Anti-Ym1 Antibody, Polyclonal

Antibodies

Rabbit polyclonal IgG antibody against mouse Ym1, unconjugated

Catalog #60130

300 µL

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Product Description

Ym1 is an ~45 kDa secreted protein synthesized by activated mouse peritoneal macrophages during the inflammatory response elicited by parasitic infections. Ym1 is a granule protein in neutrophils and has been purified from eosinophilic crystals that form in the bronchoalveolar lavage fluid of mev/mev and SHIP (SH2-containing inositol 5' phosphatase) knockout mice. The eosinophilic crystals formed in mice are considered to be histologically identical to the Charcot-Leyden crystals found in humans. Ym1 is homologous to T lymphocyte-derived eosinophil chemotactic factor (ECF-L) but elicits only a weak chemotactic response in eosinophils. Ym1 binds to heparin, GlcN oligomers, and heparan sulfate. It belongs to a protein family related to chitinases but does not possess chitinase activity.

Target Antigen Name:	Ym1
Alternative Names:	beta-N-acetylhexosaminidase Ym1, Chi3l3, chitinase-like protein 3, ECF-L, eosinophil chemotactic cytokine, eosinophil chemotactic factor-L, secreted protein Ym1
Gene ID:	12655
Species Reactivity:	Mouse
Host Species:	Rabbit
Clonality:	Polyclonal
Clone:	Not applicable
Isotype:	IgG
Immunogen:	Synthetic peptide (GYTGENSPLYK) derived from the amino acid sequence of Ym1.
Conjugate:	Unconjugated

Applications

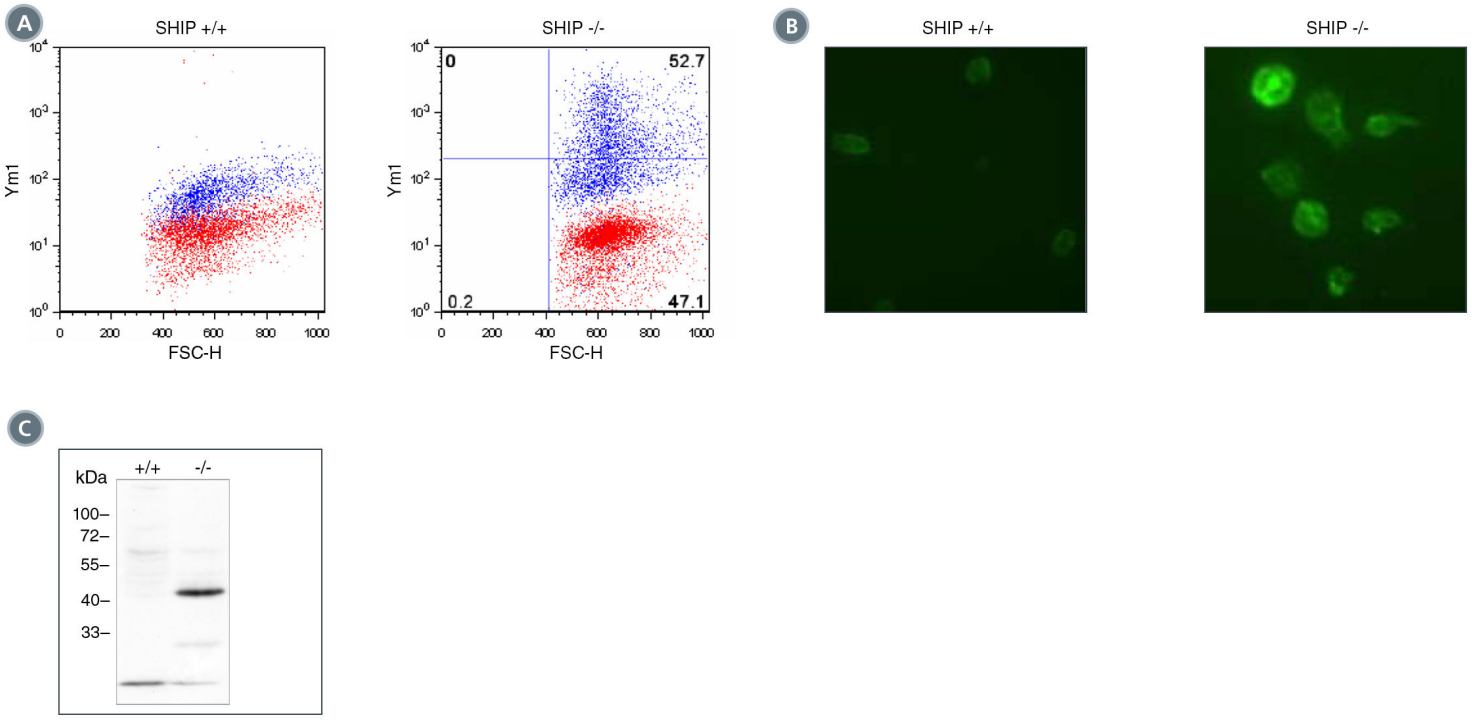
Verified:	FC, IF, WB
Reported:	FC, ICC, IF, IHC, WB

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 saline, pH 7.4, containing 0.05% sodium azide, 0.01% bovine serum albumin, 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, 1:50 dilution; IF, 1:25 dilution; WB, 1:1000 dilution. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cyometry analysis of peritoneal macrophages from normal (+/+) and SHIP knockout (-/-) mice. Cells were fixed, permeabilized, and labeled with an isotype control antibody (red) or Anti-Ym1 Antibody, Polyclonal, followed by an Alexa Fluor® 488-conjugated anti-rabbit antibody (blue).
(B) Monocytes isolated from bone marrow of normal and SHIP knockout mice were labeled with Anti-Ym1 Antibody, Polyclonal, followed by an Alexa Fluor® 488-conjugated anti-rabbit antibody.
(C) Western blot analysis of cell lysates from mouse peritoneal macrophages isolated from normal and SHIP knockout mice with Anti-Ym1 Antibody, Polyclonal. Ym1 has a predicted molecular mass of ~45 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. Katsuyama E et al. (2015) Interleukin-1 receptor-associated kinase-4 (IRAK4) promotes inflammatory osteolysis by activating osteoclasts and inhibiting formation of foreign body giant cells. J Biol Chem 290(2): 716–26. (WB)
2. Zhao J et al. (2013) Ym1, an eosinophilic chemotactic factor, participates in the brain inflammation induced by Angiostrongylus cantonensis in mice. Parasitol Res 112(7): 2689–95. (IF)
3. Kuroda E et al. (2009) SHIP represses the generation of IL-3-induced M2 macrophages by inhibiting IL-4 production from basophils. J Immunol 183(6): 3652–60. (WB)
4. Bishop JL et al. (2008) The inositol phosphatase SHIP controls Salmonella enterica serovar Typhimurium infection in vivo. Infect Immun 76(7): 2913–22. (IHC, WB)
5. Rauh MJ et al. (2005) SHIP represses the generation of alternatively activated macrophages. Immunity 23(4): 361–74. (FC, WB)
6. Hung S-I et al. (2002) Transient expression of Ym1, a heparin-binding lectin, during developmental hematopoiesis and inflammation. J Leukoc Biol 72(1): 72–82. (IF, IHC, WB)
7. Chang NC et al. (2001) A macrophage protein, Ym1, transiently expressed during inflammation is a novel mammalian lectin. J Biol Chem 276(20): 17497–506. (IF, WB)
8. Guo L et al. (2000) Biochemical characterization of endogenously formed eosinophilic crystals in the lungs of mice. J Biol Chem 275(11): 8032–7.

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

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