## **Elabscience**®

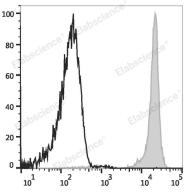
## Elab Fluor<sup>®</sup> Violet 450 Anti-Human CD45 Antibody[HI30]

## Catalog Number: E-AB-F1137Q

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Reactivity	Human
Host	Mouse
lsotype	Mouse IgG1, κ
Clone No.	HI30
Isotype Control	Elab Fluor <sup>®</sup> Violet 450 Mouse IgG1, к Isotype Control[MOPC-21] [Product E-AB- F09792Q]
Conjugation	Elab Fluor <sup>®</sup> Violet 450
Conjugation Information	Elab Fluor <sup>®</sup> Violet 450 is designed to be excited by the violet laser (405 nm) and detected using an optical filter centered near 450 nm (e.g., a $450/45$ nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.
Applications	Recommended usage
FCM	Each lot of this antibody is quality control tested by flow cytometric analysis. The amount of the reagent is suggested to be used 5 µL of antibody per test (million cells in 100 µL staining volume or per 100 µL of whole blood). Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use.

Data



Human peripheral blood lymphocytes are stained with Elab

Fluor<sup>®</sup> Violet 450 Anti-Human CD45 Antibody (filled gray histogram) or Elab Fluor<sup>®</sup> Violet 450 Mouse IgG1,  $\kappa$  Isotype Control (empty black histogram).

Preparation & Storage	
Storage	Keep as concentrated solution.
	This product can be stored at 2-8°C for 12 months. Please protected from prolonged exposure to light and do not freeze.
Shipping	Ice bag
Antigen Information	
Alternate Names	CD45;L-CA;Ly-5;Ptprc;Receptor-type tyrosine-protein phosphatase C;T200
Uniprot ID	P08575
Gene ID	5788

## **Elabscience**®

Background

CD45 is a 180 - 240 kD single chain type I membrane glycoprotein also known as leukocyte common antigen (LCA) and T200. It is a tyrosine phosphatase expressed on the plasma membrane of all hematopoietic cells, except erythrocytes or platelets. CD45 is a signaling molecule that regulates a variety of cellular processes including cell growth, differentiation, cell cycle, and oncogenic transformation. CD45 plays a critical role in T and B cell antigen receptor-mediated activation by dephosphorylating substrates including p56Lck, p59Fyn, and other Src family kinases. CD45 noncovalently associates with lymphocyte phosphatase-associated phosphoprotein (LPA P) on T and B lymphocytes. CD45 has been reported to bind galectin-1 and to be associated with several other cell surface antigens including CD1, CD2, CD3, and CD4