Antibodies	Anti-Human CD66b Antibody, Clone G10F5	STENCELL ^M
	Mouse monoclonal IgM antibody against human, chimpanzee CD66b, unconiugated	Scientists Helping Scientists [™] WWW.STEMCELL.COM
Catalog #60086	100 μg 0.5 mg/mL	INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Product Description

The G10F5 antibody reacts with CD66b (previously denoted CD67), an ~95 kDa single-chain glycosylphosphatidylinositol (GPI)-linked glycoprotein expressed by neutrophilic and eosinophilic granulocytes. CD66b is a member of the carcinoembryonic antigen (CEA)-like subfamily of proteins within the immunoglobulin superfamily and possesses two Ig-like C2-type domains and one Ig-like V-type domain. In neutrophils, CD66b is localized within granules in the cytoplasm as well as being expressed on the plasma membrane. Surface expression levels increase upon granulocyte activation, an effect induced by stimulators such as phorbol myristate acetate (PMA), calcium ionophore and N-formylmethionyl-leucyl-phenylalanine (FMLP). CD66b appears to play a role as a signaling receptor involved in cell adhesion, phagocytosis and chemotaxis by regulating granulocyte activation and adhesion to several proteins, including CD66c, galectin-3, fibronectin and E-selectin.

Target Antigen Name:	CD66b
Alternative Names:	Carcinoembryonic antigen-related cell adhesion molecule 8, CD67, CEACAM8, CGM6, NCA-95
Gene ID:	1088
Species Reactivity:	Human, Chimpanzee
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	G10F5
Isotype:	IgM, kappa
Immunogen:	Human granulocytes
Conjugate:	Unconjugated

Applications

Verified:	FC
Reported:	FA, FC, ICC, IF, IHC, IP, WB
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep [™] kits, including EasySep [™] Human Myeloid Positive Selection Kit (Catalog #18653) and EasySep [™] Human Whole Blood CD66b Positive Selection Kit (Catalog #18682); partial blocking may be observed, as well as EasySep [™] HLA Whole Blood CD15 Positive Selection Kit (Catalog 18681HLA) and EasySep [™] HLA Whole Blood CD33 Positive Selection Kit (Catalog #18287HLA).

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 is at $> 85\%$ purity.
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 $\leq 1 \mu g$ per 1 x 10 ⁶ cells in 100 μ L volume. It is recommended that the antibody be titrated for optimal performance for each application.

Antibodies



Data



Flow cytometry analysis of human whole blood nucleated cells labeled with Anti-Human CD66b Antibody, Clone G10F5, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138FI) (filled histogram), or Mouse IgM, kappa Isotype Control Antibody, Clone MM-30 (Catalog #60069), 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

1. Jensen TO et al. (2012) Intratumoral neutrophils and plasmacytoid dendritic cells indicate poor prognosis and are associated with pSTAT3 expression in AJCC stage I/II melanoma. Cancer 118(9): 2476–85. (IHC)

2. Norling L V et al. (2012) Resolvin D1 limits polymorphonuclear leukocyte recruitment to inflammatory loci: receptor-dependent actions. Arterioscler Thromb Vasc Biol 32(8): 1970–8. (FC)

3. Schmidt T et al. (2012) CD66b overexpression and homotypic aggregation of human peripheral blood neutrophils after activation by a gram-positive stimulus. J Leukoc Biol 91(5): 791–802. (FC)

4. Zhou L et al. (2012) Impact of human granulocyte and monocyte isolation procedures on functional studies. Clin Vaccine Immunol 19(7): 1065–74. (FC) 5. Yoon J et al. (2007) CD66b regulates adhesion and activation of human eosinophils. J Immunol 179(12): 8454–62.

6. Barclay AN et al. (Eds.). (1997) CD56. In: The Leucocyte Antigen Factsbook, Second Edition (pp. 310–3). New York: Academic Press.

7. Kishimoto T et al. (Eds.). (1997) Leucocyte Typing VI: White cell differentiation antigens (pp. 1163–4). New York: Garland Publishing Inc.

8. Skubitz KM et al. (1996) CD66a, CD66b, CD66c, and CD66d each independently stimulate neutrophils. J Leukoc Biol 60(1): 106–17. (FA, FC)

9. Kuroki M et al. (1992) Augmented expression and release of nonspecific cross-reacting antigens (NCAs), members of the CEA family, by human neutrophils during cell activation. J Leukoc Biol 52(5): 551–7.

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, Scientists Helping Scientists and EasySep are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. 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.