

INPP5D antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al14603

Specification

INPP5D antibody - C-terminal region - Product Information

Application WB
Primary Accession 092835

Other Accession NM 001017915, NP 001017915

Reactivity Human, Mouse, Rat, Rabbit, Pig, Horse,

Bovine, Guinea Pig, Dog

Predicted Human, Mouse, Rat, Rabbit, Pig, Horse,

Bovine, Guinea Pig, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 131kDa KDa

INPP5D antibody - C-terminal region - Additional Information

Gene ID 3635

Alias Symbol MGC104855, MGC142140, MGC142142,

SHIP, SHIP1, SIP-145, hp51CN

Other Names

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.

INPP5D antibody - C-terminal region - 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 INK 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).

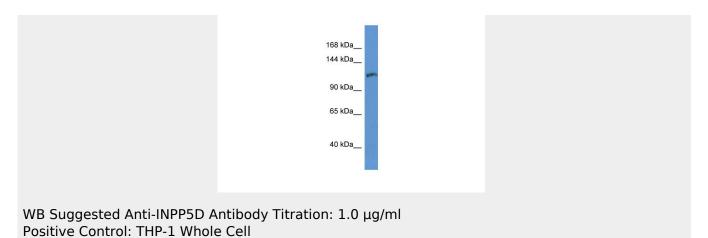
INPP5D antibody - C-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

INPP5D antibody - C-terminal region - Images





INPP5D antibody - C-terminal region - 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).