

## Product datasheet for **RG222710**

### 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:	TurboGFP
Symbol:	Rapsyn
Synonyms:	CMS4C; CMS11; FADS; FADS2; RAPSYN; RNF205
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG222710 representing NM_005055 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGCAGGACCAGACCAAGCAGCAGATCGAGAAGGGGCTCCAGCTGTACCAGTCCAACCAGACAGAGA  
AGGCATTGCAGGTGTGGACAAAGGTGCTGGAGAAGAGCTCGGACCTCATGGGGCGCTTCCGCGTGTGGG  
CTGCTGGTACAGCCCACTCGGAGATGGGCCGCTACAAGGAGATGCTGAAGTTCGCTGTGGTCCAGATC  
GACACGGCCCGGAGCTGGAGGATGCCACTTCTCCTGGAGAGTACCTGAACCTGGCAGCAGCAACG  
AGAAGCTGTGCGAGTTTACAAGACCATCTCCTACTGCAAGACCTGCCTTGGGCTGCCTGGTACCAGGGC  
AGGTGCCAGCTCGGAGGCCAGGTGAGCCTGAGCATGGGCAATGCCTTCTGGGCCTCAGCGTCTCCAG  
AAGGCCCTGGAGAGCTTCGAGAAGGCCCTGCGCTATGCCACAACAATGATGACGCCATGCTCGAGTGCC  
GCGTGTGCTGCAGCCTGGGCAGCTTCTATGCCAGGTCAAGGACTACGAGAAAGCCCTGTTCTTCCCTG  
CAAGGGCGCAGAGCTTGTCAACAATAAGGCAAGGCTGGAGCCTGAAGTACCGGCCATGAGCCAGTAC  
CACATGGCCGTGGCCTATCGCCTGCTGGGCCGCTGGGCAGTCCATGGAGTGTGTGAGGAGTCTATGA  
AGATCGCGCTGCAGCACGGGACCGCCACTGCAGGCGCTCTGCCTGCTGCTTGCCTGACATCCACCG  
GAGCCGTGGGGACCTGGAGACAGCCTTCCCCAGGTACGACTCCGCCATGAGCATCATGACCGAGATCGGA  
AACCGCCTGGGGCAGGTGCAGGCGCTGCTGGGTGTGGCCAAGTGTGGTGGCCAGGAAGGCGCTGGACA  
AGGCTCTGGATGCCATCGAGAGAGCCAGGATCTGGCCGAGGAGGTGGGAACAAGCTGAGCCAGCTCAA  
GCTGCACTGTCTGAGCGAGAGCATTACCCGAGCAAAGGGCTGCAGCGGGAAGTGCAGGGCCACGTTGTG  
AGGTTCCACGAGTGCCTGGAGGAGACGGAGCTCTACTGCGCCTGTGCGGCGAGTCCATAGGCGAGAAGA  
ACAGCCGGCTGCAGGCCCTACCTTGCTCCACATCTTCCACCTCAGGTGCCTGCAGAACAACGGGACCCG  
GAGCTGTCCCACTGCCCGCTCATCCATGAAGCCTGGCTTTGTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG222710 representing NM\_005055  
 Red=Cloning site Green=Tags(s)

MGQDQTKQQIEKGLQLYQSNQTEKALQVWTKVLEKSSDLMGRFRVLGCLVTAHSEMGRYKEMLFVAVVQI  
 DTARELEDADFLLESYLNLRARSNEKLCFHKTI SYCKTCLGLPGTRAGQLGGQVLSMGNAFLGLSVFQ  
 KALESEFEKALRYAHNDDAMLECRVCCSLGSFYAQVKDYEKALFFPCKAAELVNNYGKGSWKYRAMSQY  
 HMAVAYRLLGRLGSAMECCCEESMKIALQHGRPLQALCLLFCADIHRSRGDLETAFFRYDSAMSIMTEIG  
 NRLGQVQALLGVAKCWVARKALDKALDAITERAQDLAEEVGNKLSQLKLHCLSESIYRSKGLQRELAHVV  
 RFHECVETEELYCGLCGESIGEKNSRLQALPCSHIFHLRCLQNNGTRSCPNCRSSMKPGFV

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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

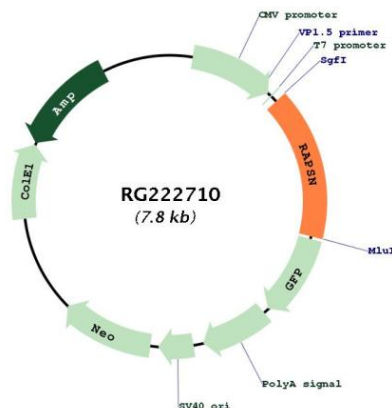
**UniProt ID:** [Q13702](#)

**Cytogenetics:** 11p11.2

**Protein Families:** Druggable Genome

**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 RG222710