

**mFluor™ Violet 450 Anti-human CD45
Antibody *UCHL1***Catalog number: 104560Z0, 104560Z1
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 IgG2a, κ
Immunogen	CD45ro (CD45RO)
Clone	UCHL1
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

UCHL1 is an anti-human monoclonal antibody that forms an immune complex with the CD45ro antigen. CD45ro (sometimes called CD45RO) is a 180 kD transmembrane glycoprotein that is found on the surface of cells like granulocytes, macrophages and NK cells. In certain organisms, CD45 plays a role in the upregulation of protein kinase activity, is a positive regulator of tumor necrosis factor production and is a negative

regulator of protein kinase activity. Additionally, it has been associated with key biological processes like dephosphorylation, particularly protein dephosphorylation. CD45 acts in key cellular pathways, for example, the regulation of receptor signaling pathway via JAK-STAT, B cell receptor signaling pathway and positive regulation of extrinsic apoptotic signaling pathway. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like Src kinases, p56lck and p59fyn. CD45 is a very popular antibody target, with over 54000 publications in the last decade. CD45ro is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of inhibitory molecules and immunology. 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 450/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant X).