

AM33032PU-N

Monoclonal Antibody to CD36 - Purified

Alternate names:

Fatty acid translocase, GP3B, GP4, Glycoprotein IIIb, PAS IV, PAS-4, Platelet collagen receptor, Platelet glycoprotein 4, Platelet glycoprotein IV, Thrombospondin receptor

Quantity:

0.1 mg

Concentration:

1.0 mg/ml

Background:

The CD36 molecule is an 88kDa transmembrane glycoprotein, which is a member of the class B scavenger receptor family of proteins. Alternative names for CD36 include fatty acid translocase (FAT), platelet glycoprotein 4, platelet glycoprotein IIIb and thrombospondin receptor. CD36 is a pattern recognition receptor that is expressed on a wide variety of cells including monocytes, macrophages, platelets, adipocytes, erythrocyte precursors, activated keratinocytes and some endothelial and epithelial cells. Studies suggest that CD36 has multiple cellular functions and binds to a diverse array of ligands including thrombospondin, modified low-density lipoproteins (LDL), anionic phospholipids and long chain fatty acids.

As a scavenger receptor, CD36 plays a key role in mediating the uptake of oxidized LDL by macrophages, the formation of foam cells and the development of atherosclerosis. CD36 is also reported to function as negative regulator of angiogenesis, as a cell adhesion molecule involved in platelet adhesion and aggregation, and as a scavenger receptor in the clearance of apoptotic cells and photoreceptor rod outer segments. Furthermore, CD36 is reported to bind to *Plasmodium falciparum* infected erythrocytes and may play an important role in the pathogenesis of malaria and sickle cell disease.

Uniprot ID:

[P16671](#)

NCBI:

[9606](#)

GeneID:

[948](#)

Host / Isotype:

Mouse / IgG2a

Recommended Isotype

AM03096PU-N

Controls:

Clone:

185-1G2

Immunogen:

Derived by fusion of NS1 mouse myeloma cells with spleen cells from BALB/c mice immunized with stimulated Human leucocytes.

Format:

State: Lyophilized purified IgG fraction

Buffer System: PBS

Preservatives: 0.09% Sodium Azide

Applications:

Flow Cytometry: 1/100-1/200.

The antibody 185-1G2 can be used for CD36 cell identification, quantification and isolation using flow cytometric methods.

Immunocytochemistry.

Immunohistochemistry on Frozen Sections.

Functional Assay: The antibody has also been reported to bind to a site of CD36 that

inhibits CD36 function. Please request a Sodium Azide Free antibody format.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

The Monoclonal antibody 185-1G2 recognizes an epitope between amino acids 155–183 on the CD36 molecule.

Species Reactivity:

Tested: Human

Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Howard LM, Puente Navazo MD, McGregor JL. Identification of CD36-reactive antibodies that bind an epitope encompassing amino acid residues 155-183. In Leucocyte typing VI. Sixth International workshop and conference. Kishimoto T, Kikutani H, von dem Borne AEG.Kr, Goyert SA, Mason DY, Miyasaka M, Moretta L, Okumura K, Shaw S, Springer TA, Sugamura K, Zola H. Eds. Kobe, Japan, Garland. 1996. p637-638.
2. Englyst NA, Taube JM, Aitman TJ, Baglin TP, Byrne CD. A novel role for CD36 in VLDL-enhanced platelet activation. Diabetes. 2003 May;52(5):1248-55. PubMed PMID: 12716760.