

Mouse anti-CD36, clone FA6-152 (Monoclonal)

Clone no. FA6-152

MONOSAN

Product name	Mouse anti-CD36, clone FA6-152 (Monoclonal)
Host	Mouse
Applications	IHC-fr,FC,FUNC,ELISA,IF,IP
Species reactivity	human
Conjugate	-
Immunogen	Unknown or proprietary to MONOSAN and/or its suppliers
Isotype	IgG1
Clonality	Monoclonal
Clone number	FA6-152
Size	1 ml
Concentration	100 ug/ ml
Format	-
Storage buffer	PBS with 0.1% BSA and 0.02% sodium azide
Storage until expiry date	2-8°C

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

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Additional info

Monoclonal antibody FA6-152 recognizes human CD36 (88-kDa), a cell surface class B scavenger receptor, also known as thrombospondin receptor. CD36 is a heavily N-glycosylated transmembrane protein of ~88 kDa with two short intracellular domains and a large extracellular domain. The protein is sensitive for neuroaminidase, resulting in a shift from 88 to 85 kDa. CD36 is expressed on platelets, mature monocytes and macrophages, microvascular endothelial cells, mammary endothelial cells, during stages of erythroid cell development and on some macrophage derived dendritic cells. The antibody recognizes adult and fetal monocytes, platelets and reticulocytes, but doesn't stain lymphocytes and granulocytes. Reactivity has also been found in small intestine, kidney, liver and thyroid. CD36 expression is primarily controlled by the transcription heterodimer PPAR γ -RXR (peroxisome proliferator-activated receptor-g-retinoid-X-receptor). CD36 is preferentially found within lipid rafts, which facilitates its association with receptors, signaling and adaptor molecules. It is a receptor and transporter of oxidized lipids and long chain fatty acids. CD36 has been implicated in many biological processes including angiogenesis, phagocytosis, inflammation, and lipid and glucose metabolism. Several in vivo models support the role of the thrombospondin / CD36 system in angiogenesis and tumor growth. An important role for CD36 has been found in Malaria as major receptor for *P. falciparum*-infected red blood cells. CD36 is associated with Src-family kinases and with the integrins $\alpha 3 \beta 1$ and $\alpha 6 \beta 1$. Recently, CD36 has been identified as a protein that is required for toll like receptor (TLR2) recognition of di-acylated bacterial lipopeptides and lipoteichoic acid⁴. Furthermore, CD36 has been shown to function as phagocytic receptor for apoptotic cells. Many different ligands have been reported to interact with CD36, suggesting that CD36 could recognize a structure-based domain rather than specific contact residues. Monoclonal antibody FA6-152 blocks the biological activity of CD36 by blocking collagen/thrombospondin binding. The antibody agglutinates fetal but not adult erythrocytes.

References

1. Edelman P et al. Blood 1986; 67: 56
2. Kieffer N et al Biochem J 1989, 262: 835
3. Thibert V et al. Thromb Haemost 1992; 68: 600
4. Nakata A et al. Arterioscler Thromb Vasc Biol 1999; 19: 1333
5. Ehara S et al. J Diab Complic 2002; 16: 60

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