Anti-Phospho-SHIP Antibody, Polyclonal

Antibodies

Rabbit polyclonal antibody against human, mouse phosphoSHIP,

unconjugated

Catalog #60142 100 µL



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Product Description

Phospho-SHIP is a highly phosphorylated form of SHIP. SH2-containing inositol phosphatase (SHIP) is a 145 kDa hematopoietic-restricted protein that becomes tyrosine-phosphorylated and associated with the adaptor protein, Shc, following cytokine, growth factor, chemokine, and immunoreceptor stimulation. SHIP also hydrolyzes the critical phosphatidylinositol (PI)-3-kinase (PI3K)-generated second messenger, PI-3,4,5-P3 (PIP3), to PI-3,4-P2 1,2 and therefore acts as an important negative regulator of the PI3K pathway. This antibody reacts with mouse and human tyrosine-phosphorylated SHIP.

Target Antigen Name: PhosphoSHIP

Alternative Names: p150Ship; phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 1; SHIP-1; SHP-145; s-SHIP

Gene ID: 3635 (human), 16331 (mouse)

Species Reactivity: Human, Mouse

Host Species: Rabbit
Clonality: Polyclonal
Clone: Not applicable
Isotype: Not applicable

Immunogen: Phosphopeptide comprising residues surrounding the phosphorylated tyrosine (Y1020) of human SHIP

Conjugate: Unconjugated

Applications

Verified: FC, IF, WB

Reported: FC, ICC, IF, IP, WB

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation: Phosphate-buffered solution, pH 7.4, containing 0.01% bovine serum albumin, 0.05% sodium azide, and

50% glycerol

Purification: The antibody was purified by affinity chromatography.

Stability and Storage: Product stable at -20°C when stored undiluted. For product expiry date, please contact

techsupport@stemcell.com.

Directions for Use: The suggested use of this antibody is: FC, IF, 1 in 100 to 1 in 1000 dilution; IP, 5 μL in 500 μL of cell lysate

from 1 x 10⁶ cells; WB, 1 in 2500 to 1 in 5000 dilution. It is recommended that the antibody be titrated for

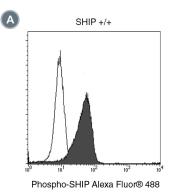
optimal performance for each application.

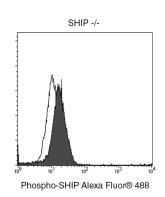
Antibodies

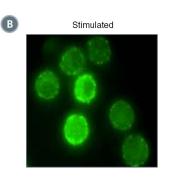
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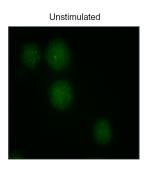


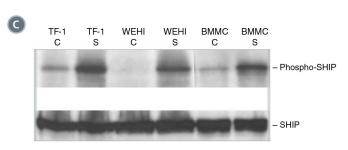
Data











- (A) Flow cytometry analysis of bone marrow-derived mast cells (BMMCs) from normal (+/+) or SHIP knockout (-/-) mice. Cells were stimulated with stem cell factor (SCF; filled histogram) or left unstimulated (solid line historgram), and then fixed, permeabilized, and labeled with Anti-Phospho-SHIP Antibody, Polyclonal, followed by an anti-rabbit Alexa Fluor® 488.
- (B) BMMCs were either stimulated with SCF or left unstimulated, and then fixed, permeabilized, and labeled with Anti-Phospho-SHIP Antibody, Polyclonal, followed by an anti-rabbit Alexa Fluor® 488.
- (C) Western blot analysis of total cell lysates from human TF-1 cells stimulated with IL-3, mouse WEHI-231 B cells stimulated with anti-IgM, and mouse BMMCs stimulated with SCF, and probed with Anti-Phospho-SHIP Antibody, Polyclonal. The blot was re-probed with an anti-SHIP antibody to show equal loading of unstimulated (C) and stimulated (S) samples. Phospho-SHIP has a predicted molecular mass of 145 kDa.

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

- 1. MacGlashan D. (2012) Subthreshold desensitization of human basophils re-capitulates the loss of Syk and FcɛRl expression characterized by other methods of desensitization. Clin Exp Allergy 42(7): 1060–70. (WB)
- 2. Williams EL et al. (2012) Development and characterisation of monoclonal antibodies specific for the murine inhibitory FcγRIIB (CD32B). Eur J Immunol 42(8): 2109–20. (WB)
- 3. Kuroda E et al. (2011) SHIP represses Th2 skewing by inhibiting IL-4 production from basophils. J Immunol 186(1): 323-32. (WB)
- 4. Ruschmann J et al. (2010) Tyrosine phosphorylation of SHIP promotes its proteasomal degradation. Exp Hematol 38(5): 392-402, 402.e1. (IP, WB)
- 5. Sly LM et al. (2003) SHIP, SHIP2, and PTEN activities are regulated in vivo by modulation of their protein levels: SHIP is up-regulated in macrophages and mast cells by lipopolysaccharide. Exp Hematol 31(12): 1170–81.
- 6. Huber M et al. (1999) The role of SHIP in growth factor induced signalling. Prog Biophys Mol Biol 71(3-4): 423-34.
- 7. Liu L et al. (1997) SHIP, a new player in cytokine-induced signalling. Leukemia 11(2): 181-4.
- 8. Damen JE et al. (1996) The 145-kDa protein induced to associate with Shc by multiple cytokines is an inositol tetraphosphate and phosphatidylinositol 3,4,5-triphosphate 5-phosphatase. Proc Natl Acad Sci USA 93(4): 1689–93.

Antibodies

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Please refer to the Safety Data Sheet (SDS) for hazard information.

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