

## Basic Information

Product Name	Anti-CD45/PTPRC Antibody	
Gene Name	PTPRC	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.	
Immunogen	A synthesized peptide derived from human CD45	
concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	180-250KD	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:20-100	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

CD45 (Cluster of Differentiation 45), also known as PTPRC, LCA or CD45R, is an enzyme that, in humans, is encoded by the PTPRC gene. CD45 is a member of the protein tyrosine phosphatase (PTP) family. CD45 is a major high molecular mass leukocyte cell surface molecule which is also an integral membrane protein tyrosine phosphatase. The cytogenetic location of CD45 is 1q31.3-q32.1. This gene is especially a prototype for transmembrane protein-tyrosine phosphatase (PTP). Targeted disruption of the CD45 gene leads to enhanced cytokine and interferon receptor-mediated activation of JAKs and STAT proteins. In vitro, CD45 directly dephosphorylates and binds to JAKs. Functionally, CD45 negatively regulates interleukin-3-mediated cellular proliferation, erythropoietin-dependent hematopoiesis, and antiviral responses in vitro and in vivo. CD45 has been best studied in T cells, where it determines T cell receptor signaling thresholds. CD45 is moved into or out of the immunological synapse (IS) membrane microdomain depending on the relative influence of interaction with the extracellular galectin lattice or the intracellular actin cytoskeleton. Galectin interaction can be finetuned by varying usage of the heavily O-glycosylated spliced regions and sialylation of N-linked carbohydrates.

## Selected Validation Data

Product datasheet

## Anti-CD45/PTPRC Antibody

Catalog Number: **BM4187**

# BOSTER

antibody and ELISA experts

**BOSTER BIOLOGICAL TECHNOLOGY**

Special NO.1, International Enterprise Center,  
2nd Guanshan Road, Wuhan, China

**Web:** [www.boster.com.cn](http://www.boster.com.cn) **Phone:** +86 027-67845390 **Fax:** +86 027-67845390 **Email:** [boster@boster.com.cn](mailto:boster@boster.com.cn)

Western blot analysis of CD45 expression in Jurkat cell lysate.

