

Mouse Anti-CD36 (Platelet & Microvessel Marker) [GPIIb/654]: MC0025

Intended Use: For Research Use Only

Description: Recognizes a protein of 80kDa-90kDa, identified as CD36. 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.

Specifications:

Clone: GPIIb/654
Source: Mouse
Isotype: IgG2a/k
Reactivity: Human
Localization: Membrane
Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC, Flow Cyt., ICC/IF
Package:

Description	Catalog No.	Size
CD36 (Platelet & Microvessel Marker) Concentrated	MC0025	1 ml

IHC Procedure*:

Positive Control Tissue: HEL or U937 cells. Platelets, monocytes, macrophages, microvascular endothelial cells in a tonsil
Concentrated Dilution: 50-200
Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

References

1. Increased hepatic CD36 expression with age is associated with enhanced susceptibility to nonalcoholic fatty liver disease.
2. Sheedfar F, et al. Aging (Albany NY). 2014 Apr;6(4):281-95, 2014.
3. Leukocyte Typing VI, p636-643 and p1136-1137, Kishimoto T. et al., eds. Garland Publishing, Inc, New York and London, 1997.
4. Membrane glycoprotein CD36: a review of its roles in adherence, signal transduction, and transfusion medicine. Greenwalt DE et al. Blood 80:1105, 1992.
5. Thrombospondin cooperates with CD36 and the vitronectin receptor in macrophage recognition of neutrophils undergoing apoptosis. Savill J, et al. J Clin Invest. 90(4):1513-1522, 1992.
6. Experimental Cell Research, Stomski FC et. al. 198(1):85-92, 1992.