

Product datasheet

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ARG40401 anti-SHIP1 phospho (Tyr1020) antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes SHIP1 phospho (Tyr1020)

Tested Reactivity Hu

Tested Application ICC/IF, IP, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name SHIP1

Species Human

Immunogen Phosphospecific peptide around Tyr1020 of Human SHIP1.

Conjugation Un-conjugated

Alternate Names EC 3.1.3.86; Inositol polyphosphate-5-phosphatase of 145 kDa; hp51CN; p150Ship; SHIP1; SIP-145;

SHIP-1; SH2 domain-containing inositol 5'-phosphatase 1; SH2 domain-containing inositol phosphatase

1; Phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 1; SHIP

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IP	1:20
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 145 kDa	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol

INPP5D

Gene Full Name

inositol polyphosphate-5-phosphatase D

Background

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.

Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Feb 2014]

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. 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. 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. [UniProt]

Calculated Mw

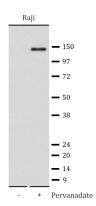
133 kDa

PTM

Tyrosine phosphorylated by the members of the SRC family after exposure to a diverse array of extracellular stimuli such as cytokines, growth factors, antibodies, chemokines, integrin ligands and hypertonic and oxidative stress. Phosphorylated upon IgG receptor FCGR2B-binding. [UniProt]

Cellular Localization

Cytoplasm. Cell membrane; Peripheral membrane protein. Membrane raft. Cytoplasm, cytoskeleton. 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. [UniProt]



ARG40401 anti-SHIP1 phospho (Tyr1020) antibody WB image

Western blot: Raji cells untreated or treated with pervanadate. Cell lysates were stained with ARG40401 anti-SHIP1 phospho (Tyr1020) antibody.