

PE/XFD700 Anti-human CD38 Antibody *HB7*

Catalog Number: 103821O0,
103821O1, 103821O2
Unit Size: 25 tests, 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	PE/AF700

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions
Application	Flow Cytometry (FACS)
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	PE/AF700
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Excitation Wavelength 565 nm

Emission Wavelength 721 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 PE/XFD700 (ex/em = 566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis FlowSight).