# **Product Datasheet**





# Mouse Anti-Human CD45

## **Overview**

Product number PDZMM107

Host species Mouse

Target species Human

Suitable for: IHC-P, WB, ELISA, Immunomicroscopy,

Dot blot, ICC, IHC-Fr

**Immunogen** A KLH-conjugated synthetic peptide derived from human CD45 protein was used for immunization.

**Conjugation** Unconjugated

# **Properties**

Form Liquid

Storage instructions Shipped at 4 °C. Store at -20 °C. Avoid freeze/thaw cycle. Please see notes

section.

**IgG** 

**Storage buffer** Phosphate buffered saline pH 7.4, contains stabilizer and ≤0.09% sodium azide.

**Purity** SpG purified

**Purification notes** This product was prepared by immunoaffinity chromatography using Protein G.

Conjugation notes

**Clonality** Monoclonal

Isotype

**General notes** For extended storage aliquot contents and freeze at -20 °C or below. Centrifuge

product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to

immediate use.

Our customer's feedback says the antibody worked great. If in case the antibody fails to give results then please contact our scientific support team for assistance.



### **Applications**

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end-user.

## **Product Usage Information:**

### **Application Dilutions**

Western Blotting 3-5 ug/ml
Immunohistochemistry (Paraffin) 5-10 ug/ml
Immunohistochemistry (Frozen) 5-10 ug/ml
Immunofluorescence 5-10 ug/ml
Flow Cytometry 5-10 ug/ml

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### **Background:**

Protein tyrosine phosphatase, receptor type, C also known as PTPRC is an enzyme that, in humans, is encoded by the PTPRC gene. PTPRC is also known as CD45 antigen (CD stands for cluster of differentiation), which was originally called leukocyte common antigen (LCA). The protein product of this gene, best known as CD45, is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45 contains an extracellular domain, a single transmembrane segment, and two tandem intracytoplasmic catalytic domains, and thus belongs to the receptor type PTP family. CD45 is a type I transmembrane protein that is present in various isoforms on all differentiated hematopoietic cells (except erythrocytes and plasma cells). CD45 has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes via its extracellular domain (a form of co-stimulation), or by activating various Src family kinases required for the antigen receptor signaling via its cytoplasmic domain. CD45 also suppresses JAK kinases, and so functions as a negative regulator of cytokine receptor signaling.

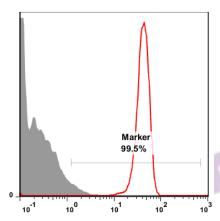
Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100  $\mu$ g/ml BSA and 50% glycerol. Store at – 20°C. After receiving aliquot the antibody and store at –20°C.

#### Terms and conditions

Guarantee only valid for products bought direct from PADZA or one of our authorized distributors



## **References:**



Note: This product has originally been developed at Avicenna Research Institute, Tehran, IRAN and assigned to PADZA Company according to contract 98/15/191dated 98/01/10.

