

## Product datasheet for RC207179

### Cytohesin 2 (CYTH2) (NM\_004228) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cytohesin 2 (CYTH2) (NM_004228) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYTH2
Synonyms:	ARNO; CTS18; CTS18.1; cytohesin-2; PSCD2; PSCD2L; SEC7L; Sec7p-L; Sec7p-like
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC207179 representing NM_004228 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGAGGACGGCGTCTATGAACCCCGAGACCTGACTCCGGAGGAGCGGATGGAGCTGGAGAACATCCGGC  
GGCGGAAGCAGGAGCTGCTGGTGGAGATTACGCGCCTGCGGGAGGAGCTCAGTGAAGCCATGAGCGAGGT  
GGAGGGCTGGAGGCAATGAGGGCAGTAAGACCTTGCAACGGAACCGGAAGATGGCAATGGGCAGGAAG  
AAGTTCAACATGGACCCCAAGAAGGGGATCCAGTTCTTGGTGGAGAATGAACTGCTGCAGAACACACCCG  
AGGAGATCGCCCGCTTCCGTGTACAAGGGCGAGGGGCTGAACAAGACAGCCATCGGGGACTACCTGGGGGA  
GAGGGAAGAACTGAACCTGGCAGTGTCCATGCTTTTGTGGATCTGCATGAGTTCACCGACCTCAATCTG  
GTGCAGGCCCTCAGGCAGTTTCTATGGAGCTTTCGCTACCCGGAGAGGCCAGAAAATTGACCGGATGA  
TGGAGGCTTCGCCCAGCGATACTGCCTGTGCAACCCTGGGGTTTTCCAGTCCACAGACACGTGCTATGT  
GCTGTCTTCGCCGTCATCATGCTCAACACCAGTCTCCACAATCCAATGTCCGGGACAAGCCGGGCGCTG  
GAGCGCTTTGTGGCCATGAACCGGGGCATCAACGAGGGCGGGACCTGCCTGAGGAGCTGCTCAGGAACC  
TGTACGACAGCATCCGAAATGAGCCCTCAAGATTCTGAGGATGACGGGAATGACCTGACCCACACCTT  
CTTCAACCCGGACCGGGAGGGCTGGCTCCTGAAGCTGGGGGCGGGTGAAGACGTGGAAGCGGGCGCTGG  
TTTATCTCACAGACAACCTGCCTCTACTACTTTGAGTACACCACGACAAGGAGCCCGAGGAATCATCC  
CCCTGGAGAATCTGAGCATCCGAGAGGTGGACGACCCCGGAAACCGAACTGCTTTGAACTTTACATCCC  
CAACAACAAGGGGAGCTCATCAAAGCCTGCAAACTGAGGCGGACGGCCGAGTGGTGGAGGAAACCCAC  
ATGGTGTACCGGATCTCGCCCCACGAGGAGGAGAAGGACGAGTGGATCAAGTCCATCCAGGCGGCTG  
TGAGTGTGGACCCCTTCTATGAGATGCTGGCAGCGAGAAAGAAGCGGATTCAGTCAAGAAGAAGCAGGA  
GCAGCCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC207179 representing NM\_004228  
 Red=Cloning site Green=Tags(s)

MEDGVYEPPDLTPEERMELNIRRRKQELLVEIQRLREELSEAMSEVEGLEANEKSKTLQRNRKAMGRK  
 KFNMDPKKGIQFLVENELLQNTPEEIAFLYKGEGLNKTAIGDYLGEREELNLAVLHAFVDLHEFTDLNL  
 VQALRQFLWSFRLPGEAQKIDRMFAAQRYCLCNPVGFQSTDTCYVLSFAVIMLNTSLHNPVNRDKPGL  
 ERFVAMNRGINEGGDLPEELLRNLYDSIRNEPFKIPEDDGNDLTHTFNPDREGWLLKLGGRVKTWKRRW  
 F.I.L.T.D.N.C.L.Y.Y.F.E.Y.T.T.D.K.E.P.R.G.I.I.P.L.E.N.L.S.I.R.E.V.D.D.P.R.K.P.N.C.F.E.L.Y.I.P.N.N.K.G.Q.L.I.K.A.C.K.T.E.A.D.G.R.V.V.E.G.N.H  
 M.Y.R.I.S.A.P.T.Q.E.E.K.D.E.W.I.K.S.I.Q.A.A.V.S.V.D.P.F.Y.E.M.L.A.A.R.K.K.R.I.S.V.K.K.K.Q.E.Q.P

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

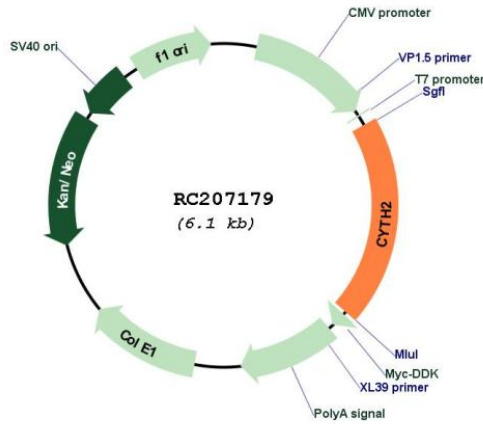
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



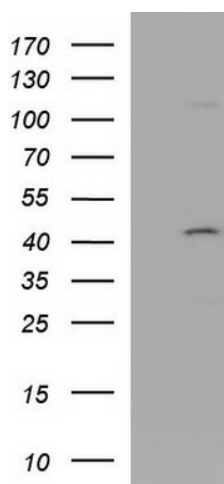
Plasmid Map:



ACCN:

NM\_004228

<b>ORF Size:</b>	1197 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_004228.7</a>
<b>RefSeq Size:</b>	4622 bp
<b>RefSeq ORF:</b>	1200 bp
<b>Locus ID:</b>	9266
<b>UniProt ID:</b>	<a href="#">Q99418</a>
<b>Cytogenetics:</b>	19q13.33
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	46.5 kDa
<b>Gene Summary:</b>	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:**

HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CYTH2 (Cat# RC207179, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CYTH2 (Cat# [TA590845]).