

Rabbit anti-Human SHIP2 Polyclonal Antibody | anti-SHIP2 antibody

Phospho-SHIP2 (Tyr1135) Antibody

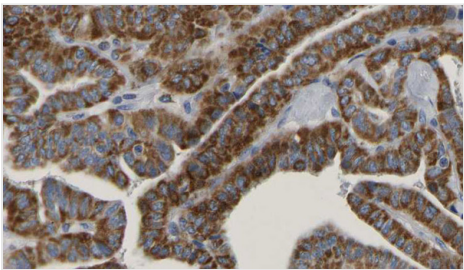
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321388	Rabbit	Human	Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

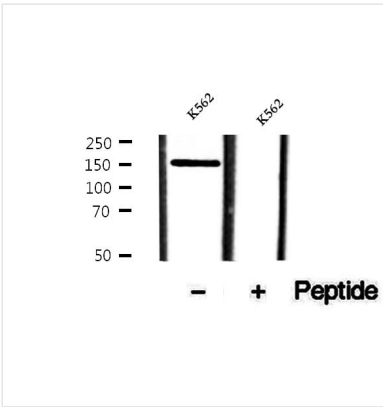
SHIP2; Polyclonal Antibody; Phospho-SHIP2 (Tyr1135) Antibody; 4; 5-trisphosphate 5-phosphatase 2; 51C protein; EC 3.1.3.n1; inositol polyphosphate phosphatase like 1; Inositol polyphosphate phosphatase like protein 1; Inositol polyphosphate phosphatase-like protein 1; INPPL-1; INPPL1; OPSMD; Phosphatidylinositol 3; 5 trisphosphate 5 phosphatase 2; Protein 51C; SH2 domain containing inositol 5' phosphatase 2; SH2 domain-containing inositol 5"-phosphatase 2; SH2 domain-containing inositol phosphatase 2; SHIP-2; SHIP2_HUMAN; anti-SHIP2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-SHIP2 (Tyr1135) antibody detects endogenous levels of SHIP2.
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1258
Applicable Applications for anti-SHIP2 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human SHIP2 around the phosphorylation site of Tyr1135.
Subcellular Location	Cytoplasm > Cytosol. Cytoplasm > Cytoskeleton > Actin Patch. Membrane. Translocates to membrane ruffles when activated, translocation is probably due to different mechanisms depending on the stimulus and cell type. Partly translocated via its SH2 domain which mediates interaction with tyrosine phosphorylated receptors such as the FC-gamma-RIIB receptor (FCGR2B). Tyrosine phosphorylation may also participate in membrane localization. Insulin specifically stimulates its redistribution from the cytosol to the plasma membrane. Recruited to the membrane following M-CSF stimulation.
Tissue Specificity	Widely expressed, most prominently in skeletal muscle, heart and brain. Present in platelets. Expressed in transformed myeloid cells and in primary macrophages, but not in peripheral blood monocytes.
Predicted Cross Reactivity	Bovine, Horse, Sheep, Rabbit, Dog, Xenopus
Similarity	Bovine (92%), Horse (100%), Sheep (92%), Rabbit (100%), Dog (92%), Xenopus (86%)
Conjugation	Unconjugated
Epitope	Phospho Tyr1135
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohiostchemistry)
AAA321388 at 1/100 staining Human thyroid cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts of K562 cells, using Phospho-SHIP2 (Tyr1135) Antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-SHIP2 antibody	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. Plays a central role in regulation of PI3K-dependent insulin signaling, although the precise molecular mechanisms and signaling pathways remain unclear. While overexpression reduces both insulin-stimulated MAP kinase and Akt activation, its absence does not affect insulin signaling or GLUT4 trafficking. Confers resistance to dietary obesity. May act by regulating AKT2, but not AKT1, phosphorylation at the plasma membrane. Part of a signaling pathway that regulates actin cytoskeleton remodeling. Required for the maintenance and dynamic remodeling of actin structures as well as in endocytosis, having a major impact on ligand-induced EGFR internalization and degradation. Participates in regulation of cortical and submembraneous actin by hydrolyzing PtdIns(3, 4, 5)P3 thereby regulating membrane ruffling (PubMed:21624956). Regulates cell adhesion and cell spreading. Required for HGF-mediated lamellipodium formation, cell scattering and spreading. Acts as a negative regulator of EPHA2 receptor endocytosis by inhibiting via PI3K-dependent Rac1 activation. Acts as a regulator of neuritogenesis by regulating PtdIns(3, 4, 5)P3 level and is required to form an initial protrusive pattern, and later, maintain proper neurite outgrowth. Acts as a negative regulator of the FC-gamma-RIIA