

Product datasheet for **RG217980**

Cytohesin 2 (CYTH2) (NM_017457) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytohesin 2 (CYTH2) (NM_017457) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cytohesin 2
Synonyms:	ARNO; CTS18; CTS18.1; cytohesin-2; PSCD2; PSCD2L; SEC7L; Sec7p-L; Sec7p-like
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217980 representing NM_017457 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGACGGCGTCTATGAACCCAGACCTGACTCCGGAGGAGCGGATGGAGCTGGAGAACATCCGGC
GGCGGAAGCAGGAGCTGCTGGTGGAGATTCAGCGCCTGCGGGAGGAGCTCAGTGAAGCCATGAGCGAGGT
GGAGGGCTGGAGCCAATGAGGGCAGTAAGACCTTGCAACGGAACCGGAAGATGGCAATGGCAGGAAG
AAGTTCAACATGGACCCCAAGAAGGGGATCCAGTTCCTGGTGGAGAATGAACTGTCGAGAACACACCCG
AGGAGATCGCCCGCTTCTGTACAAGGGCGAGGGGCTGAACAAGACAGCCATCGGGGACTACCTGGGGGA
GAGGGAAGAACTGAACCTGGCAGTGCTCCATGCTTTTGTGGATCTGCATGAGTTCACCGACCTCAATCTG
GTGCAGGCCCTCAGGCAGTTTCTATGGAGCTTTCGCCTACCCGGAGAGGCCAGAAAATTGACCGGATGA
TGGAGGCCTTCGCCCAGCGATACTGCCTGTGCAACCCTGGGGTTTTCCAGTCCACAGACACGTGCTATGT
GCTGTCTTCGCCGTCATCATGCTCAACACCAGTCTCCACAATCCCAATGTCCGGGACAAGCCGGGCCTG
GAGCGCTTTGTGGCCATGAACCGGGGCATCAACGAGGGCGGGGACCTGCCTGAGGAGCTGCTCAGGAACC
TGTACGACAGCATCCGAAATGAGCCCTCAAGATTCCTGAGGATGACGGGAATGACCTGACCCACACCTT
TTCAACCCGGACCGGGAGGGCTGGCTCCTGAAGCTGGGAGGGGCCGGGTGAAGACGTGGAAGCGGGCC
TGTTTTATCCTCACAGACAACCTGCTCTACTACTTTGAGTACACCAGGACAAGGAGCCCGAGGAATCA
TCCCCAGGAGAATCTGAGCATCCGAGAGGTGGACGACCCCGAAACCGAACTGCTTTGAACTTTACAT
CCCCAACAAAGGGGCAGCTCATCAAAGCCTGCAAAAAGTGAAGCGGACGCGGAGTGGTGGAGGAAAAC
CACATGGTGTACCGGATCTCGGCCCCACGAGGAGGAGAAGGACGAGTGGATCAAGTCCATCCAGGCGG
CTGTGAGTGTGGACCCCTTCTATGAGATGCTGGCAGCGAGAAAGAAGCGGATTTTCAGTCAAGAAGAAGCA
GGAGCAGCCC

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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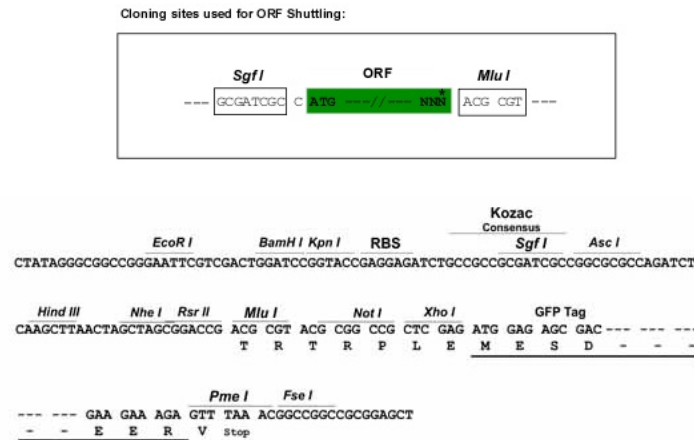
Protein Sequence: >RG217980 representing NM_017457
 Red=Cloning site Green=Tags(s)

MEDGVYEPPDLTPEERMELLENIRRRKQELLVEIQRLREELSEAMSEVEGLEANEKSKTLQRNRKMMAMGRK
 KFNMDPKKGIQFLVENELLQNTPEEIAFLYKGEGLNKTAIGDYLGEREELNLAVLHAFVDLHEFTDLNL
 VQALRQFLWSFRLPGEAQKIDRMMEFAQRYCLCNPVGFQSTDTCYVLSFAVIMLNTSLHNPVNRDKPGL
 ERFVAMNRGINEGGDLPEELLRNLYDSIRNEPFKIPEDDGNDLTHTFNPDREGWLLKLGGRVKTWKRR
 WFILTDNCLYYFEYTTDKPRGIIPQENLSIREVDDPRKPNCFELYIPNNKGQLIKACKTEADGRVVEGN
 HMVYRISAPTQEEKDEWIKSIQAAVSVDPFYEMLAARKKRISVKKKQEQP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017457

ORF Size: 1200 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_017457.3](#), [NP_059431.1](#)

RefSeq Size: 1545 bp

RefSeq ORF: 1203 bp

Locus ID: 9266

UniProt ID: [Q99418](#)

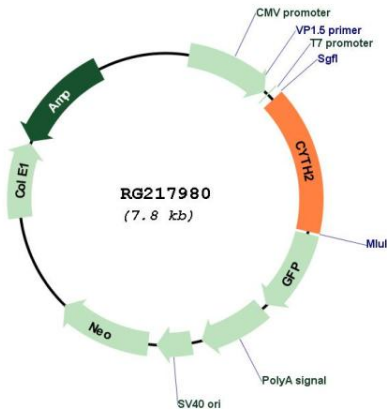
Cytogenetics: 19q13.33

Domains: Sec7, PH

Protein Families: Druggable Genome

Gene Summary: The protein encoded by this gene is a member of the PSCD family. Members of this family have identical structural organization that consists of an N-terminal coiled-coil motif, a central Sec7 domain, and a C-terminal pleckstrin homology (PH) domain. The coiled-coil motif is involved in homodimerization, the Sec7 domain contains guanine-nucleotide exchange protein (GEP) activity, and the PH domain interacts with phospholipids and is responsible for association of PSCDs with membranes. Members of this family appear to mediate the regulation of protein sorting and membrane trafficking. The encoded protein exhibits GEP activity in vitro with ARF1, ARF3, and ARF6 and is 83% homologous to CYTH1. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2008]

Product images:



Circular map for RG217980