

## CD45 (LCA) (PT1659) mouse mAb

### Ready to use

<b>Catalog No.</b>	IML0176
<b>Reactivity</b>	Human
<b>Applications</b>	IHC-p
<b>Gene Name</b>	PTPRC CD45
<b>Protein Name</b>	Receptor-type tyrosine-protein phosphatase C (EC 3.1.3.48) (Leukocyte common antigen) (L-CA) (T200) (CD antigen CD45)
<b>Human Gene Id</b>	5788
<b>Swiss-Prot</b>	P08575
<b>Formulation</b>	Liquid in PBS containing, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse:IgG2b, Kappa
<b>Dilution</b>	IHC-p: 1:100-200
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Concentration</b>	-
<b>Storage&amp;Stability</b>	4°C: 1 years
<b>Background</b>	The protein phosphatase (PTP) receptor CD45 is a type I transmembrane protein comprised of a pair of intracellular tyrosine phosphatase domains and a variable extracellular domain generated by alternative splicing. The catalytic activity of CD45 is a function of the first phosphatase domain (D1) while the second phosphatase domain (D2) may interact with and stabilize the first domain, or recruit/bind substrates. CD45 interacts directly with antigen receptor complex proteins or activates Src family kinases involved in the regulation of T- and B-cell antigen receptor signaling. Specifically, CD45 dephosphorylates Src-family kinases Lck and Fyn at their conserved negative regulatory carboxy-terminal tyrosine residues and upregulates kinase activity. Conversely, studies indicate that CD45 can also inhibit Lck and Fyn by dephosphorylating their positive regulatory autophosphorylation site. CD45 appears to be both a positive and a negative regulator that conducts signals depending on specific stimuli and cell type. Human leukocytes including lymphocytes, eosinophils, monocytes, basophils, and neutrophils express CD45, while erythrocytes and platelets are negative for CD45 expression.
<b>Subcellular Location</b>	Membranous
<b>BiowMW</b>	-

### Products Images: