

**mFluor™ Red 700 Anti-human CD38
Antibody *HB7***Catalog number: 103820V0, 103820V1
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 IgG1, κ
Immunogen	CD38 (ADP-ribosyl cyclase, T10)
Clone	HB7
Conjugate	mFluor™ Red 700

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with mFluor™ Red 700 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	mFluor™ Red 700
Excitation Wavelength	680 nm
Emission Wavelength	695 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 mFluor™ Red 700 (ex/em = 680/695 nm). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).