

SHIP1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51284**Specification**

SHIP1 Antibody - Product Information

Application	WB
Primary Accession	O92835
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	145 KDa
Antigen Region	1121 - 1180

SHIP1 Antibody - Additional Information**Gene ID** 3635**Other Names**

Phosphatidylinositol 3, 5-trisphosphate 5-phosphatase 1, 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

Target/Specificity

KLH conjugated synthetic peptide derived from human SHIP1

Dilution

WB~~ 1:1000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

SHIP1 Antibody - 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:10764818, PubMed:8723348, PubMed:8769125). 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).

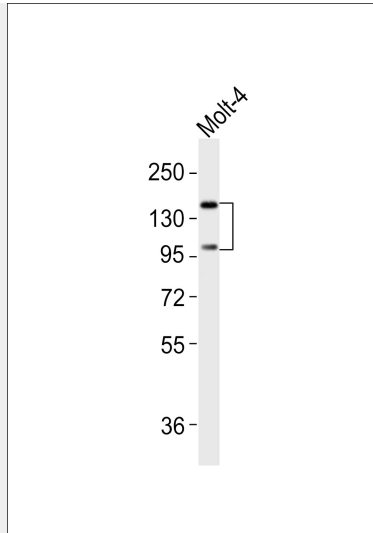
SHIP1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SHIP1 Antibody - Images





Anti-SHIP1 Antibody at 1:1000 dilution + Molt-4 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 133 kDa Blocking/Dilution buffer: 5% NFD/MTBST.

SHIP1 Antibody - Background

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. Acts as a negative regulator of B-cell antigen receptor signaling. Mediates signaling from the FC-gamma-R1IB 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. 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. May also hydrolyze PtdIns(1,3,4,5)P₄, and could thus affect the levels of the higher inositol polyphosphates like InsP₆.

SHIP1 Antibody - 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).