

**mFluor™ UV375 Anti-human CD38 Antibody**  
**\*HB7\***Catalog number: 103820X0, 103820X1  
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™ UV375                   |

**Biological Properties**

|             |                                                                                                              |
|-------------|--------------------------------------------------------------------------------------------------------------|
| Appearance  | Yellow liquid                                                                                                |
| Preparation | Antibody purified by affinity chromatography and then conjugated with mFluor™ UV375 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                  |

**Spectral Properties**

|                       |               |
|-----------------------|---------------|
| Conjugate             | mFluor™ UV375 |
| Excitation Wavelength | 351 nm        |
| Emission Wavelength   | 387 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™ UV375 (ex/em = 351/387 nm). It is compatible with the 355 nm laser and 379/28 nm bandpass filter (for example, as in the BD LSRFortessa™ Cell Analyzer).