

Anti-Ym1 Antibody, Polyclonal

Antibodies

Rabbit polyclonal IgG antibody
against mouse Ym1, unconjugated



Scientists Helping Scientists™ | WWW.STEMCELL.COM

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Catalog #60130

300 µL

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

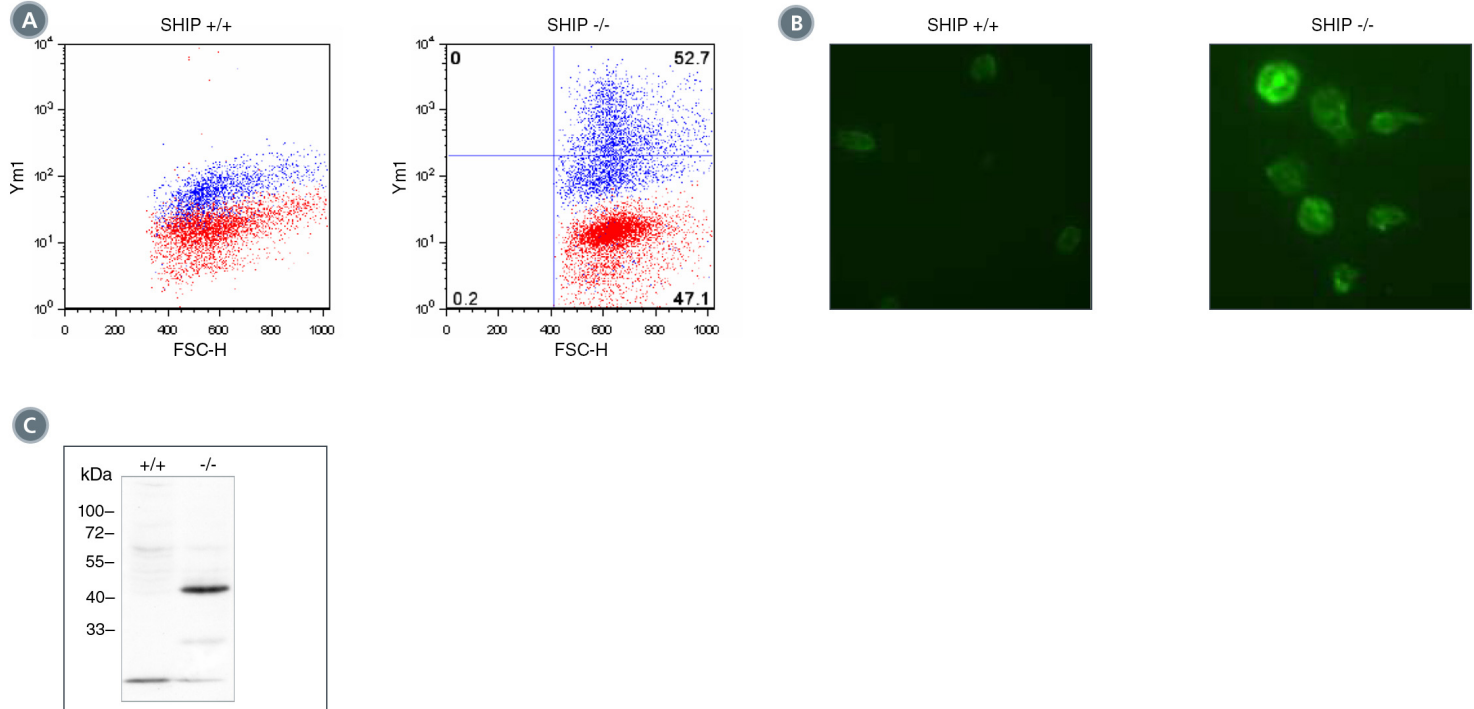
Verified:	FC, IF, WB
Reported:	FC, ICC, IF, IHC, WB

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; 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 cytometry 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 and probed 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.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2016 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design and Scientists Helping Scientists are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. Alexa Fluor® is a registered trademark of Life Technologies Corporation. This product is licensed for internal research use only and its sale is expressly conditioned on the buyer not using it for manufacturing, performing a service, or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.