

Product datasheet for **RG218040**

SHIP (INPP5D) (NM_001017915) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SHIP (INPP5D) (NM_001017915) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	INPP5D
Synonyms:	hp51CN; p150Ship; SHIP; SHIP-1; SHIP1; SIP-145
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218040 representing NM_001017915 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGGTCCCCTGCTGGAACCATGGCAACATCACCCGCTCCAAGGCGGAGGAGCTGCTTTCCAGGACAGGCA
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GTGGTGTGCGCAAGCCTGAGCACGAGAACCGGATCAGCCACATCTGTACTGACAACGTGAAGACAGGCA
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CCCGCATCACGGCAAGCACCGGCCGAGGAGGGGCCACCAGGGCCTCTAGGCAGGACTGCCATGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218040 representing NM_001017915
 Red=Cloning site Green=Tags(s)

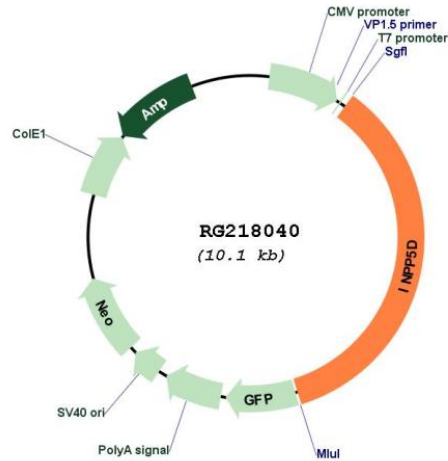
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
 Cloning Scheme:



Plasmid Map:



ACCN: NM_001017915

ORF Size: 3567 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.

RefSeq: [NM_001017915.1](#), [NP_001017915.1](#)

RefSeq Size: 4928 bp

RefSeq ORF: 3570 bp

Locus ID: 3635

UniProt ID: [Q92835](#)

Cytogenetics: 2q37.1

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
Gene Summary:	<p>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]</p>