

# 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 [CF® Dye Brochure](#) 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 [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0169, Anti-CD36 (185-1G2)**

## References

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

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

## 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; CHD57; Collagen receptor, platelet; fatty acid translocase (FAT); Fatty acid transport protein; glycoprotein IIb (GP IIb); 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 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °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

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
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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