

PE/XFD610 Anti-human CD45 Antibody *HI185*

Catalog Number: 10453100,
10453101, 10453102
Unit Size: 25 tests, 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	Lot specific (please consult certificate of analysis for given lot)
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	CD45 (Leukocyte Common Antigen (LCA), T200, PTPRC)
Clone	HI185
Conjugate	PE/AF610

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF610 under optimal conditions
Application	Flow Cytometry (FACS)
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined.
	<i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

Spectral Properties

Conjugate	PE/AF610
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Excitation Wavelength 565 nm

Emission Wavelength 627 nm

Applications

The HI185 monoclonal antibody reacts with human CD45, a 180 - 240 kD transmembrane glycoprotein often found on the surface of neutrophils, hematopoietic cells, B cells and dendritic cells. CD45 is a component of vital cellular pathways, for example, the T cell receptor signaling pathway, negative regulation of cytokine-mediated signaling pathway and positive regulation of extrinsic apoptotic signaling pathway. Also, in many organisms, it enhances hematopoietic stem cell migration, is a suppressor of cytokine-mediated signaling pathway and enhances protein tyrosine phosphatase activity. CD45 has been thought to be involved with vital biological processes such as dephosphorylation, especially protein dephosphorylation, and is associated with a variety of biologically interesting macromolecules/ligands, for example, p59fyn and Src kinases. CD45 is a very popular antibody target, with over 50000 publications in the last decade. CD45 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of neuroscience. This antibody was purified through affinity chromatography and conjugated to PE/XFD610 (ex/em = 567/627 nm). XFD610 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 610 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 610/30 nm bandpass filter (for example, as in the Luminex Amnis FlowSight).