

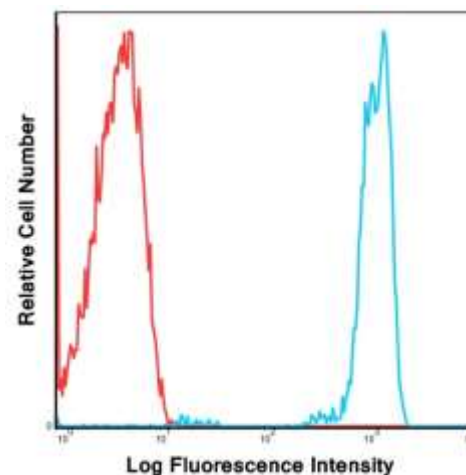
# CD45 FITC Monoclonal Antibody (Clone HI30)

CATALOG #:	6958-25 6958-100	25 tests 100 tests
ALTERNATE NAMES:	CD45	
HOST:	Mouse	
ISOTYPE:	IgG1, Kappa	
PURIFICATION:	Affinity chromatography. Unreacted dye removed from the product.	
IMMUNOGEN:	Human CD45	
FORM:	Liquid	
FORMULATION:	Phosphate-buffered aqueous solution pH 7.2, $\leq 0.09\%$ Sodium azide, may contain carrier protein/stabilizer.	
SPECIES REACTIVITY:	Human	
STORAGE CONDITIONS:	Product should be kept at 2-8°C and protected from prolonged exposure to light. <b>Do not freeze.</b>	

**DESCRIPTION:** CD45, a transmembrane multifunctional glycoprotein, is a member of Type I receptor-linked PTPase family and is expressed as multiple isoforms due to alternative splicing. Expression of these isoforms is highly regulated and shift in this expression determines T-cell activation. CD45RB consists of exon B and is predominantly expressed in naïve T-cells secreting IL-2. Its expression is low in primed/memory T cells, cells that express Th2 cytokines such as IL-4 and IL-10 and population of T-cells with regulatory function. Immunotherapy with CD45RB antibody is being widely studied in transplantation and vaccination. CD45 antibodies are commonly used to identify tumors of lymphoid origin. The HI130 monoclonal antibody specifically reacts with the 180 kDa, 190 kDa, 205 kDa, and 220 kDa isoforms of the human leukocyte common antigen (LCA) CD45. It is expressed on lymphocytes, granulocytes, monocytes, thymocytes, and eosinophils, but not on mature erythrocytes, platelets, mature erythroid cells of bone marrow, and non-hematopoietic tissues. CD45 is essential for T cell activation and the tyrosine phosphatase activity of its intracellular region is integral for signal transduction.

**APPLICATION:** Flow (Cell Surface): 5  $\mu$ l/1x10<sup>6</sup> cells, Volume per test: 5  $\mu$ l (0.25  $\mu$ g).

**Note:** This information is only intended as a guide. The optimal dilutions must be determined by the user.



Laser: Blue (488nm)  
Peak Emission: 520nm  
Peak Excitation: 494nm  
Filter: 530/30  
Brightness (1=dim, 5=brightest): 3

Human peripheral blood lymphocytes were stained with FITC HI30 with relevant isotype control in Red.

## RELATED PRODUCTS:

- CD-14 Antibody (Clone biG 10) (Cat. No. 3676-100)
- CD40 Antibody (Cat. No. 3072-100)
- CD40L Antibody (Clone 2A12A7) (Cat. No. 5015-100)
- CD-14, human recombinant (Cat. No. 4937-10)
- CD-14, mouse recombinant (Cat. No. 4938-10)
- CD40Ligand/TRAP, human recombinant (Cat. No. 4014-10, -50, -1000)
- CD40Ligand/TRAP, murine recombinant (Cat. No. 4015-10, -50, -1000)

**FOR RESEARCH USE ONLY! Not to be used on humans.**