

<b>Product name:</b>	SHIP (1118) Rabbit Monoclonal Antibody
<b>Cat number:</b>	MABN17862
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100µL
<b>Clone:</b>	Monoclonal
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Immunogen:</b>	A synthetic peptide of human SHIP-1
<b>Reactivity:</b>	Human, Mouse
<b>Applications:</b>	WB 1:500-1:2000, IHC 1:100-1:500, ICC/IF 1:100-1:200, FC 1:20-1:50, IP 1:20-1:50
<b>Molecular Weight:</b>	133kDa
<b>Purification:</b>	Affinity purification
<b>Form:</b>	Liquid
<b>Buffer:</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage:</b>	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

**Background:**

SHIP is an SH2-containing inositol phosphatase. A hemopoietic-specific phosphatase that regulates cell survival, growth, cell cycle arrest and apoptosis. Hydrolyzes Ins(1,3,4,5)P<sub>4</sub> and PtdIns(3,4,5)P<sub>3</sub>. A cytosolic protein with a SH2 domain in its N-terminus and two NPXY Shc binding motifs at its C-terminus. Phosphatidylinositol (PtdIns) phosphatase that specifically hydrolyzes the 5-phosphate of phosphatidylinositol-3,4,5-trisphosphate (PtdIns(3,4,5)P<sub>3</sub>) to produce PtdIns(3,4)P<sub>2</sub>, thereby negatively regulating the PI3K (phosphoinositide 3-kinase) pathways (PubMed:8723348, PubMed:10764818, PubMed:8769125). Able also to hydrolyze the 5-phosphate of phosphatidylinositol-4,5-bisphosphate (PtdIns(4,5)P<sub>3</sub>) and inositol 1,3,4,5-tetrakisphosphate (PubMed:9108392, PubMed:10764818, PubMed:8769125). 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.