

## Product datasheet for RC206003

### Cytohesin 3 (CYTH3) (NM\_004227) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cytohesin 3 (CYTH3) (NM_004227) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytohesin 3
Synonyms:	ARNO3; cytohesin-3; GRP1; PSCD3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206003 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATGAAGACGGCGGCGGAGGGTGGTGGCGTGCCTGAAGACCTCTCATTAGAAGAGAGAGAAGAAC  
TTCTAGACATTCGTCGAAGAAAAAGGAACCTATTGATGACATTGAGAGGCTGAAATATGAAATTGCAGA  
GGTGATGACAGAGATCGACAATCTAACTCCGTAGAGGAGAGCAAACGACTCAGAGGAACAAACAGATA  
GCCATGGGAAGAAAGAAATCAACATGGATCCCAAAAAGGGAATTCAGTTTCTAATAGAAAATGACCTGC  
TACAGAGTTCCCCAGAAGACGTCGCCAGTTCCCTTTATAAAGGAGAAGGCCTAAATAAGACCGTCATTGG  
GGACTACCTGGGTGAAAGGGATGAATTTAATATTAAAGTTCTTCAAGCCTTTGTTGAACTCCATGAGTTT  
GCTGATCTCAACCTTGTACAAGCCTTAAGGCAGTTCTTATGGAGCTTCAGGCTGCCCGGGGAGGCGCAGA  
AGATTGATCGCATGATGGAGGCTTTCGCTTCTCGCTACTGCCTGTGCAACCCCGGGTCTTCCAGTCCAC  
AGACACGTGCTACGTGCTGTCAATCGCCATCATCATGCTCAACACCAGCCTCCACAACCAACGTGCGT  
GACAAGCCACGGCAGAACGGTTCATCGCCATGAACCGCGGCATCAACGAGGGCGGGGACCTCCCTGAGG  
AGCTGCTGAGGAATTTGTATGAGAGCATTAGAACGAGCCATTTAAGATCCCGGAGGACGACGGGAACGA  
CCTGACCCACACCTTCTCAACCCGACCGGAGGGCTGGCTCCTGAAGCTGGGAGGCGGTGTGAAGACC  
TGAAGCGCCGGTGGTTCATCTGACCGATAACTGCCTCTATTACTTTGAATACACAACAGATAAGGAGC  
CCAGGGGAATCATCCCGTTGGAAAACCTCAGCATCAGGGAGGTGGAGGACCCCGGAAACCAACTGTTT  
TGAGCTCTACAATCCCAGCCACAAGGGCAGGTCAAGGCCTGTAAGACGGAGCCGACGCGCCGCGTG  
GTAGAGGGGAACCATGTGGTGTACCGGATCTCAGCCCCGAGCCCGGAGGAGAAGGAGGAGTGGATGAAAT  
CCATCAAAGCCAGTATCAGCAGAGATCCCTTCTATGACATGTTGGCAACGAGGAAACGAAGGATTGCCAA  
TAAAAA

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC206003 protein sequence  
Red=Cloning site Green=Tags(s)

MDEGGGGEGGGVPEDLSLEEREELDIRRRKELIDDIERLKYEIAEVMTEIDNLSVEESKTTQRNKQI  
 AMGRKKFNMDPKKGIQFLIENDLLQSSPEDVAQFLYKGEGLNKTVIGDYLGERDEFNIKVLQAFVELHEF  
 ADLNLVQALRQFLWSFRLPGEAQKIDRMMEAFASRYCLCNPGVFQSTDTCYVLSFAIIMLNTSLHNHNVR  
 DKPTAERFIAMNRGINEGGDLPEELLRNLYESIKNEPFKIPEDDGNLTHTFNPDREGWLLKLGGRVKT  
 WKRRWFILTDNCLYYFEYTTDKPEPRGIIPLENLSIREVEDPRKPNCFELYNPSHKGVKACKTEADGRV  
 VEGNHVYRISAPSPEEKKEEMKSIKASISRDPPFYDMLATRKRRIANKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6832\\_b12.zip](https://cdn.origene.com/chromatograms/mk6832_b12.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_004227

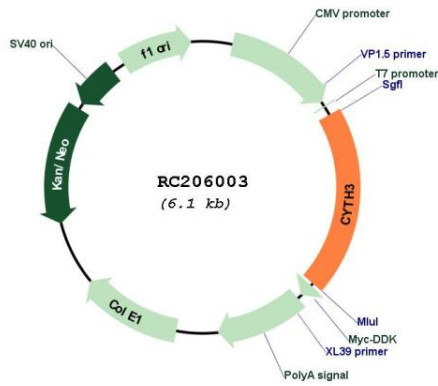
ORF Size: 1197 bp

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.

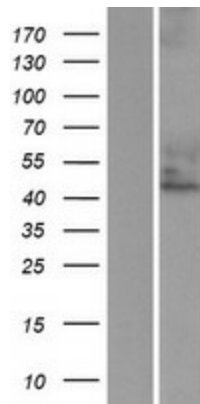
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_004227.2</a>
<b>RefSeq Size:</b>	4482 bp
<b>RefSeq ORF:</b>	1200 bp
<b>Locus ID:</b>	9265
<b>UniProt ID:</b>	<a href="#">O43739</a>
<b>Cytogenetics:</b>	7p22.1
<b>Domains:</b>	Sec7, PH
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	46.3 kDa
<b>Gene Summary:</b>	This gene encodes a member of the PSCD (pleckstrin homology, Sec7 and coiled-coil domains) family. PSCD family members 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. This encoded protein is involved in the control of Golgi structure and function, and it may have a physiological role in regulating ADP-ribosylation factor protein 6 (ARF) functions, in addition to acting on ARF1. [provided by RefSeq, Jul 2008]

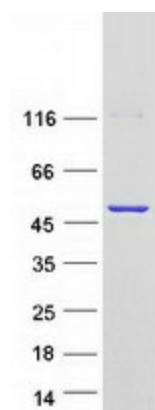
Product images:



Circular map for RC206003



Western blot validation of overexpression lysate (Cat# [LY418128]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206003 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYTH3 protein (Cat# [TP306003]). The protein was produced from HEK293T cells transfected with CYTH3 cDNA clone (Cat# RC206003) using MegaTran 2.0 (Cat# [TT210002]).