

Product datasheet for **RC210221**

CHRNB3 (NM_000749) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHRNB3 (NM_000749) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CHRNB3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC210221 representing NM_000749
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTCCCAGATTTTATGCTGGTCTCATCGTCCTTGGCATCCCTTCTCAGCCACCACAGGTTTCAACT
 CAATCGCCGAAAATGAAGATGCCCTCCTCAGACATTTGTTCCAAGTTATCAGAAAATGGTCCGCCCTGT
 ATTACATTCTAATGACACCATAAAAGTATATTTGGATTGAAAATATCCCAGCTGTAGATGTGGATGAA
 AAGAATCAGCTGATGACAACCAATGTGTGGCTCAAACAGGAATGGACAGACCACAAGTTACGCTGGAATC
 CTGATGATTATGGTGGGATCCATTCCATTAAGTTCCATCAGAATCTCTGTGGCTTCTGACATAGTTCT
 CTTTAAAATGCTGACGGCCGCTTCAAGGCTCCCTGATGACCAAGGTCATCGTGAATCAAACGGAAC
 GTTGTCTGGACCCTCCCGCCAGCTACAAAAGCTCCTGCACCATGGACGTCACGTTTTTCCCGTTCGACC
 GACAGAAGTCTCCATGAAGTTGGATCCTGGACTTATGATGGCACCATGGTTGACCTCATTTTATGATCAA
 TGAATGTCGACAGAAAAGACTTCTTCGATAACGGAGAATGGGAAATCTGAATGCAAAGGGGATGAAG
 GGAACAGAAAGGACGGCGTACTCCTATCCCTTATACGATTCCTTCGTCCTGAGACGCTGCCTT
 TATTCTATACCCTCTTCTCATCATCCCTGCCTGGGGCTGTCTTCTAACAGTCTTGTGTTCTATTT
 ACCTTCGGATGAAGGAGAAAACTTTCATTATCCACATCGGTCTTGGTTTCTCTGACAGTTTTCTTTTA
 GTGATTGAAGAAATCATCCCATCGTCTTCCAAAGTCATTCCTCTCATTGGAGAGTACCTGCTGTTTCA
 TGATTTTTGTGACCCTGTCCATCATTGTTACCGTGTGTTGCTTAAACGTTACCACAGATCTTCTCCAC
 GTACCACCCATGGCCCTGGGTTAAGAGGCTCTTCTGCAGAACTTCCAAAATTACTTTGCATGAAA
 GATCATGTGGATCGTACTCATCCCAGAGAAAGAGGAGTCAACCAGTAGTGAAGGCAAAGTCTCG
 AAAAAAGAAAACAGAAACAGCTTAGTGATGGAGAAAAAGTTCTAGTTGCTTTTTTGGAAAAAGCTGCTGA
 TTCCATTAGATACATTTCCAGACATGTGAAGAAAGAACATTTTATCAGCCAGGTAGTACAAGACTGGAAA
 TTTGTAGCTCAAGTTCTTGACCGAATCTTCTGTGGCTCTTCTGATAGTGTAGTAAACAGGCTCGGTT
 TGATTTTACCCTGCTTGAAGATGTGGCTACATAGTTACCAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210221 representing NM_000749
 Red=Cloning site Green=Tags(s)

MLPDFMLVLIVLGIPISSATTGFNSIAENEDALLRHLFQGYQKWVRPVLHSNDTIKVVYFGLKISQLVDVDE
 KNQLMTTNVWLKQEWTDHKLRWNPDDYGGIHSIKVPSESLWLPDIVLFENADGRFEGSLMTKIVKSNGT
 VVWTPPASYKSSCTMDVTFPPFDRQNCMSKFGSWTYDGTMDLILINENVDRKDFDNGEWEILNAKGMK
 GNRRDGVYSYPFITYSFVLRRLPLFYTLFLIIPCLGLSFLTVL VFYLP SDEGEKLSLSTSVLVSLTVFLL
 VIEEIIIPSSSKVIPLIGEYLLFIMIFVTL SIIIVTFVINVHHRSSSTYHPMAPWVKRFLQKLPKLLCMK
 DHVDYSSPEKEESQPVVKGKVLKQKQLSDGEKVLVAFLEKAADSIRYISRHVKKEHFISQVVQDWK
 FVAQVLDRIFLWFLIVSVTGSVLIFTPALKMMLHSYH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2573_a02.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_000749

ORF Size: 1374 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_000749.5](#)

RefSeq Size: 1953 bp

RefSeq ORF: 1377 bp

Locus ID: 1142

UniProt ID: [Q05901](#)

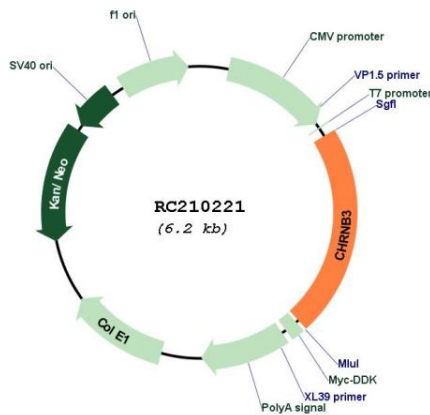
Cytogenetics: 8p11.21

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

MW: 52.5 kDa

Gene Summary: The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are (hetero)pentamers composed of homologous subunits. The subunits that make up the muscle and neuronal forms of nAChRs are encoded by separate genes and have different primary structure. There are several subtypes of neuronal nAChRs that vary based on which homologous subunits are arranged around the central channel. They are classified as alpha-subunits if, like muscle alpha-1 (MIM 100690), they have a pair of adjacent cysteines as part of the presumed acetylcholine binding site. Subunits lacking these cysteine residues are classified as beta-subunits (Groot Kormelink and Luyten, 1997 [PubMed 9009220]). Elliott et al. (1996) [PubMed 8906617] stated that the proposed structure for each subunit is a conserved N-terminal extracellular domain followed by 3 conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region.[supplied by OMIM, Apr 2010]

Product images:



Circular map for RC210221