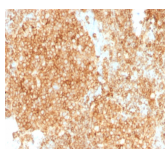


# CD45 / LCA Monoclonal Mouse Antibody (PTPRC/1147 + PTPRC/1460)



## 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

<b>Antibody number</b>	#2027
<b>Antibody reactivity (target)</b>	CD45, LCA
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	PTPRC/1147 + PTPRC/1460
<b>Isotype</b>	IgG1, kappa
<b>Molecular weight of antigen</b>	180-220 kDa
<b>Synonyms</b>	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
<b>Human gene symbol</b>	PTPRC
<b>Entrez gene ID</b>	5788
<b>SwissProt</b>	P08575
<b>Unigene</b>	654514
<b>Immunogen</b>	Human recombinant full-length CD45 protein
<b>Verified antibody applications</b>	IHC (FFPE) (verified), WB (verified)
<b>Antibody target cellular localization</b>	Plasma membrane
<b>Species reactivity</b>	Human
<b>Positive control</b>	Ramos, U-698, or GA-10 cells. Tonsil
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	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
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Product origin</b>	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.
<b>Cell/tissue expression</b>	Hematopoietic cells
<b>Antibody research areas</b>	Immunology, Signal transduction
<b>Tumor expression</b>	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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