

# Product datasheet for TA506545BM

#### OriGene Technologies, Inc.

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### CD45 (PTPRC) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI3E3]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI3E3

**Applications:** FC, IF, WB

**Recommended Dilution:** WB 1:400~8000, IF 1:100, FLOW 1:50

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PTPRC(NP\_002829) produced in HEK293T

cell

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol.

**Concentration:** 0.5 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: HRP

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 147.1 kDa

**Gene Name:** protein tyrosine phosphatase receptor type C

Database Link: NP 002829

Entrez Gene 5788 Human

P08575





### Background:

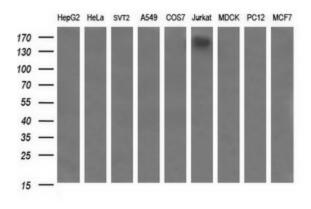
The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. This PTP 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, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq, Jun 2012]

**Synonyms:** B220; CD45; CD45R; GP180; L-CA; LCA; LY5; T200

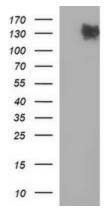
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Phosphatase, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs), Fc gamma R-mediated phagocytosis, Primary immunodeficiency, T cell receptor signaling pathway

## **Product images:**

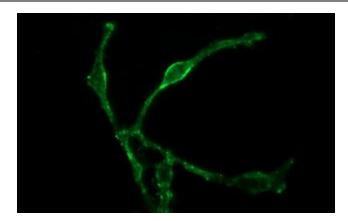


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PTPRC monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

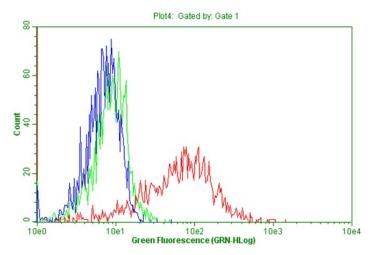


HEK293T cells lysate (5 ug, left lane) and full length human recombinant protein of human PTPRC (NP\_002829) produced in HEK293T cell (5 ug, right lane)were separated by SDS-PAGE and immunoblotted with anti-PTPRC.





Immunofluorescent staining of HeLa cells using anti-PTPRC mouse monoclonal antibody ([TA506545]).



Flow cytometric Analysis of living Jurkat cells, using anti-PTPRC antibody ([TA506545]), (Red), compared to IgG isotype control, (green) and PBS (blue).