

CD45 / LCA Monoclonal Mouse Antibody (Bra55)

Product Description

CD45R, also designated CD45 and PTPRC, has been identified as a transmembrane glycoprotein, broadly expressed among hematopoietic cells. Multiple isoforms of CD45R are distributed throughout the immune system according to cell type. These isoforms arise because of alternative splicing of exons 4, 5, and 6. The corresponding protein domains are characterized by the binding of monoclonal antibodies specific for CD45RA (exon 4), CD45RB (exon 5), CD45RC (exon 6) and CD45RO (exons 4 to 6 spliced out). The variation in these isoforms is localized to the extracellular domain of CD45R, while the intracellular domain is conserved. CD45R functions as a phosphor-tyrosine phosphatase. Antibody to CD45 is useful in differential diagnosis of lymphoid tumors from non-hematopoietic undifferentiated neoplasms.

Product attributes

Antibody number	#0313
Antibody reactivity (target)	CD45, LCA
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	Bra55
Isotype	IgG1, kappa
Molecular weight	180-220 kDa
Synonyms	B220, CD45R, GP180, Leukocyte common antigen (LCA), Loc, Ly-5, Lyt-4, Protein tyrosine phosphatase receptor type C (PTPRC), Receptor-type tyrosine-protein phosphatase C, T200 glycoprotein
Human gene symbol	PTPRC
Entrez gene ID	5788
SwissProt	P08575
Unigene	654514
Immunogen	Recombinant full-length human PTPRC protein
Antibody target cellular localization	Plasma membrane
Verified antibody applications	Flow (verified), IF (verified), IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistochemistry (formalin-fixed): 0.5-1.0 ug/mL for 30 minutes at RT, Flow cytometry: 0.5-1 ug/million cells, Immunofluorescence: 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user
Positive control	Jurkat, Ramos, U-698 or GA-10 cells. Tonsil.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Cell/tissue expression	Hematopoietic cells
Tumor expression	Leukemia/lymphoma
Antibody research areas	Immunology, Signal transduction

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