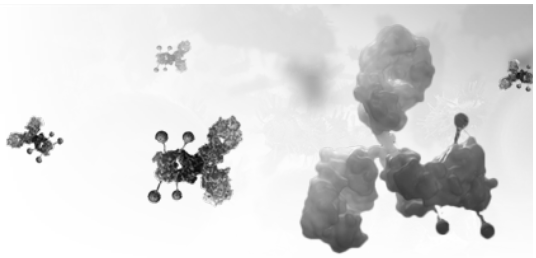

Mouse Anti-Klrb1b monoclonal antibody, clone 3E23 (CABT-RM144)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Detects Natural killer cell surface protein NKR-P1B allele B6 (NKR-P1B) in murine species. It does not react with Nkrp1a, Nkrp1c, and Nkrp1f.
Target	Klrb1b
Immunogen	Mouse BaF/3 cells (murine IL-3-dependent pro-B cell line) expressing mouse NKR-P1B protein.
Isotype	IgG2a, λ
Source/Host	Mouse
Species Reactivity	Mouse
Clone	3E23
Purification	Protein G purified
Conjugate	unconjugated
Applications	FC, FuncS, IP, WB
Molecular Weight	~52 kDa observed; 25.03 kDa calculated. . Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 µl
Buffer	PBS
Preservative	None

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Storage	Stable for 1 year at -20°C from date of receipt. Handling Recommendations: Upon receipt and prior to removing the cap, centrifuge the vial and gently mix the solution. Aliquot into microcentrifuge tubes and store at -20°C. Avoid repeated freeze/thaw cycles, which may damage IgG and affect product performance.

BACKGROUND

Introduction	Killer cell lectin-like receptor subfamily B member 1B allele B is encoded by the Klrb1b gene in murine species. NKR-P1B is a single-pass type II disulfide-linked homodimeric membrane protein that is expressed only on a subset of mature natural killer (NK) cells. It serves as an inhibitory receptor that inhibits NK cell function upon interaction with its cognate C-type lectin-related ligand, Clr-b. The NKR-P1B-Clr-b system plays a role in tumor surveillance and immune escape in a transgenic murine model of B-cell lymphoma. It is reported to mediate MHC class I-independent "missing-self" recognition of allografts, tumor cells, and virus-infected cells. Structurally, it has a cytoplasmic domain (aa 1-43), a short transmembrane domain (aa 44-64), and extracellular domain (aa 65-223). Its N-terminal ITIM motif (aa 6-11) undergoes phosphorylation and the phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases leading to down-regulation of cell activation.
Keywords	Killer cell lectin-like receptor subfamily B member 1B allele B; Klrb1b; Ly-55d; NKR-P1D; Klrb1d; Ly55d; Nkrp1b; Nkrp1d; CD161 antigen-like family member B; CD161b; Inhibitory receptor NKR-P1B

GENE INFORMATION

Entrez Gene ID	80782
UniProt ID	Q99JB4

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