

Product datasheet for **RC208043**

PSCD4 (CYTH4) (NM_013385) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSCD4 (CYTH4) (NM_013385) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSCD4
Synonyms:	CYT4; cytohesin-4; DJ63G5.1; PSCD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208043 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACCTGTGCCACCCAGAGCCCGGGAGCTGAGCAGCGGGAGACGGAAGAGTTACAGAGGATCAAGT
 GGCACCGAAAGCAGCTCCTGGAGGACATCCAGAAGCTGAAGGATGAGATTGCAGATGTGTTTGCCCAAT
 CGACTGCTTCGAGAGTGGGAGGAGAGCCGGATGGCCAGAAGGAGAAGGAGCTGTGTATTGGGCGCAAG
 AAGTTCAACATGGACCCCGCAAGGGTATCCAGTATTTTCATTGAGCACAACTGCTGACCCCTGACGTCC
 AGGACATTGCACGGTTCCTGTATAAAGGCGAGGGCCTCAACAAGACAGCCATTGGTACCTACCTGGGGGA
 GAGGGATCCCATCAACCTGCAGGTCTCCAGGCCCTTCGTGGACTGCCACGAGTTCGCCAACCTCAACCTC
 GTCCAGGCCCTCAGGCAGTTCCTGTGGAGCTTCGGCTGCCGGGCGAGGCCAGAGATAGACCGGATGA
 TGGAGGCGCTTTGCCACTCGATACTGCCTCTGCAACCCAGGCGTCTTCCAGTCCACAGACACCTGCTACGT
 GTTGTCCTTCTCCATCATCATGCTCAACACCAGCCTCCACAATCCCAACGTCCGGGACAGGCCGCTTTC
 GAGCGCTTTGTGTCCATGAACCGCGCATCAACAATGGTAGCGACCTGCCGAGGACAGCTGCGGAACC
 TCTTCGACAGCATCAAGAGTGAGCCATTCTCCATCCCTGAGGACGACGCAATGACCTCACTCACACCTT
 CTTCAATCCAGACCGGGAGGGTTGGCTGCTCAAGCTAGGGGGCCGCTGAAGACGTGGAACGGCGCTGG
 TTCATCCTGACCGACAACCTGCCTCTACTACTTCGAGTTCACCACTGACAAGGAGCCACGGGGAATTATAC
 CTCTTGAGAACCCTCTCGGTGCAGAAGGTGGATGACCCCAAGAAGCCATTCTGCCTGGAGCTCTACAACCC
 TAGCTGCCGAGGCCAGAAAATCAAGGCCTGCAAGACCGATGGCGACGGCAGGGTGGTGGAGGGCAAGCAC
 GAATCGTACCGCATCTCAGCCACAGTCCGAGGAACGTGACCACTGGATCGAGTCCATCCGAGCCAGCA
 TCACCCGTGTCCCTTCTACGACCTGGTCTCTACTCGGAAGAAGAAGATTGCCAGCAAGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC208043 protein sequence
 Red=Cloning site Green=Tags(s)

MDLCHPEPAELSSGETEELQRIKWHRKQLLEDIQKLKDEIADVFAQIDCFESAEESRMAQKEKELCIGRK
 KFNMDPAKGIQYFIEHKLLTPDVQDIARFLYKGEGLNKTATIGTYLGERDPINLQVLQAFVDCHEFANLNL
 VQALRQFLWSFRLPGEAQKIDRMMEAFATRYCLNPGVFQSTDTCYVLSFSIIMLNTSLHNPVNRDRPPF
 ERFVSMNRGINNGSDLPEDQLRNLFDSIKSEPF SIPEDDGNDLTHTFFNPDREGWLLKLGGRVKTKWRRW
 FILTDNCLYYFEFTTDKEPRGIIIPLENLSVQKVDDPKKPFCELYNPSCRQKIKACKTDGGRVVEGKH
 ESYRISATSAEERDQWIESIRASITRVFPFDLVSTRKKKIASKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6342_f12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013385

ORF Size: 1182 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_013385.2](#), [NP_037517.1](#)

RefSeq Size: 3138 bp

RefSeq ORF: 1185 bp

Locus ID: 27128

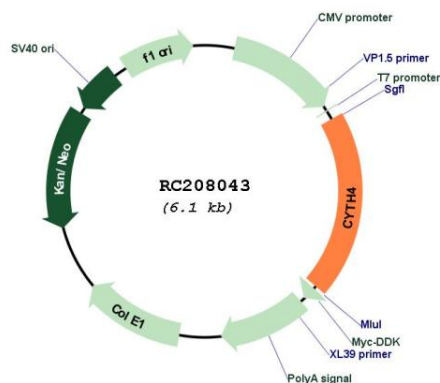
UniProt ID: [Q9UIA0](#)

Cytogenetics: 22q13.1

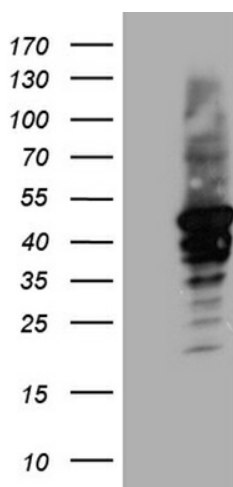
MW: 45.7 kDa

Gene Summary: This gene encodes a member of the PSCD family of proteins, which have 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 function as GEPs for ADP-ribosylation factors (ARFs), which are guanine nucleotide-binding proteins involved in vesicular trafficking pathways. This protein exhibits GEP activity in vitro with ARF1 and ARF5, but is inactive with ARF6. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2015]

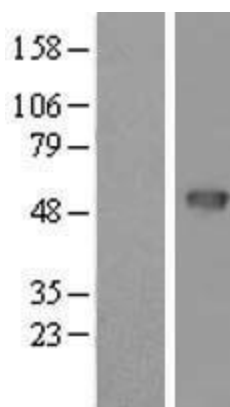
Product images:



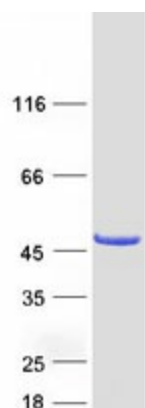
Circular map for RC208043



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CYTH4 (Cat# RC208043, 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-CYTH4 (Cat# [TA811273])(1:2000). Positive lysates [LY415608] (100ug) and [LC415608] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415608]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208043 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYTH4 protein (Cat# [TP308043]). The protein was produced from HEK293T cells transfected with CYTH4 cDNA clone (Cat# RC208043) using MegaTran 2.0 (Cat# [TT210002]).