ProteinFind® Anti-CD166 Mouse Monoclonal Antibody

Please read the datasheet carefully prior to use.

Cat. No. HS906

Version No. Version 2.0

Storage: PBS (pH7.4), 0.05% ProClin 300, 50% Glycerol; at -20°C for two years, avoid repeated freeze-thawing.

Description

CD166, also known as Activated Leukocyte Cell Adhesion Molecule (ALCAM), is a member of the immunoglobulin superfamily and has five immunoglobulin like domains (VVC2C2C2) in the extracellular region[1]. It is expressed in umbilical cord blood hematopoietic stem cells, lymphatic endothelial cells, skin, tonsil, peripheral blood mononuclear cells, and mononuclear derived dendritic cells[2-5]. In addition, CD166 promotes T cells activation and proliferation through interaction with T cell surface glycoprotein CD6[4,5]. This product is the mouse anti-human CD166 monoclonal antibody, which is used for the specific detection of human CD166 by FC.

Species Reactivity: Human

Clone Number: Trans-1G6

Antibody Subtype: Mouse IgG1

Immunogen

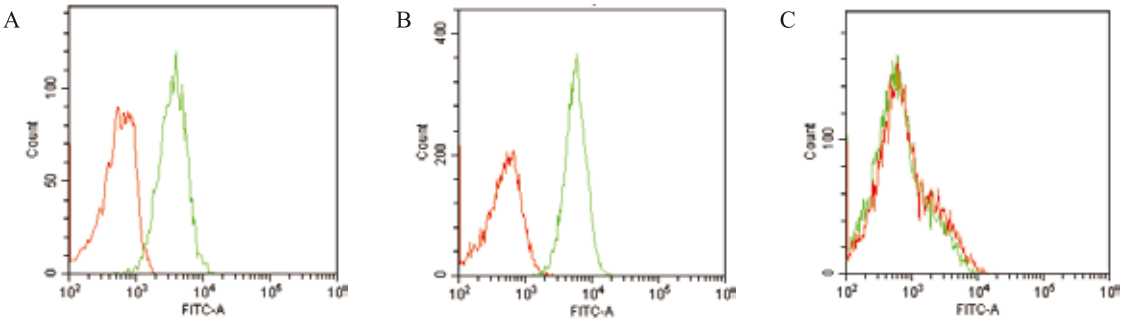
- Recombinant human CD166 partial extracellular domain
- Entrez Gene ID: 214
- UniProt ID: Q13740

Applicable Experiments and Dilution

- FC: 1:100 dilution is recommended.

Positive Control Cell Line: Mesenchymal stem cells (MSC), THP-1 cells

★ **Advanced Validation:** The antibody was validated by the relative expression of protein levels in different cell lines.



FC: *ProteinFind*® Anti-CD166 Mouse Monoclonal Antibody (green) for FC detection of MSC (positive cells) (figure A), THP-1 cells (positive cells) (figure B) and K-562 cells (negative cells) (figure C).

The negative control was Mouse IgG1 Isotype Control (red).

Dilution ratio of primary antibody: 1:100

References

[1] Bowen MA, Patel DD, Li X, et al. Cloning, Mapping, and Characterization of Activated Leukocyte-Cell Adhesion Molecule (ALCAM), a CD6 Ligand [J]. J Exp Med. 1995, 181: 2213-20.

[2] Chitteti B R, Kobayashi M, Cheng Y, et al. CD166 regulates human and murine hematopoietic stem cells and the hematopoietic niche [J]. Blood. 2014, 124(4): 519-29.

[3] Iolyeva M, Karaman S, Willrodt AH, et al. Novel role for ALCAM in lymphatic network formation and function [J]. FASEB J. 2013, 27(3): 978-90.

[4] Hassan NJ, Barclay AN, Brown MH. Frontline: Optimal T cell activation requires the engagement of CD6 and CD166 [J]. Eur J Immunol. 2004, 34(4): 930-40.

[5] Zimmerman AW, Joosten B, Torensma R, et al. Long-term engagement of CD6 and ALCAM is essential for T-cell proliferation induced by dendritic cells [J]. Blood. 2006, 107(8): 3212-20.

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