

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.

Also view our [CD45 Mouse Monoclonal Biotium Choice Antibody \(2D1\)](#). The antibody belongs to the Biotium Choice list of select antibodies that have been developed and validated in-house for optimal performance. The antibody has been validated in flow cytometry. **Catalog number key for antibody number 0313, Anti-CD45|LCA (Bra55)**

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, Lyl-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
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (<i>Bos taurus</i>), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Tumor expression	Leukemia/lymphoma
Antibody research areas	Immunology, Signal transduction

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF@405S	404/431	405	DAPI (microscopy), AF405	CF@405S Features
BNC88	CF@488A	490/515	488	GFP, FITC	CF@488A Features
BNC68	CF@568	562/583	532, 561	RFP, TRITC	CF@568 Features
BNC94	CF@594	593/614	561	Texas Red®	CF@594 Features
BNC40	CF@640R	642/662	633-640	Cy@5	CF@640R Features
BNC47	CF@647	650/665	633-640	Cy@5	CF@647 Features
BNC74	CF@740	742/767	633-685	775/50	CF@740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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