

Product datasheet for **RG208972**

Synaptophysin (SYP) (NM_003179) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptophysin (SYP) (NM_003179) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Synaptophysin
Synonyms:	MRX96; MRXSYP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208972 representing NM_003179 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCTGCTGGCGGACATGGACGTGGTGAATCAGCTGGTGGCTGGGGTCAGTCCGGGTGGTCAAGG
AGCCCCTCGCCTTTGTGAAGGTGCTGCAATGGTCTTCGCCATCTTCGCCTTTGCCACATGCGGCAGCTA
CAGTGGGGAGCTCCAGCTGAGCGTGGATTGTGCCAACAAGACCGAGAGTGACCTCAGCATCGAGGTCGAG
TTCGAGTACCCCTTCAGGCTGCACCAAGTGTACTTTGATGCACCCACCTGCCGAGGGGGCACCACCAAGG
TCTTCTTAGTTGGGGACTACTCCTCGTCAGCCGAATTCTTTGTCACCGTGGCCGTGTTTGCCTTCTCTA
CTCCATGGGGGCTCTGGCCACCTACATCTTCTGCAACAAGTACCGAGAGAATAACAAAGGGCCCATG
CTGGACTTTCTGGCCACGGCTGTGTTCCCTTCATGTGGCTAGTTAGCTCATCGGCATGGGCCAAGGGGC
TGTCAGATGTGAAGATGGCCACAGACCCAGAGAACATTATCAAGGAGATGCCTGTCTGCCCCAGACAGG
GAACACATGCAAGGAGCTGAGAGACCTTGTGACCTCGGGACTCAACACCTCGGTGGTGTTCGGCTTCTG
AACCTGGTGTCTGGGTGGCAACCTGTGGTTCGTGTTAAGGAGACAGGCTGGGCCGCCCGTTCTCTGC
GCGCGCTCCCGGCCCGCCGAGAAACAACCGGCACCCGGGACGCCTACGGCGATGCAGGCTACGGGCA
GGGCCCGCGGGTACGGGCCAGGATTCTACGGGCCTCAGGGCGGCTACCAGCCTGACTATGGTCAA
CCAGCCCGCAGCGGTGGCAGTGGCTACGGGCCTCAGGGCGACTATGGGCAGCAAGGCTACGGCCCGCAGG
GTGCACCCACCTCCTTCCAATCAGATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG208972 representing NM_003179
 Red=Cloning site Green=Tags(s)

MLLLADMDVVNQLVAGGQFRVVKPELGFVKVLQWVFAIFAFATCGSYSSELQLSVDKANKTESDLSIEVE
 FEYPPFRLHQVYFDAPTCRGGTTKVFVLVDYSSSAEFFVTVAVFALYSMGALATYIFLQNKYRENNKGP
 LDFLATAVFAFMWLVSSSAWAKGLSDVKMATDPENIIKEMPVCRQTGNTCKELRDLVTSGLNTSVVFGFL
 NLVWLWGNLWVFKETGWAAPFLRAPPGAPEKQPAPGDAYGDAGYGQGGYGPQDSYGPQGGYQPDYGO
 PAGSGSGYGPQGDYGGYGPQGAPTSFSNQM

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003179

ORF Size: 939 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_003179.2](#), [NP_003170.1](#)

RefSeq Size: 2449 bp

RefSeq ORF: 942 bp

Locus ID: 6855

UniProt ID: [P08247](#)

Cytogenetics: Xp11.23

Protein Families: Secreted Protein, Transmembrane

Gene Summary: This gene encodes an integral membrane protein of small synaptic vesicles in brain and endocrine cells. The protein also binds cholesterol and is thought to direct targeting of vesicle-associated membrane protein 2 (synaptobrevin) to intracellular compartments. Mutations in this gene are associated with an X-linked form of cognitive disability. [provided by RefSeq, Jul 2017]

Product images:



Circular map for RG208972