receptor (FCGR2A). Mediates signaling from the FC-gamma-RIIB receptor (FCGR2B), playing a central role in terminating signal transduction from activating immune/hematopoietic cell receptor systems. Involved in EGF signaling pathway. Upon stimulation by EGF, it is recruited by EGFR and dephosphorylates PtdIns(3, 4, 5)P3. Plays a negative role in regulating the PI3K-PKB pathway, possibly by inhibiting PKB activity. Down-regulates Fc-gamma-R-mediated phagocytosis in macrophages independently of INPP5D/SHIP1. In macrophages, down-regulates NF-kappa-B-dependent gene transcription by regulating macrophage colony-stimulating factor (M-CSF)-induced signaling. May also hydrolyze PtdIns(1, 3, 4, 5)P4, and could thus affect the levels of the higher inositol polyphosphates like InsP6. Involved in endochondral ossification. Subunit Structure: Interacts with tyrosine phosphorylated form of SHC1 (PubMed:9660833, PubMed:10194451, PubMed:11349134). Interacts with EGFR (PubMed:11349134). Upon stimulation by the EGF signaling pathway, it forms a complex with SHC1 and EGFR (PubMed:11349134). Interacts with cytoskeletal protein SORBS3/vinexin, promoting its localization to the periphery of cells (PubMed:16302969). Forms a complex with filamin (FLNA or FLNB), actin, GPIb (GP1BA or GP1BB) that regulates cortical and submembraneous actin (PubMed:11739414, PubMed:12676785). Interacts with c-Met/MET, when c-Met/MET is phosphorylated on 'Tyr-1356' (PubMed:15735664). Interacts with p130Cas/BCAR1 (PubMed:11158326). Interacts with CENTD3/ARAP3 via its SAM domain (PubMed:17314030). Interacts with c-Cbl/CBL and CAP/SORBS1 (PubMed:12504111). Interacts with activated EPHA2 receptor (PubMed:17135240). Interacts with receptor FCGR2A (PubMed:12690104). Interacts with receptor FCGR2B (PubMed:11016922). Interacts with tyrosine kinase ABL1 (PubMed:10194451). Interacts with tyrosine kinase TEC (By similarity). Interacts with CSF1R (By similarity). Interacts (via N-terminus) with SH3YL1 (via SH3 domain) (PubMed:21624956). Interacts with FCRL6 (tyrosine phosphorylated form) (PubMed:20933011). Post-translational Modifications: Tyrosine phosphorylated by the members of the SRC family after exposure to a diverse array of extracellular stimuli such as insulin, growth factors such as EGF or PDGF, chemokines, integrin ligands and hypertonic and oxidative stress. May be phosphorylated upon IgG receptor FCGR2B-binding. Phosphorylated at Tyr-986 following cell attachment and spreading. Phosphorylated at Tyr-1162 following EGF signaling pathway stimulation. Phosphorylated at Thr-958 in response to PDGF. Similarity: The SH2 domain interacts with tyrosine phosphorylated forms of proteins such as SHC1 or FCGR2A. It also mediates the interaction with p130Cas/BCAR1. The NPXY sequence motif found in many tyrosine-phosphorylated proteins is required for the specific binding of the PID domain. Belongs to the inositol 1, 4, 5-trisphosphate 5-phosphatase family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	222136583
NCBI GeneID	3636
NCBI Accession #	NP_001558.3
NCBI GenBank Nucleotide #	NM_001567.3
UniProt Accession #	O15357; Q13577; Q13578; B2RTX5
Molecular Weight	Observed: 160 kDa Predicted: 139 kDa
NCBI Official Full Name	phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2

NCBI Official Synonym Full Names	inositol polyphosphate phosphatase like 1
NCBI Official Symbol	INPPL1
NCBI Official Synonym Symbols	OPSMD; SHIP2
NCBI Protein Information	phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2
UniProt Protein Name	Phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2
UniProt Gene Name	INPPL1
UniProt Synonym Gene Names	SHIP2; INPPL-1; SH2 domain-containing inositol phosphatase 2; SHIP-2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ship2-antibody-immunohistochemistry-western-blot-elisa/321388>