

THE TECHNOLOGY

CD36 is a major platelet glycoprotein also found on white blood cells and some endothelial cells. CD36 may play a role in cell adhesion as a receptor for thrombospondin (a multifunctional protein). Absence of CD36 protects against the formation of arterial plaques thus slowing the development of atherosclerosis. CD36 deficiency also leads to heart disease in mice. Investigators at Weill Cornell Medical College have developed an IgA monoclonal antibody that reacts specifically with mouse CD36 as determined by flow cytometry and immunoprecipitation. This antibody will be useful in studying mouse models for the development of new blood vessels, endothelial cell signaling, foam cell formation, phagocytosis, wound healing, inflammation, diabetes and energy metabolism.

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THE PRODUCT

Antibody to mouse CD36

CD36 is a cell surface class B scavenger receptor. CD36 is preferentially found within lipid rafts, which facilitates its association with receptors, signaling and adapter molecules. CD36 binds to collagen, thrombospondin, anionic phospholipids and oxidized LDL. It may function as a cell adhesion molecule. CD36 directly mediates the adherence of erythrocytes harboring the malaria parasite, *Plasmodium falciparum*, with the lining of small veins of various organs. This may cause microvascular occlusion, which is believed to contribute to the acute pathology of malaria. It also binds long chain fatty acids and may function in their transport and/or as a regulator of fatty acid transport.

