



Rat Anti-Mouse CD45RB Monoclonal antibody, clone MB23G2 (HB220) (CABT-L4361)

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

PRODUCT INFORMATION

Product Overview

The HB220 antibody reacts with mouse CD45RB a 220 kDa transmembrane protein tyrosine phosphatase expressed on peripheral B cells naïve T cells thymocytes and weakly on macrophages and dendritic cells. CD45RB is one of 5 isoforms of CD45 which result from alternative splicing of exons 4-6. CD45RB results from exon 5 splicing. CD45RB is critical for intracellular signaling in T cells in response to antigen stimulation as indicated by the severe immunodeficiency observed in CD45-deficient mice. As T cells progress from naïve to memory cells and become activated CD45RB expression is downregulated. Additionally the intensity of CD45RB expression can be used to differentiate between functionally distinct CD4+ T cell subsets which secrete differing cytokine profiles. The primary ligands for CD45 include galectin-1 CD2 CD3 CD4 and Thy-1.

Target	Mouse CD45RB
Immunogen	Anti-immunoglobulin activated mouse B cells
Isotype	IgG2a, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	MB23G2 (HB220)
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo anti-CD45RB-mediated tolerance induction, in vivo pre-mNK cell depletion

Molecular Weight	150 kDa
Format	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	member of a family of heavily glycosylated leukocyte cell surface glycoproteins; displays extensive O-glycosylation [RGD, Feb 2006]
Keywords	PTPRC;protein tyrosine phosphatase, receptor type, C;Lca;RT7;CD45;L-CA;T200;receptor-type tyrosine-protein phosphatase C;T200 glycoprotein;leucocyte common antigen;leukocyte common antigen A;leukocyte common antigen B;Protein tyrosine phosphatase, receptor-type, c polypeptide;

GENE INFORMATION

Official Symbol	protein tyrosine phosphatase, receptor type, C
Synonyms	PTPRC; protein tyrosine phosphatase, receptor type, C; Lca; RT7; CD45; L-CA; T200; receptor-type tyrosine-protein phosphatase C; T200 glycoprotein; leucocyte common antigen; leukocyte common antigen A; leukocyte common antigen B; Protein tyrosine phosphatase, receptor-type, c polypeptide;