

Anti-Human CD36 Antibody, Clone FA6-152

Antibodies

Mouse monoclonal IgG1 antibody
against human, rat CD36,
unconjugated

Catalog #60084

100 µg 1 mg/mL



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Product Description

The FA6-152 antibody reacts with CD36, an ~88 kDa transmembrane glycoprotein that functions as a scavenger receptor, cell adhesion molecule, and signal transducer on the surface of many types of cells including platelets, monocytes, macrophages, erythrocyte precursors, endothelial and epithelial cells, and some macrophage-derived dendritic cells. The topology of the protein is thought to comprise a large extracellular loop with the N- and C-termini both inserted through the cell membrane. CD36 binds multiple ligands such as thrombospondin, collagen, lipoproteins, and long-chain fatty acids, and has evident roles in the phagocytotic clearance of apoptotic cells, inhibition of angiogenesis, metabolism of glucose and fatty acids, inflammation, and the pathogenesis of malaria. Binding of the FA6-152 antibody to CD36 reportedly blocks its interaction with thrombospondin, collagen, apoptotic cells, and modified LDL, and induces agglutination of fetal but not adult erythrocytes. The epitope for FA6-152 reportedly resides within an immunodominant domain of CD36 comprising amino acids 155 - 183.

Target Antigen Name:	CD36
Alternative Names:	GP88, GPIIb, GPIV, FAT, platelet glycoprotein 4, platelet glycoprotein IIIb, platelet glycoprotein IV, SCARB3, thrombospondin receptor
Gene ID:	948
Species Reactivity:	Human, Rat
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	FA6-152
Isotype:	IgG1, kappa
Immunogen:	Fetal erythrocytes
Conjugate:	Unconjugated

Applications

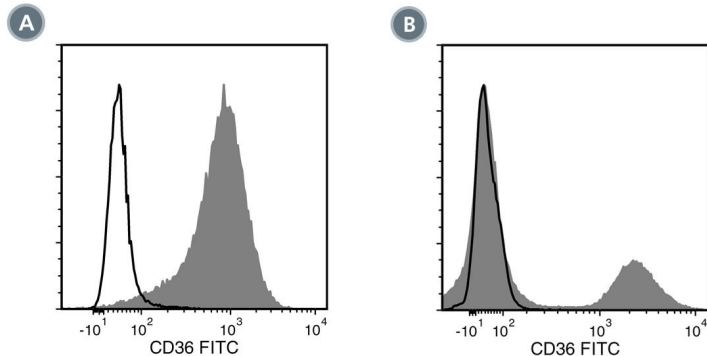
Verified:	CellSep, FC
Reported:	FA/blocking, FC, ICC, IF, IHC, IP, RIA, WB
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human CD14 Positive Selection Kit (Catalog #18058) and EasySep™ Human Buffy Coat CD14 Positive Selection Kit (Catalog #18088).

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
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 ≤ 1 µg per 1 × 10 ⁶ cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of human erythroleukemia (HEL) cells labeled with Anti-Human CD36 Antibody, Clone FA6-152, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138F1) (filled histogram), or a mouse IgG1, kappa isotype control antibody, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (solid line histogram).

(B) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD36 Antibody, Clone FA6-152, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (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

1. Daviet L et al. (1995) Identification of an immunodominant functional domain on human CD36 antigen using human-mouse chimaeric proteins and homologue-replacement mutagenesis. *Biochem J* 305(1): 221–4. (Epitope mapping, FC)
2. Pascual G et al. (2017) Targeting metastasis-initiating cells through the fatty acid receptor CD36. *Nat* 541(7635): 41–5. (FA/Immunotherapy)
3. Tondera C et al. (2017) Insights into binding of S100 proteins to scavenger receptors: class B scavenger receptor CD36 binds S100A12 with high affinity. *Amino Acids* 49(1): 183–91. (FA/Blocking, ICC, WB,)
4. Chu LY & Silverstein RL. (2012) CD36 ectodomain phosphorylation blocks thrombospondin-1 binding: structure-function relationships and regulation by protein kinase C. *Arterioscler Thromb Vasc Biol* 32(3): 760–7. (IP, WB)
5. Thelen T et al. (2010) The class A scavenger receptor, macrophage receptor with collagenous structure, is the major phagocytic receptor for *Clostridium sordellii* expressed by human decidual macrophages. *J Immunol* 185(7): 4328–35. (FA/Blocking)
6. Doebele RC et al. (2009) A novel interplay between Epac/Rap1 and mitogen-activated protein kinase 5/extracellular signal-regulated kinase 5 (MEK5/ERK5) regulates thrombospondin to control angiogenesis. *Blood* 114(20): 4592–600. (FA/Blocking)
7. Reed-Geaghan EG et al. (2009) CD14 and toll-like receptors 2 and 4 are required for fibrillar A β -stimulated microglial activation. *J Neurosci* 29(38): 11982–92. (FA/Blocking)
8. Houssier M et al. (2008) CD36 deficiency leads to choroidal involution via COX2 down-regulation in rodents. *PLoS Med* 5(2): e39. (WB)
9. Mason D et al. (Eds.). (2002) *Leucocyte Typing VII* (pp. 781–3). Oxford UK: Oxford University Press.
10. Finnemann SC & Silverstein RL. (2001) Differential roles of CD36 and alphavbeta5 integrin in photoreceptor phagocytosis by the retinal pigment epithelium. *J Exp Med* 194(9): 1289–98. (FA/Blocking, ICC, IF)
11. Thibert V et al. (1992) Quantitation of platelet glycoprotein IV (CD36) in healthy subjects and in patients with essential thrombocythemia using an immunocapture assay. *Thromb Haemost* 68(5): 600–5. (RIA)
12. Edelman P et al. (1986) A monoclonal antibody against an erythrocyte ontogenic antigen identifies fetal and adult erythroid progenitors. *Blood* 67(1): 56–63. (FC)

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