iFluor™ 488 Anti-human CD45 Antibody *AHC0057*

Catalog number: 10457050, 10457051
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	Igg2a
Immunogen	CD45 (Leukocyte Common Antigen (LCA), T200, PTPRC)
Clone	AHC0057
Conjugate	iFluor™ 488

Biological Properties

Appearance	Orange-red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 488
Excitation Wavelength	491 nm
Emission Wavelength	516 nm

Applications

AHC0057 is an anti-human monoclonal antibody that recognizes the CD45 antigen. CD45 (sometimes called T200 or Leukocyte Common Antigen (LCA)) is a 180 - 240 kD transmembrane glycoprotein that is located on the surface of cells such as granulocytes, stem cells, B cells and NK cells. CD45 has been thought to be involved with important biological processes like dephosphorylation, specifically protein dephosphorylation.

Moreover, in many organisms, it plays a role in the downregulation of microglial cell activation, is involved in the negative regulation of protein autophosphorylation and is a promoter of T cell mediated cytotoxicity. CD45 acts in important cellular pathways, namely, the positive regulation of extrinsic apoptotic signaling pathway, negative regulation of cytokine-mediated signaling pathway and B cell receptor signaling pathway. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands such as src kinases and p59fyn. CD45 is a very popular antibody target, with over 54000 publications in the last decade. CD45 is essential for cell biology research, often serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to iFluor™ 488 (ex/em = 491/516 nm). It is compatible with the 488 nm laser and 530/30 nm bandpass filter (for example, as in the BD FACSAria™ III).