

Product datasheet for RC212176

SHIP (INPP5D) (NM_005541) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SHIP (INPP5D) (NM_005541) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SHIP
Synonyms:	hp51CN; p150Ship; SHIP; SHIP-1; SHIP1; SIP-145
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212176 representing NM_005541 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGGTCCCCTGCTGGAACCATGGCAACATCACCCGCTCCAAGGCGGAGGAGCTGCTTTCCAGGACAGGCA
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GTGCTGGCCAAGCCTGAGCACGAGAACCGGATCAGCCACATCTGTACTGACAACGTGAAGACAGGCATTG
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Protein Sequence: >RC212176 representing NM_005541
 Red=Cloning site Green=Tags(s)

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 EPGILSPSIVLTKAQEADRGEGPKQVPAPRLRSFTCSSSAEGRAAGGDKSQGPKPTPVSSQAPVPAKR
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6280_b04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



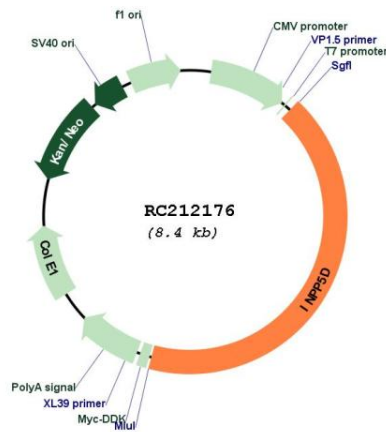
ACCN: NM_005541

ORF Size: 3564 bp

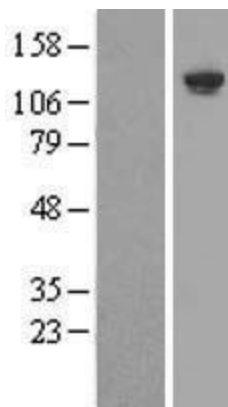
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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_005541.3 , NP_005532.2
RefSeq Size:	4925 bp
RefSeq ORF:	3567 bp
Locus ID:	3635
UniProt ID:	Q92835
Cytogenetics:	2q37.1
Domains:	SH2, Exo_endo_phos
Protein Families:	Druggable Genome
Protein Pathways:	B cell receptor signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Insulin signaling pathway, Phosphatidylinositol signaling system
MW:	133 kDa

Gene Summary:

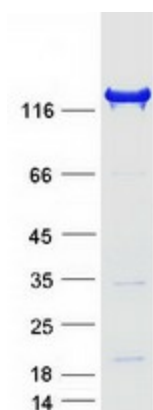
This gene is a member of the inositol polyphosphate-5-phosphatase (INPP5) family and encodes a protein with an N-terminal SH2 domain, an inositol phosphatase domain, and two C-terminal protein interaction domains. Expression of this protein is restricted to hematopoietic cells where its movement from the cytosol to the plasma membrane is mediated by tyrosine phosphorylation. At the plasma membrane, the protein hydrolyzes the 5' phosphate from phosphatidylinositol (3,4,5)-trisphosphate and inositol-1,3,4,5-tetrakisphosphate, thereby affecting multiple signaling pathways. The protein is also partly localized to the nucleus, where it may be involved in nuclear inositol phosphate signaling processes. Overall, the protein functions as a negative regulator of myeloid cell proliferation and survival. Mutations in this gene are associated with defects and cancers of the immune system. Deficiencies in the encoded protein, SHIP1, have been associated with Inflammatory Bowel Disease types such as Crohn's Disease and Ulcerative Colitis. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2020]

Product images:


Circular map for RC212176



Western blot validation of overexpression lysate (Cat# [LY417234]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212176 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified INPP5D protein (Cat# [TP312176]). The protein was produced from HEK293T cells transfected with INPP5D cDNA clone (Cat# RC212176) using MegaTran 2.0 (Cat# [TT210002]).