

### **Product datasheet for TA506563**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# CD45 (PTPRC) Mouse Monoclonal Antibody [Clone ID: OTI3D1]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3D1

**Applications:** FC, IHC, WB

Recommended Dilution: WB 1:4000, IHC 1:500, 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 and 0.02% sodium azide.

Concentration: 1 mg/ml

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

(protein A/G)

**Conjugation:** Unconjugated

**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]

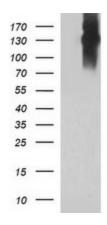
**Synonyms:** B220; CD45; CD45R; GP180; L-CA; LCA; LY5; T200

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

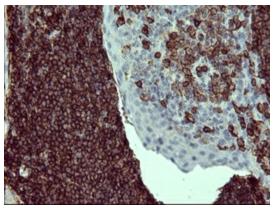
**Protein Pathways:** Cell adhesion molecules (CAMs), Fc gamma R-mediated phagocytosis, Primary

immunodeficiency, T cell receptor signaling pathway

## **Product images:**

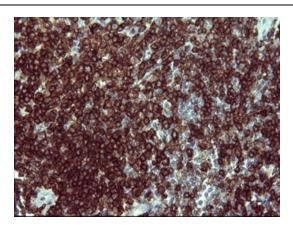


HEK293T cells lysate (5 ug, left lane) and full length human recombinant protein of human PTPRC (NP\_002829) produced in HEK293T cell (5 ug, right lane)were separated by SDS-PAGE and immunoblotted with anti-PTPRC.

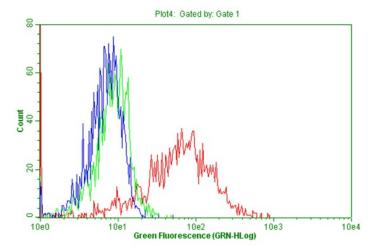


Immunohistochemical staining of paraffinembedded Human lymph node tissue within the normal limits using anti-PTPRC mouse monoclonal antibody. (TA506563; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min)





Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-PTPRC mouse monoclonal antibody. (TA506563; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min)



Flow cytometric Analysis of living Jurkat cells, using anti-PTPRC antibody (TA506563), (Red), compared to IgG isotype control, (green) and PBS (blue).