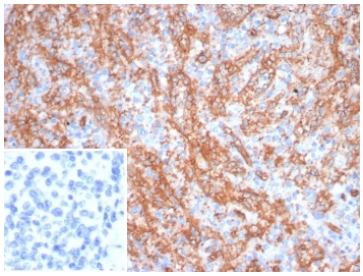
Platelet glycoprotein 4 Antibody / CD36 [clone CD36/7216] (V5825)

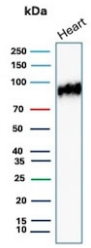
Catalog No.	Formulation	Size
V5825-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5825-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5825SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	CD36/7216
Purity	Protein A/G affinity
UniProt	P16671
Localization	Cell membrane, Cytoplasm (Golgi)
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This Platelet glycoprotein 4 antibody is available for research use only.



Immunohistochemistry analysis of Platelet glycoprotein 4 Antibody | CD36 (clone CD36/7216) in FFPE human spleen tissue. Prominent membranous HRP-DAB brown staining is observed in splenic macrophages and sinusoidal lining cells, consistent with CD36 expression, while most lymphoid cells show minimal staining. The inset shows PBS used in place of the primary antibody as a secondary-only negative control. Heat-induced epitope retrieval was performed in 10mM Tris with 1mM EDTA, pH 9.0, at 95oC for 20 minutes followed by cooling before testing.



Western blot testing of human heart tissue lysate with Platelet glycoprotein 4 antibody (clone CD36/7216). Expected molecular weight: 53-88 kDa depending on level of glycosylation.

Description

Platelet glycoprotein 4 Antibody recognizes CD36, also known as Platelet glycoprotein 4 (GPIV) and Fatty acid translocase (FAT), a multifunctional class B scavenger receptor expressed on platelets, monocytes, macrophages, endothelial cells, adipocytes, and certain epithelial cells. CD36 is an integral membrane glycoprotein involved in lipid uptake, inflammation, angiogenesis, and innate immune signaling. Platelet glycoprotein 4 Antibody is useful for detecting CD36 expression in research applications involving metabolic, vascular, and immune-related tissues.

CD36 antibody, also referred to as FAT antibody and GPIV antibody in the literature, binds a transmembrane receptor that recognizes long-chain fatty acids, oxidized low-density lipoprotein, thrombospondin, and microbial ligands. Through these interactions, CD36 plays a central role in fatty acid transport, foam cell formation, platelet activation, and inflammatory pathway modulation. CD36 is highly expressed in adipose tissue and skeletal muscle where it facilitates fatty acid uptake, and in macrophages where it contributes to lipid accumulation and atherogenesis.

The CD36 gene is located on human chromosome 7q21.11 and encodes a heavily glycosylated protein containing two transmembrane segments and a large extracellular loop with multiple ligand-binding regions. CD36 localizes predominantly to the plasma membrane but can also be present in intracellular vesicular compartments involved in lipid trafficking. CD36-mediated signaling has been associated with activation of MAPK and NF-kappaB pathways, linking lipid metabolism to inflammatory responses.

Altered CD36 expression has been associated with atherosclerosis, insulin resistance, metabolic syndrome, and certain malignancies. In histologic sections, CD36 typically demonstrates membranous staining in endothelial cells, macrophages, platelets, and other positive cell types. A CD36 antibody is commonly used in research settings to investigate lipid metabolism, vascular biology, and immune regulation. Clone CD36/7216 is a mouse monoclonal antibody developed to target CD36 in experimental systems.

Application Notes

Optimal dilution of the Platelet glycoprotein 4 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 200-400 from human Platelet glycoprotein 4 protein was used as the immunogen for the Platelet glycoprotein 4 antibody.

Storage

Aliquot the Platelet glycoprotein 4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.