

AF488 Anti-human CD45 Antibody *UCHL1*

Catalog number: 10456150, 10456151

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 AF488

Biological Properties

Appearance Red liquid

Preparation Antibody purified by affinity chromatography and then conjugated with AF488 under optimal

conditions

Application Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate AF488

Excitation Wavelength 499 nm

Emission Wavelength 520 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 AF488 (ex/em = 499/520 nm). It is compatible with the 488 nm laser and 525/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant X).