

Product datasheet for AM26240FC-N

OriGene Technologies, Inc.

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CD36 Mouse Monoclonal Antibody [Clone ID: FA6-152]

Product data:

Product Type: Primary Antibodies

Clone Name: FA6-152

Applications: ELISA, FN, IF, IHC, IP

Recommended Dilution: Immnohistochemistry on frozen sections (4,5): Tissue embedded in tissue-tek (for instance

aortic tissue) followed by freezing in liquid nitrogen; 7-8 µm sections; air-dried; aceton-fixed;

10 % NGS as block (Ref 4). The typical starting working dilution is 1:50.

Flow cytometry (1): stains the extracellular domain of CD36. Unfixed cells; 2µg per 100.000

cells. Positive on granulocytes (Ref 1). The typical starting working dilution is 1:50.

Functional studies (2): Platelet aggregation and secretion was induced by $> 1 \mu g/ml$ antibody

(Ref 2).

Immunoassay (3): 10 μg/ml antibody as coat diluted in Tris-buffered saline; 100 μl/well; o/n

at RT (Ref 3).

Immunoflourescence (1,4): Unfixed cells were incubated for 30 minutes at 4 $^{\circ}$ C followed by a secondary FITC polyclonal antibody; one-minute methanol fixation before analysis (Ref 1). Immunoprecipitation: 88 kDa sialoglycoprotein in platelets; 85 and 88 kDa in HEL cells. 10 µg

antibody/200 µg protein. Positive control: HELA cells.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: 20-Weeks-old fetal erythrocytes

Specificity: This antibody recognizes human CD36 (88-kDa), a cell surface class B scavenger receptor, also

known as thrombospondin receptor.

It blocks the biological activity of CD36 by blocking collagen/thrombospondin binding. The

antibody agglutinates fetal but not adult erythrocytes.

Formulation: PBS

Label: FITC

State: Liquid 0.2 µm filtered lg fraction Stabilizer: 1% bovine serum albumin





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Concentration: lot specific

Purification: Protein G

Conjugation: FITC

Storage: Store at 2 - 8 °C.

Stability: Shelf life: one year from despatch.

Gene Name: CD36 molecule

Database Link: Entrez Gene 948 Human

P16671

Background: 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 PPARg-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 α 3 β 1 and α 6 β 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.

Synonyms: Glycoprotein IIIb, PAS IV, PAS-4, Thrombospondin receptor, GP3B, GP4