

# INPP5D antibody - C-terminal region

Rabbit Polyclonal Antibody

Catalog # AI14603

## Product Information

Application	WB
Primary Accession	<a href="#">Q92835</a>
Other Accession	<a href="#">NM_001017915</a> , <a href="#">NP_001017915</a>
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	133292

## Additional Information

Gene ID	3635
Alias Symbol Other Names	MGC104855, MGC142140, MGC142142, SHIP, SHIP1, SIP-145, hp51CN Phosphatidylinositol 3, 4, 5-trisphosphate 5-phosphatase 1, 3.1.3.86, Inositol polyphosphate-5-phosphatase of 145 kDa, SIP-145, SH2 domain-containing inositol 5'-phosphatase 1, SH2 domain-containing inositol phosphatase 1, SHIP-1, p150Ship, hp51CN, INPP5D, SHIP, SHIP1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-INPP5D antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	INPP5D antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Name	INPP5D
Synonyms	SHIP {ECO:0000303   PubMed:10764818}, SHIP
Function	Phosphatidylinositol (PtdIns) phosphatase that specifically hydrolyzes the 5-phosphate of phosphatidylinositol-3,4,5-trisphosphate (PtdIns(3,4,5)P3) to produce PtdIns(3,4)P2, thereby negatively regulating the PI3K (phosphoinositide 3-kinase) pathways (PubMed: <a href="#">10764818</a> , PubMed: <a href="#">8723348</a> , PubMed: <a href="#">8769125</a> ). Able also to hydrolyzes the 5-phosphate of phosphatidylinositol-4,5-bisphosphate (PtdIns(4,5)P3) and inositol

1,3,4,5-tetrakisphosphate (PubMed:[10764818](#), PubMed:[8769125](#), PubMed:[9108392](#)). Acts as a negative regulator of B-cell antigen receptor signaling. Mediates signaling from the FC-gamma-RIIB receptor (FCGR2B), playing a central role in terminating signal transduction from activating immune/hematopoietic cell receptor systems. Acts as a negative regulator of myeloid cell proliferation/survival and chemotaxis, mast cell degranulation, immune cells homeostasis, integrin alpha-IIb/beta-3 signaling in platelets and JNK signaling in B-cells. Regulates proliferation of osteoclast precursors, macrophage programming, phagocytosis and activation and is required for endotoxin tolerance. Involved in the control of cell-cell junctions, CD32a signaling in neutrophils and modulation of EGF-induced phospholipase C activity (PubMed:[16682172](#)). Key regulator of neutrophil migration, by governing the formation of the leading edge and polarization required for chemotaxis. Modulates FCGR3/CD16-mediated cytotoxicity in NK cells. Mediates the activin/TGF-beta-induced apoptosis through its Smad-dependent expression.

## Cellular Location

Cytoplasm. Cell membrane {ECO:0000250|UniProtKB:Q9ES52}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9ES52}. Membrane raft {ECO:0000250|UniProtKB:Q9ES52}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9ES52}. Membrane; Peripheral membrane protein Note=Translocates to the plasma membrane when activated, translocation is probably due to different mechanisms depending on the stimulus and cell type. Translocates from the cytoplasm to membrane ruffles in a FCGR3/CD16-dependent manner. Colocalizes with FC-gamma-RIIB receptor (FCGR2B) or FCGR3/CD16 at membrane ruffles. Tyrosine phosphorylation may also participate in membrane localization {ECO:0000250|UniProtKB:Q9ES52}

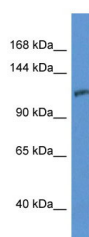
## Tissue Location

Specifically expressed in immune and hematopoietic cells. Expressed in bone marrow and blood cells. Levels vary considerably within this compartment. Present in at least 74% of immature CD34+ cells, whereas within the more mature population of CD33+ cells, it is present in only 10% of cells. Present in the majority of T-cells, while it is present in a minority of B-cells (at protein level).

## References

Drayer A.L.,et al.Biochem. Biophys. Res. Commun. 225:243-249(1996).  
Ware M.D.,et al.Blood 88:2833-2840(1996).  
Kavanaugh W.M.,et al.Curr. Biol. 6:438-445(1996).  
Geier S.J.,et al.Blood 89:1876-1885(1997).  
Odai H.,et al.Blood 89:2745-2756(1997).

## Images



WB Suggested Anti-INPP5D Antibody Titration: 1.0 µg/ml  
Positive Control: THP-1 Whole Cell

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.