

## Anti-CD45R [RA3-6B2] VivopureX 5 mg Ab01031-2.0-VXM

This chimeric mouse antibody was made using the variable domain sequences of the original Rat IgG2a format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG2a, Kappa

**Clone Number:** RA3-6B2

**Alternative Name(s) of Target:** B220; CD45; CD45 antigen; Cluster designation 45R; L-CA; Leukocyte common antigen; Ly-5; lymphocyte antigen 5; lymphocyte common antigen; Lyt-4; protein tyrosine phosphatase, receptor type, C; protein tyrosine phosphatase, receptor type, c polypeptide; Receptor-type tyrosine-protein phosphatase C; T200; T200 glycoprotein; T200 leukocyte common antigen

**UniProt Accession Number of Target Protein:** P06800

**Published Application(s):** WV, FC, IF, IHC

**Published Species Reactivity:** Mouse

**Immunogen:** This antibody was raised in Lou-M rats using a popliteal lymph node immunisation and fusion protocol as described by Martiniello et al (1994)

**Specificity:** This antibody is specific for murine CD45R antigen which is expressed on B lymphocytes throughout their development from early pro-B stages onwards and is down-regulated upon terminal differentiation to plasma cells. Apart from B cells, CD45R is expressed on a small subset of dendritic cells (plasmacytoid dendritic cells). The CD45R mAb clone RA3-6B2 specifically recognizes the exon A-restricted isoform of mouse CD45.

**Application Notes:** This antibody has been used in FACS analyses, immunoprecipitation, immunoblotting, and immunohistochemistry in various studies, such as to understand the role of PD-1 in maintaining islet-specific tolerance in type 1 diabetes (Martinov et al, 2016), to investigate how Staphylococcus aureus enterotoxins spread systemically and trigger inflammatory cascades (Svedova et al, 2016), to highlight the physiologic importance of cell-type specific balancing of AhR/AhRR expression in response to microbial, nutritional and other environmental stimuli (Brandstätter et al, 2016), and to examine the role of FBXW7 in suppression of cancer metastasis in a non-cell-autonomous manner (Yumimoto et al, 2015).

**Antibody First Published in:** Stephen Hurst et al. New IL-17 family members promote Th1 or Th2 responses in the lung: in vivo function of the novel cytokine IL-25. J Immunol. 2002 Jul 1;169(1):443-53.

[PMID:12077275](#)

**Note on publication:** Describe the use of this antibody for FACS analysis to demonstrate the function of the novel cytokine IL-25 in the lung.

## Product Form

**Size:** 5 mg VivopureX products are produced at high purity (>98%), low endotoxin (<0.5 EU/mg) and are formulated without preservatives. These antibodies are chimerized to have an Fc domain matching their target species to reduce immunogenicity and give you the optimal effector function for your experiment. As a result VivopureX products are the ideal choice for in vivo research applications.

**Purification:** Protein A affinity purified

**Supplied In:**

PBS only.

**Storage Recommendation:** All VivopureX products are formulated in PBS only without addition of preservatives. To ensure optimal storage and prevent microbial contamination, only open and dispense under sterile conditions. Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:**  $\geq 1$ mg (see vial label for exact conc)

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.