CD36 monoclonal antibody, clone SMO

Catalog # MAB6908 Size 100 ug

Applications



Flow Cytometry

5 X 10⁵ ficoll prepared human peripheral blood lymphocytes were washed and preincubated 5 minutes with 20 m l of 250 mg/mL human lgG (To block non specific binding) after which they were incubated 45 minutes on ice with 80m l of CD36 monoclonal antibody, clone SMO (Cat # MAB6908) at a concentration of 5 mg/mL. Cells were washed twice and incubated with Goat anti-Mouse lg/FITC, after which they were washed three times, fixed and analyzed using a BD FACstar plus. A net 16% sub population of the cells stained positive with a mean shift of 1.05 log10 fluorescent units when compared to a Mouse lgM negative control at a similar concentration.

Specification

Product Description	Mouse monoclonal antibody raised against native CD36.
Immunogen	Native purified CD36 from human tonsil cells/PBM.
Host	Mouse
Reactivity	Human
Form	Liquid
lsotype	lgM
Recommend Usage	The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM sodium phosphate buffer, 100 mM potassium Chloride, 150 mM NaCl, pH 7.5 (0.5 mg/mL gentamicin sulfate)
Storage Instruction	Store at 4°C. Do not freeze.



Applications

Flow Cytometry

5 X 10⁵ ficoll prepared human peripheral blood lymphocytes were washed and preincubated 5 minutes with 20 m l of 250 mg/mL human lgG (To block non specific binding) after which they were incubated 45 minutes on ice with 80m l of CD36 monoclonal antibody, clone SMO (Cat # MAB6908) at a concentration of 5 mg/mL. Cells were washed twice and incubated with Goat anti-Mouse lg/FITC, after which they were washed three times, fixed and analyzed using a BD FACstar plus. A net 16% sub population of the cells stained positive with a mean shift of 1.05 log10 fluorescent units when compared to a Mouse lgM negative control at a similar concentration.

Gene Info — CD36	
Entrez GenelD	<u>948</u>
Gene Name	CD36
Gene Alias	CHDS7, FAT, GP3B, GP4, GPIV, PASIV, SCARB3
Gene Description	CD36 molecule (thrombospondin receptor)
Omim ID	<u>173510 248310 608404 610938 611162</u>
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is the fourth major glycoprotein of the platelet surface and serve s as a receptor for thrombospondin in platelets and various cell lines. Since thrombospondins are widely distributed proteins involved in a variety of adhesive processes, this protein may have imp ortant functions as a cell adhesion molecule. It binds to collagen, thrombospondin, anionic phosph olipids and oxidized LDL. It directly mediates cytoadherence of Plasmodium falciparum parasitiz ed erythrocytes and it binds long chain fatty acids and may function in the transport and/or as a re gulator of fatty acid transport. Mutations in this gene cause platelet glycoprotein deficiency. Multipl e alternatively spliced transcript variants encoding the same protein have been found for this gene . [provided by RefSeq
Other Designations	CD36 antigen CD36 antigen (collagen type I receptor, thrombospondin receptor) PAS-4 protein cl uster determinant 36 fatty acid translocase glycoprotein IIIb leukocyte differentiation antigen CD36 platelet glycoprotein IV scavenger receptor class B, member

Publication Reference



• CD36 gene transfer confers capacity for phagocytosis of cells undergoing apoptosis.

Ren Y, Silverstein RL, Allen J, Savill J. The Journal of Experimental Medicine 1995 May; 181(5):1857.

Application: Func, Human, Human neutrophils

CD36 directly mediates cytoadherence of Plasmodium falciparum parasitized erythrocytes.

Oquendo P, Hundt E, Lawler J, Seed B. Cell 1989 Jul; 58(1):95.

Application: IP, Monkey, C32, COS cells

Monoclonal antibodies specific for human monocytes, granulocytes and endothelium.

Hogg N, MacDonald S, Slusarenko M, Beverley PC. Immunology 1984 Dec; 53(4):753.

Application: Func, IF, IHC, IP, Human, Human monocytes, platelets

Pathway

- Adipocytokine signaling pathway
- ECM-receptor interaction
- Hematopoietic cell lineage
- PPAR signaling pathway

Disease

- <u>Anemia</u>
- Angina Pectoris
- <u>Atherosclerosis</u>
- <u>Calcinosis</u>
- <u>Cardiovascular Diseases</u>
- Colon cancer
- <u>Colorectal Neoplasms</u>

😵 Abnova

- <u>Coronary Artery Disease</u>
- Diabetes Mellitus
- Disease Progression
- Edema
- Genetic Predisposition to Disease
- <u>Hepatitis</u>
- <u>Hypertension</u>
- Insulin Resistance
- Kidney Failure
- <u>Macular Degeneration</u>
- Malaria
- <u>Metabolic Syndrome X</u>
- <u>Myocardial Infarction</u>
- <u>Obesity</u>
- Osteoarthritis
- Perception
- Taste