

XFD680 Anti-human CD38 Antibody *HB7*

Catalog Number: 10382180, 10382181

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 IgG1, κ
Immunogen	CD38 (ADP-ribosyl cyclase, T10)
Clone	HB7
Conjugate	AF680

Biological Properties

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 μ L/million cells in 100 μ L 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	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 nm

Applications

HB7 is an anti-human monoclonal antibody that recognizes the CD38 antigen. CD38 (alternatively called ADP-ribosyl cyclase or T10) is a 45 kD transmembrane glycoprotein that is expressed on the surface of cells such as B cells, dendritic cells and macrophages. CD38 is a component of critical cellular pathways, for instance, the apoptotic signaling pathway and B cell receptor signaling pathway. In addition, in many organisms, it is a repressor of bone resorption, is involved in the positive regulation of cell growth and is involved in the positive regulation of vasoconstriction. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands such as hyaluronic acid and CD16. CD38 is a moderately popular antibody target, with over 15000 publications in the last decade. CD38 is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of immunology. 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 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).