

## Product datasheet for **RC222710**

### Rapsyn (RAPSN) (NM\_005055) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rapsyn (RAPSN) (NM_005055) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rapsyn
Synonyms:	CMS4C; CMS11; FADS; FADS2; RAPSYN; RNF205
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222710 representing NM_005055 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGGGCAGGACCAGACCAAGAAGCAGATCGAGAAGGGGCTCCAGCTGTACCAGTCCAACCAGACAGAGA  
AGGCATTGCAGGTGTGGACAAAGGTGCTGGAGAAGAGCTCGGACCTCATGGGGCGCTTCCGCGTCTGGG  
CTGCTGGTACAGCCACTCGGAGATGGGCCGCTACAAGGAGATGCTGAAGTTCGCTGTGGTCCAGATC  
GACACGGCCCGGAGCTGGAGGATGCCACTTCTCCTGGAGAGTACCTGAACCTGGCAGCAGCAACG  
AGAAGCTGTGCGAGTTTACAAGACCATCTCCTACTGCAAGACCTGCCTTGGGCTGCCTGGTACCAGGGC  
AGGTGCCAGCTCGGAGGCCAGGTGAGCCTGAGCATGGGCAATGCCTTCTGGGCCTCAGCGTCTCCAG  
AAGGCCCTGGAGAGCTTCGAGAAGGCCCTGCGCTATGCCACAACAATGATGACGCCATGCTCGAGTGCC  
GCGTGTGCTGCAGCCTGGGCAGCTTCTATGCCAGGTCAAGGACTACGAGAAAGCCCTGTTCTTCCCTG  
CAAGGGCGCAGAGCTTGTCAACAATAAGGCAAGGCTGGAGCCTGAAGTACCGGGCCATGAGCCAGTAC  
CACATGGCCGTGGCCTATCGCCTGCTGGGCCGCTGGGCAGTCCATGGAGTGTGTGAGGAGTCTATGA  
AGATCGCGCTGCAGCACGGGGACCGCCACTGCAGGCGCTCTGCCTGCTGCTTGCCTGACATCCACCG  
GAGCCGTGGGGACCTGGAGACAGCCTTCCCCAGGTACGACTCCGCCATGAGCATCATGACCGAGATCGGA  
AACCGCTGGGGCAGGTGCAGGCGCTGCTGGGTGTGCCAAGTGTGGTGGCCAGGAAGGCGCTGGGACA  
AGGCTCTGGATGCCATCGAGAGAGCCAGGATCTGGCCGAGGAGGTGGGAACAAGCTGAGCCAGCTCAA  
GCTGCACTGTCTGAGCGAGAGCATTACCGCAGCAAAGGGCTGCAGCGGAACTGCGGGCCACGTTGTG  
AGGTTCCACGAGTGCCTGGAGGAGACGGAGCTCTACTGCGCCTGTGCGGCGAGTCCATAGGCGAGAAGA  
ACAGCCGGCTGCAGGCCCTACCTTGCTCCACATCTTCCACCTCAGGTGCCTGCAGAACAACGGGACCCG  
GAGCTGTCCCACTGCCCGCTCATCCATGAAGCCTGGCTTTGTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAAGTTTAA



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**Protein Sequence:** >RC222710 representing NM\_005055  
Red=Cloning site Green=Tags(s)

MGQDQTKKQIEKGLQLYQSNQTEKALQVWTKVLEKSSDLMGRFRVLGCLVTAHSEMGRYKEMLKFAVVQI  
 DTARELEDADFLLESYLNARSNEKLCEFHKTISYCKTCLGLPGTRAGQLGGQVLSMGNAFLGLSVFQ  
 KALESFEKALRYAHNNDAMLECRVCCSLGSFYAQVKDYEKALFFPCKAAELVNYYGKGSWLKYRAMSQY  
 HMAVAYRLLGRLGSAMECCCEESMKIALQHGRPLQALCLLFCFADIHRSRGDLETAFPRYDSAMSIMTEIG  
 NRLGQVQALLGVAKCWVARKALDKALDAITERAQDLAEEVGNKLSQLKLHCLSESIYRSKGLQRELRAHVV  
 RFHECVETELEYCGLCGESIGEKNSRLQALPCSHIFHLRCLQNNGTRSCPNCRSSMKPGFV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2702\\_d09.zip](https://cdn.origene.com/chromatograms/mg2702_d09.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\_005055

**ORF Size:** 1236 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\\_005055.5](#)

**RefSeq Size:** 1664 bp

**RefSeq ORF:** 1239 bp

**Locus ID:** 5913

**UniProt ID:** [Q13702](#)

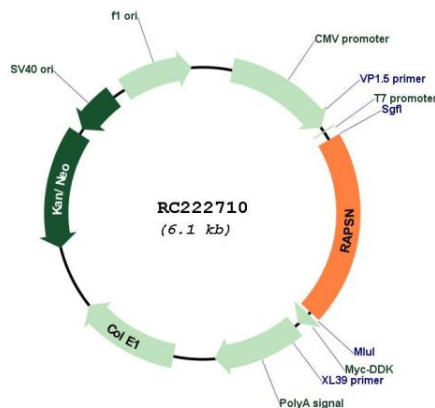
**Cytogenetics:** 11p11.2

**Protein Families:** Druggable Genome

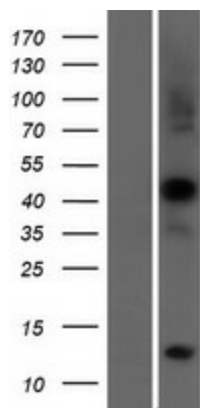
**MW:** 46.1 kDa

**Gene Summary:** This gene encodes a member of a family of proteins that are receptor associated proteins of the synapse. The encoded protein contains a conserved cAMP-dependent protein kinase phosphorylation site, and plays a critical role in clustering and anchoring nicotinic acetylcholine receptors at synaptic sites by linking the receptors to the underlying postsynaptic cytoskeleton, possibly by direct association with actin or spectrin. Mutations in this gene may play a role in postsynaptic congenital myasthenic syndromes. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Apr 2011]

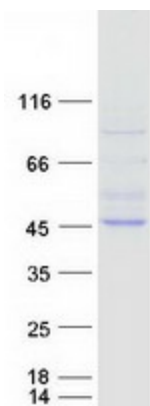
### Product images:



Circular map for RC222710



Western blot validation of overexpression lysate (Cat# [LY417541]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222710 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAPSIN protein (Cat# [TP322710]). The protein was produced from HEK293T cells transfected with RAPSIN cDNA clone (Cat# RC222710) using MegaTran 2.0 (Cat# [TT210002]).