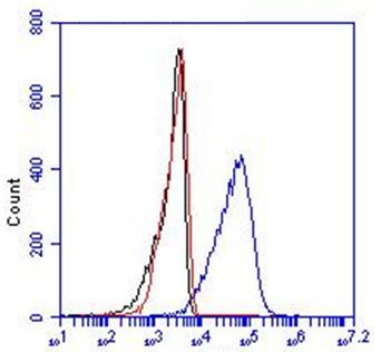
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	CD36, Human, clone FA6-152		
Catalog number	HM2122-500UG		
Lot number	-	**Expiry date**	-
Volume	-	**Amount**	500 µg
Formulation	0.2 µm filtered in PBS	**Concentration**	>0.5 mg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	<24 EU/mg	**Purification**	Protein G
Storage	4°C		

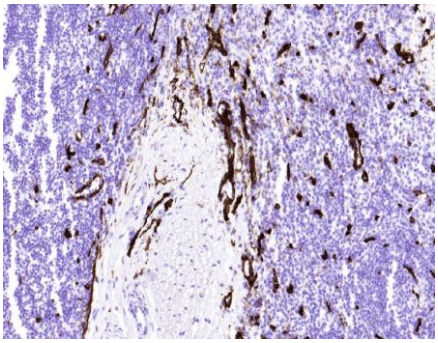
Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	5,4,7,8		1,4,6	1,11,12	2,9,10,12	3	2	
Yes	●		●	●	●	●	●	
No		●						
N.D.								●

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: Flow cytometry: detection of CD36 in THP-1 cells. Red, black and blue line represent the isotype control, cells only and HM2122 with a concentration of 10 µg/ml, respectively.



IHC-F: Frozen sections of tonsil tissue. Staining especially in vascular endothelia. Concentration used of HM2122 was 1:50.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- F: 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).
- FC: Antibody FA6-152 stains the extracellular domain of CD36. Unfixed cells; 2µg per 100.000 cells. Positive on granulocytes (Ref 1).
- FS: Platelet aggregation and secretion was induced by > 1µg/ml antibody (Ref 2).
- IA: 10 µg/ml antibody as coat diluted in Tris-buffered saline ; 100 µl/well; o/n at RT (Ref 3).
- IF: unfixed cells were incubated for 30 minutes at 4 °C followed by a secondary FITC polyclonal antibody; one-minute methanol fixation before analysis (Ref 1).
- IP: 88 kDa sialoglycoprotein in platelets; 85 and 88 kDa in HEL cells. 10 µg antibody/200 µg protein.
- Positive control: THP-1 cells.

General Information

Description

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 does not 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 α3β1 and α6β1. Recently, CD36 has been identified as a protein that is required for toll like receptor (TLR2) recognition of di-acylated bacterial lipopeptides and lipoteichoic acid 4. 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.

Immunogen 20-Weeks-old fetal erythrocytes

Aliases GPIV, Fatty acid translocase (FAT), platelet glycoprotein 4, PAS IV, Platelet collagen receptor, thrombospondin receptor

Gene Gene name: CD36

References

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Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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Approved by Manager of QC	Date
Brenda Teunissen	06/01/2020

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