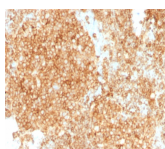


# CD45 / LCA Monoclonal Mouse Antibody (PTPRC/1147 + PTPRC/1460)



## Product Description

Recognizes the CD45 leukocyte common antigen (LCA) family which is comprised of at least four isoforms of membrane glycoproteins (220, 205, 190, 180 kDa) expressed on hematopoietic cell lines but absent on non-hematopoietic cell lines, normal and malignant non-hematopoietic tissues. The intracellular portions of these molecules have protein phosphatase activity and are involved in regulation of transmembrane signals. Antibody to CD45 is useful in differential diagnosis of lymphoid tumors from non-hematopoietic undifferentiated neoplasms. A positive result with this MAb is highly indicative of lymphoid or myeloid origin. Certain types of lymphoid neoplasms may lack CD45 (Hodgkin lymphoma, some T-cell lymphomas, and some leukemias) so its absence does not rule out a hematolymphoid tumor. This antibody is expressed almost exclusively by cells of hematopoietic lineage and is present in most benign and malignant lymphocytes as well as plasma cell precursors.

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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 2027, Anti-CD45|LCA (PTPRC/1147 PTPRC/1460)**

## Product attributes

Antibody number	#2027
Antibody reactivity (target)	CD45, LCA
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	PTPRC/1147 + PTPRC/1460
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	Human recombinant full-length CD45 protein
Verified antibody applications	IHC (FFPE) (verified), WB (verified)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Positive control	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
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Cell/tissue expression	Hematopoietic cells
Antibody research areas	Immunology, Signal transduction
Tumor expression	Leukemia/lymphoma

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