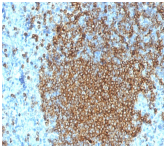


# CD45RA Monoclonal Mouse Antibody (K4B5)



## Product Description

Recognizes a protein of 205 kDa-220 kDa, identified as CD45RA. CD45RA is isoforms of the human leukocyte common antigen (CD45). Human CD45 contains three exons which encode peptide segments designated A, B and C, respectively. The differential splicing of the exons generates at least five isoforms, ABC, AB, BC, B and O. This antibody reacts with ABC and BC isoforms. CD45RA is expressed on 40-50% of peripheral CD4 T-cells, 50% of peripheral CD8 T-cells, B-cells, and leukemic B-cell lines. T-cells expressing CD45RA are naive or virgin T-cells. T-cells expressing CD45RO are memory T-cells. CD45RA and CD45RO define complementary, predominantly non-overlapping populations of resting peripheral T-cells. This MAb is useful in study on the subpopulation of CD4 or CD8 T-cells. It can especially be used to differentiate T-cell lymphomas (CD45RO ve) from B cell lymphomas (CD45RA ve). 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.

## Product attributes

Antibody number	#1680
Antibody reactivity (target)	CD45RA
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	K4B5
Isotype	IgG2a, kappa
Molecular weight	205-220 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	Stimulated human leukocytes
Verified antibody applications	Flow (verified), IHC (FFPE) (verified), WB (verified)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Positive control	Daudi, Raji, IM9 and human lymphocytes. Human spleen, lymph nodes and tonsils.
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35 °C, Store at 2 to 8 °C, Protect fluorescent conjugates from light
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	B-cells
Antibody research areas	Immunology, Signal transduction
Tumor expression	Leukemia/lymphoma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
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

## Dye Features

- [CF®405S Features](#)
- [CF®488A Features](#)
- [CF®568 Features](#)
- [CF®594 Features](#)
- [CF®640R Features](#)
- [CF®647 Features](#)

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