iFluor™ 647 Anti-human CD36 Antibody *CB38*

Catalog number: 103600F0, 103600F1
Unit size: 100 tests, 500 tests

Product Details

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgM kappa
Immunogen	CD36 (Platelet glycoprotein 4, GpIIIb, GPIV, FAT)
Clone	CB38
Conjugate	iFluor™ 647

Biological Properties

Appearance	Blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 647 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 647
Excitation Wavelength	656 nm
Emission Wavelength	670 nm

Applications

The CB38 monoclonal antibody binds to human CD36, a 85 - 113 kD glycoprotein often expressed on the surface of epithelial cells, platelets, monocytes, endothelial cells and dendritic cells. CD36 has been thought to be involved with important biological processes such as intestinal absorption, especially intestinal cholesterol absorption. Furthermore, in certain organisms, it acts to positively regulate reactive oxygen species

biosynthetic process, promotes cold-induced thermogenesis and plays a role in the upregulation of macrophage cytokine production. CD36 is a component of key cellular pathways, for example, the regulation of lipopolysaccharide-mediated signaling pathway, toll-like receptor signaling pathway and cytokine-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like IV and V and collagen I. CD36 is a moderately popular antibody target, with over 16000 publications in the last decade. CD36 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of cell biology, immunology and innate immunity. This antibody was purified through affinity chromatography and conjugated to iFluor™ 647 (ex/em = 656/670 nm). It is compatible with the 640 nm laser and 660/20 nm bandpass filter (for example, as in the BD FACSAria™ II).