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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1680, Anti-CD45RA (K4B5)

Product attributes

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| 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; 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 | 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 $^{\circ}$ C, Store at 2 to 8 $^{\circ}$ 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 | |
| onen me | stored as recommended | |
| Product origin | stored as recommended 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. | |
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| 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, | N/A | N/A | N/A | |

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