

## Product datasheet for **RG218099**

### Cytohesin 1 (CYTH1) (NM\_017456) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cytohesin 1 (CYTH1) (NM_017456) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cytohesin 1
Synonyms:	B2-1; CYTOHESIN-1; D17S811E; PSCD1; SEC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218099 representing NM_017456 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGAGGACGACAGCTACGTTCCAGTGACCTGACAGCAGAGGAGCGTCAAGAACTGGAGAACATCC  
GACGGAGAAAACAGGAGCTGCTGGCTGACATTCAGAGGCTGAAGGATGAGATAGCAGAAGTAGCTAATGA  
AATTGAAAACCTGGGATCCACAGAGGAAAGGAAAAACATGCAGAGGAACAACAGGTAGCCATGGGCAGG  
AAAAAATTAATATGGACCCTAAAAGGGGATCCAGTTCTTAATAGAGAACGACCTCCTGAAGAACACTT  
GTGAAGACATTGCCAGTTCTTATATAAAGGCGAAGGGCTCAACAAGACAGCCATCGGCGACTACCTAGG  
GGAGAGAGATGAGTTAATATCCAGTTCTTCATGCATTTGTGGAGCTGCATGAGTTCACCTGATCTTAAT  
CTCGTCCAGGCACTACGGCAGTTCTGTGGAGCTTCCGGCTACCCGGAGAGGCCAGAAGATCGACCCGGA  
TGATGGAGGCGTTTGGCCAGCGATATTGTCAAGTCAATAATGGCGTGTCCAGTCCACGGATACTTGTTA  
CGTCTCTCCTTTGCCATCATCATGTTGAACACCAAGTCTGCACAACCCCAATGTCAAAGATAAGCCCACT  
GTGGAGAGGTTTCATTGCCATGAACCGAGGCATCAATGATGGGGGAGACCTGCCGGAGGAGCTCCTCCGGA  
ATCTCTATGAGAGCATAAAAAATGAACCCTTTAAAATCCCAGAAGACGACGGGAATGACCTCACTCACAC  
TTTCTTCAATCCAGACCGAGAAGGCTGGCTATTGAAACTCGGTGGCAGGGTAAAGACTTGGAAAGAGACGC  
TGGTTCTTCTGACTGACAACCTGCCTTTACTACTTTGAGTATACCAGGATAAGGAGCCCGTGGAATCA  
TCCCTTTAGAGAATCTGAGTATCCGGGAAGTGGAGGACTCCAAAAAACCAACTGCTTTGAGCTTTATAT  
CCCCGACAATAAAGACCAAGTTATCAAGCCTGCAAGACCGAGGCTGACGGGCGGGTGGTGGAGGGGAAC  
CACACTGTTTACCGATCTCAGCTCCGACGCCGAGGAGAAGGAGGAGTGGATTAAGTGCATTAAGCAG  
CCATCAGCAGGGACCTTTCTACGAAATGCTCGCAGCACGAAAAAGAAGGTCTCTCCACGAAGCGACA  
C

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG218099 representing NM\_017456  
Red=Cloning site Green=Tags(s)

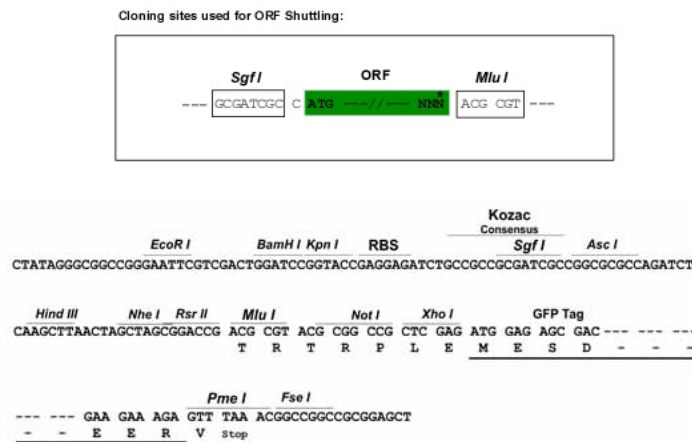
MEEDDSYVPSDLTAEERQELNIRRRKQELLADIQRLKDEIAEVANEIENLGSTEERKNMQRNKQVAMGR  
 KKFNMDPKKGIQFLIENDLLKNTCEDIAQFLYKGEGLNKTAIGDYLGERDEFNIQVLHAFVELHEFTDLN  
 LVQALRQFLWSFRLPGEAQKIDRMMEAFQRYCQCNNGVFQSTDTCYVLSFAIIMLNTSLHNPVNDKDKPT  
 VERFIAMNRGINDGGDLPEELLRNLYESIKNEPFKIPEDDGNLTHTFNPDREGWLLKLGGRVKTWKRR  
 WFILTDNCLYYFEYTTDKPRGIIPLENLSIREVEDSKKPNCFELYIPDNKDQVIKACKTEADGRVVEGN  
 HTVYRISAPTPEEKEEWIKCIKAAISRDPFYEMLAARKKKVSSTKRH

TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja3211\\_e06.zip](https://cdn.origene.com/chromatograms/ja3211_e06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_017456

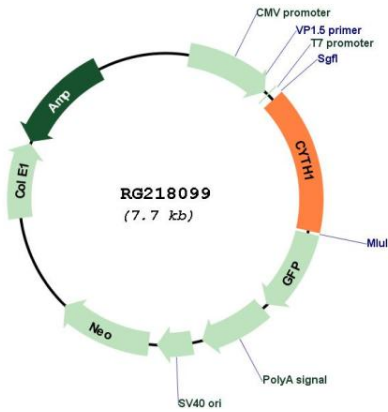
**ORF Size:** 1188 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

<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_017456.4</a>
<b>RefSeq Size:</b>	3363 bp
<b>RefSeq ORF:</b>	1194 bp
<b>Locus ID:</b>	9267
<b>UniProt ID:</b>	<a href="#">Q15438</a>
<b>Cytogenetics:</b>	17q25.3
<b>Domains:</b>	Sec7, PH
<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 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. This gene is highly expressed in natural killer and peripheral T cells, and regulates the adhesiveness of integrins at the plasma membrane of lymphocytes. A pseudogene of this gene has been defined on the X chromosome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

Product images:



Circular map for RG218099