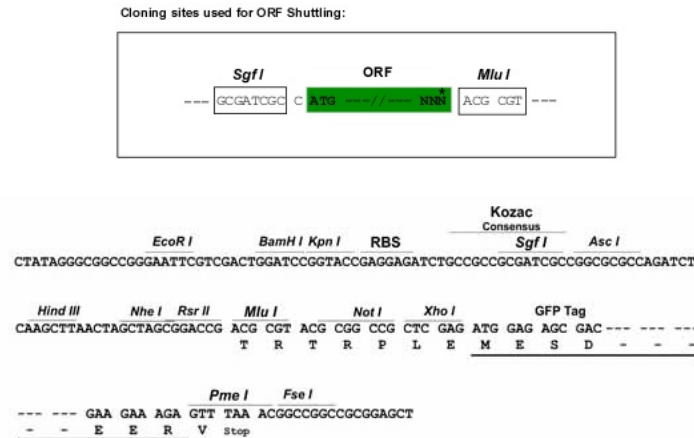
MARRCGPVALLLGFLLRLCSGVWGTDEERLVEHLLDPSRYNKLIRPATNGSELVTVQLMVSLAQLISV
 HEREQIMTTNVWLTQEWEDYRLTWKPEEFDNMKKVRLPSKHIWLPDVVLYNNADGMYEVSFYSNVVSVD
 GSIFWLPPIYKSACKIEVKHFPFDQONCTMKFRSWTYDRTEIDLVLKSEVASLDDFTPSGEWDIVALPG
 RRNENPDDSTYVDITYDFIIRRKPLFYINLIIPCVLITSLAILVFYLPSDCGEKMTLCISVLLALTVFL
 LLIISKIVPPTSLDVPLVGKYLMTMVLVTFIVTSVCVLNVHRSPTTHTMAPWVKVVFLEKLPALLFMQ
 QPRHHCARQLRLRRRQREREGALFFREAPGADSCTCFVNRASVQGLAGAFGAEPAPVAGPGRSGEPC
 GCGLREAVDGVRFIADHMRSEDDDDQSVSEWDKYYAMVIDRLFLWIFVFCVFGTIGMFLQPLFQNYTTTT
 FLHSDHSAPSSK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_000748

ORF Size: 1506 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_000748.3](#)

RefSeq Size: 2448 bp

RefSeq ORF: 1509 bp

Locus ID: 1141

UniProt ID: [P17787](#)

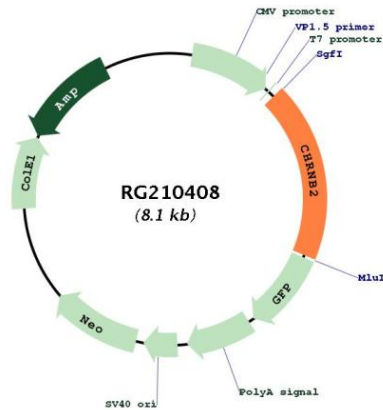
Cytogenetics: 1q21.3

Domains: Neur_chan_memb, Neur_chan_LBD

Protein Families: Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

Gene Summary: Neuronal acetylcholine receptors are homo- or heteropentameric complexes composed of homologous alpha and beta subunits. They belong to a superfamily of ligand-gated ion channels which allow the flow of sodium and potassium across the plasma membrane in response to ligands such as acetylcholine and nicotine. This gene encodes one of several beta subunits. Mutations in this gene are associated with autosomal dominant nocturnal frontal lobe epilepsy. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG210408