

### Product datasheet for TP312176M

#### OriGene Technologies, Inc.

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## SHIP (INPP5D) (NM\_005541) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human inositol polyphosphate-5-phosphatase, 145kDa (INPP5D),

transcript variant 2, 100 µg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC212176 representing NM\_005541

or AA Sequence: Red=Cloning site Green=Tags(s)

MVPCWNHGNITRSKAEELLSRTGKDGSFLVRASESISRAYALCVLYRNCVYTYRILPNEDDKFTVQASEG VSMRFFTKLDQLIEFYKKENMGLVTHLQYPVPLEEEDTGDDPEEDTESVVSPPELPPRNIPLTASSCEAK EVPFSNENPRATETSRPSLSETLFQRLQSMDTSGLPEEHLKAIQDYLSTQLAQDSEFVKTGSSSLPHLKK LTTLLCKELYGEVIRTLPSLESLQRLFDQQLSPGLRPRPQVPGEANPINMVSKLSQLTSLLSSIEDKVKA LLHEGPESPHRPSLIPPVTFEVKAESLGIPQKMQLKVDVESGKLIIKKSKDGSEDKFYSHKKILQLIKSQ KFLNKLVILVETEKEKILRKEYVFADSKKREGFCQLLQQMKNKHSEQPEPDMITIFIGTWNMGNAPPPKK ITSWFLSKGQGKTRDDSADYIPHDIYVIGTQEDPLSEKEWLEILKHSLQEITSVTFKTVAIHTLWNIRIV VLAKPEHENRISHICTDNVKTGIANTLGNKGAVGVSFMFNGTSLGFVNSHLTSGSEKKLRRNQNYMNILR FLALGDKKLSPFNITHRFTHLFWFGDLNYRVDLPTWEAETIIQKIKQQQYADLLSHDQLLTERREQKVFL HFEEEEITFAPTYRFERLTRDKYAYTKQKATGMKYNLPSWCDRVLWKSYPLVHVVCQSYGSTSDIMTSDH SPVFATFEAGVTSQFVSKNGPGTVDSQGQIEFLRCYATLKTKSQTKFYLEFHSSCLESFVKSQEGENEEG SEGELVVKFGETLPKLKPIISDPEYLLDQHILISIKSSDSDESYGEGCIALRLEATETQLPIYTPLTHHG ELTGHFQGEIKLQTSQGKTREKLYDFVKTERDESSGPKTLKSLTSHDPMKQWEVTSRAPPCSGSSITEII NPNYMGVGPFGPPMPLHVKQTLSPDQQPTAWSYDQPPKDSPLGPCRGESPPTPPGQPPISPKKFLPSTA

RGLPPRTQESRPSDLGKNAGDTLPQEDLPLTKPEMFENPLYGSLSSFPKPAPRKDQESPKMPRKEPPPCP EPGILSPSIVLTKAQEADRGEGPGKQVPAPRLRSFTCSSSAEGRAAGGDKSQGKPKTPVSSQAPVPAKRP IKPSRSEINQQTPPTPTPRPPLPVKSPAVLHLQHSKGRDYRDNTELPHHGKHRPEEGPPGPLGRTAMQ

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-Myc/DDK
Predicted MW: 133 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method





#### SHIP (INPP5D) (NM\_005541) Human Recombinant Protein - TP312176M

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 005532

 Locus ID:
 3635

 UniProt ID:
 Q92835

 RefSeq Size:
 4925

 Cytogenetics:
 2q37.1

 RefSeq ORF:
 3564

Synonyms: hp51CN; p150Ship; SHIP; SHIP-1; SHIP1; SIP-145

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]

**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



# **Product images:**



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]).