

XFD647 Anti-human CD36 Antibody *CB38*

Catalog Number: 10360180, 10360181

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	Lot specific (please consult certificate of analysis for given lot)
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, GpIIb, GPIV, FAT)
Clone	CB38
Conjugate	AF647

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF647 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined. <i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

Spectral Properties

Conjugate	AF647
Excitation Wavelength	650 nm
Emission Wavelength	671 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 XFD647 (ex/em = 650/671 nm). XFD647 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 647 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).