

CD36 Monoclonal Mouse Antibody (185-1G2)

Product Description

Recognizes a protein of 80 kDa-90 kDa, identified as CD36 (Workshop IV; Code P-26). Its epitope maps between aa155-183. It is expressed on platelets, monocytes and macrophages, microvascular endothelial cells, erythrocyte precursors, mammary epithelial cells, and some macrophage derived dendritic cells. CD36 acts as a receptor for thrombospondin (TSP), collagen types I, IV and V, P. falciparum malaria-infected erythrocytes, and sickle erythrocytes. It also functions as a scavenger receptor, mediating macrophage uptake of oxidized low-density lipoprotein (LDL) and recognition of apoptotic polymorphonuclear leukocytes (PMN). CD36 plays a role in platelet aggregation, macrophage foam cell development, inflammation, and the tissue ischemia observed in sickle cell disease and cerebral malaria. Note that 1-4% of Japanese and East Asia population lack CD36. This MAb blocks adhesion of P. falciparum parasitized red blood cells to CD36 and strongly inhibits collagen-induced platelet aggregation.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0169, Anti-CD36 (185-1G2)

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Product attributes

Product attributes			
Antibody number	#0169		
Antibody reactivity (target)	CD36		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	185-1G2		
Isotype	IgG2a, kappa		
Molecular weight	80-90 kDa		
Synonyms	Adipocyte membrane protein; OHDS7; Collagen receptor, platelet; fatty acid translocase (FAT); Fatty acid transport protein; glycoprotein ilib (GP IIIb); PAS IV; PAS-4; pas4 protein; platelet collagen receptor; Platelet glycoprotein 4; scarb3; Scavenger receptor class B member 3; thrombospondin receptor		
Human gene symbol	CD36		
Entrez gene ID	948		
SwissProt	P16671		
Unigene	120949		
Immunogen	Stimulated human leukocytes		
Antibody target cellular localization	Plasma membrane		
Species reactivity	Human		
Expected antibody applications	Flow, surface (published for clone), Functional studies (published for clone), IF (published for clone), IP (published for clone)		
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user		
Positive control	HEL or U937 cells. Platelets, monocytes, macrophages, microvascular endothelial cells in a tonsil.		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 $^\circ$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^\circ$ C		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide		
Cell/tissue expression	Platelets, Erythrocyte precursors, Mammary gland, Microvascular endothelial cells, Monocytes/macrophages		
Antibody research areas	Immunology, Inflammation		
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.		

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- Blood (2001) 97(6), 1689-1696. (IP)
 J Biol Chem (2006) 281 (36), 26069-26080. (receptor blockade)
 J Leukocyte Biol (2014) 95, 509-520. (surface Flow, IF)

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