

Antibodies

Anti-Human CD38 Antibody, Clone HIT2

Mouse monoclonal IgG1 antibody
against human, chimpanzee, horse
CD38, unconjugated

Catalog #60014

100 µg 0.5 mg/mL



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

Product Description

The HIT2 antibody reacts with CD38, an ~45 kDa type II transmembrane glycoprotein expressed by many cell types, especially leukocytes. CD38 is an ectoenzyme (ADP-ribosyl hydrolase) with both cyclase and hydrolase activities, whereby it mediates lymphocyte activation, adhesion, and metabolism. CD31 is a known ligand for the receptor. In humans, CD38 is expressed by the majority of hematopoietic cells at levels which vary according to the differentiation and activation status of the cells. It is highly expressed on activated T and B cells and plasma cells, and is also found at high levels in several tissues, including brain, kidney, liver, ovary, pancreas, placenta, testis, and some types of cancerous tissue.

Target Antigen Name:	CD38
Alternative Names:	ADP-ribosyl cyclase, T10
Gene ID:	952
Species Reactivity:	Human, Chimpanzee, Horse
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	HIT2
Isotype:	IgG1, kappa
Immunogen:	Human fetal thymocytes
Conjugate:	Unconjugated

Applications

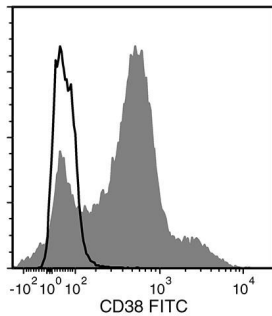
Verified:	FC
Reported:	CyTOF®, FC, IHC, WB
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human CD138 Positive Selection Kit II (Catalog #17877) and EasySep™ Human Whole Blood and Bone Marrow CD138 Positive Selection Kit II (Catalog #17887).

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 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com .
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 2 µg per 1 × 10 ⁶ cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD38 Antibody, Clone HIT2, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138FI) (filled histogram), or a mouse IgG1, kappa isotype control antibody followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (solid line histogram).

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

- Charaf L et al. (2017) Effect of tyrosine kinase inhibitors on stemness in normal and chronic myeloid leukemia cells. *Leukemia* 31(1): 65–74. (FACS)
- Buggert M et al. (2014) Multiparametric bioinformatics distinguish the CD4/CD8 ratio as a suitable laboratory predictor of combined T cell pathogenesis in HIV infection. *J Immunol* 192(5): 2099–108. (FC)
- Lehner M et al. (2008) Plasticity of dendritic cell function in response to prostaglandin E2 (PGE2) and interferon-gamma (IFN-gamma). *J Leukoc Biol* 83(4): 883–93. (FC)
- Roura-Mir C et al. (2005) CD1a and CD1c activate intrathyroidal T cells during Graves' disease and Hashimoto's thyroiditis. *J Immunol* 174(6): 3773–80. (IF, IHC)
- Ferrero E et al. (2004) Characterization and phylogenetic epitope mapping of CD38 ADPR cyclase in the cynomolgus macaque. *BMC Immunol* 5: 21. (FC, ICC, IF, WB)
- Bende RJ et al. (2003) Primary follicular lymphoma of the small intestine: alpha4beta7 expression and immunoglobulin configuration suggest an origin from local antigen-experienced B cells. *Am J Pathol* 162(1): 105–13. (IHC)
- Lin G et al. (2002) Cross-reactivity of CD antibodies in eight animal species. In: Mason D et al (Eds.) *Leukocyte Typing VII* (pp. 519–24). New York: Oxford University Press.
- Yoshino N et al. (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. *Exp Anim* 49(2): 97–110. (FC)
- Deaglio S et al. (1998) Human CD38 (ADP-ribosyl cyclase) is a counter-receptor of CD31, an Ig superfamily member. *J Immunol* 160(1): 395–402. (FA, FC)
- Horenstein AL et al. (1998) CD38 binding to human myeloid cells is mediated by mouse and human CD31. *Biochem J* 330 (3): 1129–35. (IP, WB)
- van der Voort R et al. (1997) Paracrine regulation of germinal center B cell adhesion through the c-met-hepatocyte growth factor/scatter factor pathway. *J Exp Med* 185(12): 2121–31. (FC, IHC)
- Joshua D et al. (1996) The labelling index of primitive plasma cells determines the clinical behaviour of patients with myelomatosis. *Br J Haematol* 94(1): 76–81. (FC)
- Mizuguchi M et al. (1995) Neuronal localization of CD38 antigen in the human brain. *Brain Res* 697(1-2): 235–40. (IHC, WB)
- Alessio M et al. (1990) CD38 molecule: structural and biochemical analysis on human T lymphocytes, thymocytes, and plasma cells. *J Immunol* 145(3): 878–84. (IP)
- McMichael AJ et al. (Eds.). (1987) *Leucocyte Typing III: White Cell Differentiation Antigens* (pp. 417–9). New York: Oxford University Press.

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 © 2018 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and EasySep are trademarks of STEMCELL Technologies Canada Inc. CyTOF is a registered trademark of Fluidigm Corporation. All other trademarks are the property of their respective holders. Alexa Fluor is a registered trademark of Life Technologies Corporation. Antibodies conjugated to Alexa Fluor® are licensed for internal research use only and sale is expressly conditioned on the buyer not using the antibody 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.