

XFD680 Anti-human CD36 Antibody *CB38*

Catalog Number: 10360190, 10360191

Unit Size: 100 tests, 500 tests

Product Details

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| 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

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| Species Reactivity | Human |
| Class | Primary |
| Clonality | Monoclonal |
| Host | Mouse |
| Isotype | Mouse IgM kappa |
| Immunogen | CD36 (Platelet glycoprotein 4, GpIIb, GPIV, FAT) |
| Clone | CB38 |
| Conjugate | AF680 |

Biological Properties

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| Appearance | Blue liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with AF680 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

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| Conjugate | AF680 |
| Excitation Wavelength | 681 nm |
| Emission Wavelength | 704 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 XFD680 (ex/em = 681/704 nm). XFD680 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 680 (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).