

Product datasheet for RC207623

CHRFAM7A (NM_148911) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHRFAM7A (NM_148911) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CHRFAM7A
Synonyms:	CHRNA7; CHRNA7-DR1; D-10; NACHRA7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207623 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGGAGGCAGATATCAGTGGCTATATCCCAATGGAGAATGGGACCTAGTGGGAATCCCCGGCAAGA
GGAGTGAAAGGTTCTATGAGTGTGCAAAGAGCCCTACCCCGATGTCACCTTCACAGTGACCATGCGCCG
CAGGACGCTCTACTATGGCCTCAACCTGCTGATCCCCTGTGTGCTCATCTCCGCCCTCGCCCTGCTGGT
TTCCTGCTTCTGCAGATTCGGGGAGAAGATTTCCCTGGGGATAACAGTCTTACTCTCTCTTACCGTCT
TCATGCTGCTCGTGGCTGAGATCATGCCCGCAACATCCGATTCGGTACCATTGATAGCCAGTACTTCGC
CAGCACCATGATCATCGTGGCCTCTCGGTGGTGGTGACAGTGATCGTGTGTCAGTACCACCACCAGCAG
CCCAGCGGGGCAAGATGCCCAAGTGGACCAGAGTCATCCTTCTGAACTGGTGCAGCGTGGTTCCTGCGAA
TGAAGAGGCCCGGGGAGGACAAGGTGCGCCCGCCTGCCAGCACAAGCAGCGGCGTGCAGCCTGGCCAG
TGTGGAGATGAGCGCCGTGGCGCCGCGCCCGCCAGCAACGGGAACCTGCTGTACATCGGCTTCCGCGGC
CTGGACGGCGTGCAGTGTGCCGACCCCGACTCTGGGGTAGTGTGGCCGCATGGCCTGCTCCCCCA
CGCAGGATGAGCACCTCCTGCACGGTGGCAACCCCGAGGGGGACCCGGACTTGGCCAAGATCCTGGA
GGAGGTCCGCTACATTGCCAACCGCTTCCGCTGCCAGGACGAAAGCGAGGCGGTCTGCAGCGAGTGAAG
TTCGCCGCTGTGTGGTGGACCGCCTGTGCCTCATGGCCTTCTCGGTCTTACCATCATCTGCACCATCG
GCATCTGATGTGGCTCCCAACTTCGTGGAGGCGGTGCCAAAGACTTTGCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC207623 protein sequence
Red=Cloning site Green=Tags(s)

MQEADISGYIPNGEWDLVGIPGKRSEFYECCKEYPDVFTFTVMRRRTLYYGLNLLIPCVLISALALLV
 FLLPADSGEKISLGITVLLSLTVFMLLVAEIMPATSDSVPLIAQYFASTMIIVGLSVVVTIVLQYHHHD
 PDGGKMPKWTRVILLNWCWFLRMKRPGEDKVRPACQHKQRRCLASVEMSAVAPPPASNGNLLYIGFRG
 LDGVHCVPTPDSGVVCGRMACSPHDEHLLHGGQPPPEGDPDLAKILEEVRYIANRFRQCDESEAVCSEWK
 FAACVVDRLCLMAFSVFIICTIGILMSAPNFVEAVSKDFA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6135_d07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_148911

ORF Size: 963 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_148911.1](#), [NP_683709.1](#)

RefSeq Size: 2794 bp

RefSeq ORF: 966 bp

Locus ID: 89832

UniProt ID: [P36544](#)

Cytogenetics: 15q13.2

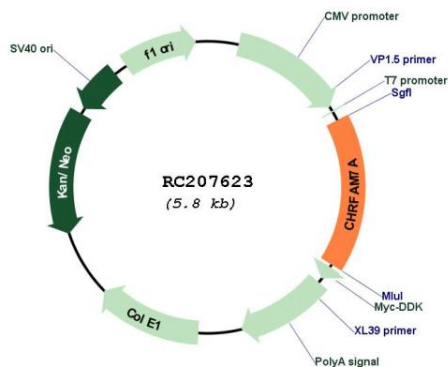
Domains: Neur_chan_memb

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

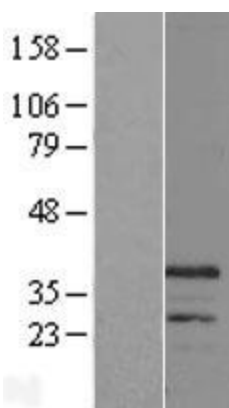
MW: 35.5 kDa

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 family member CHRNA7, which is located on chromosome 15 in a region associated with several neuropsychiatric disorders, is partially duplicated and forms a hybrid with a novel gene from the family with sequence similarity 7 (FAM7A). Alternative splicing has been observed, and two variants exist for this hybrid gene. The N-terminally truncated products predicted by the largest open reading frames for each variant would lack the majority of the neurotransmitter-gated ion-channel ligand binding domain but retain the transmembrane region that forms the ion channel. Although current evidence supports transcription of this hybrid gene, translation of the nicotinic acetylcholine receptor-like protein-encoding open reading frames has not been confirmed. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC207623



Western blot validation of overexpression lysate (Cat# [LY403450]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207623 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).