mFluor™ Violet 450 Anti-human CD7 Antibody *HIT7*

Catalog number: 100700Z0, 100700Z1
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
Immunogen	CD7 (gp40, TP41)
Clone	HIT7
Conjugate	mFluor™ Violet 450

Biological Properties

Appearance	Light yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with mFluor™ Violet 450 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	mFluor™ Violet 450
Excitation Wavelength	406 nm
Emission Wavelength	445 nm

Applications

HIT7 is an anti-human monoclonal antibody that recognizes the CD7 antigen. CD7 (also known as gp40) is a 40 kD single-pass type I membrane protein that is located on the surface of cells like NK cells, stem cells and T cells. CD7 has been closely linked to essential biological processes such as immune response, particularly adaptive immune response. Furthermore, it is involved with important cellular pathways, namely, the

transmembrane receptor protein tyrosine kinase signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like PI3-Kinase. CD7 is a fairly uncommon antibody target, with a little more than 3600 publications in the last decade. Even still, CD7 is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of immunology and costimulatory molecules. This antibody was purified through affinity chromatography and conjugated to mFluor™ Violet 450 (ex/em = 406/445 nm). It is compatible with the 405 nm laser and 460/22 nm bandpass filter (for example, as in the Bio-Rad ZE5 Cell Analyzer).