

#### OriGene Technologies, Inc.

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# Product datasheet for TA506055S

# CD45 (PTPRC) Mouse Monoclonal Antibody [Clone ID: OTI2H1]

### **Product data:**

| Product Type:           | Primary Antibodies   |
|-------------------------|--|
| Clone Name:             | OTI2H1   |
| Applications:           | FC, IHC, WB  |
| Recommended Dilution:   | WB 1:200~8000, IHC 1:150, FLOW 1:50  |
| Reactivity:             | Human  |
| Host:                   | Mouse  |
| lsotype:                | lgG1   |
| Clonality:              | Monoclonal   |
| Immunogen:              | Full length human recombinant protein of human PTPRC(NP_001318) 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<br>(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:          | <u>NP_002829</u><br><u>Entrez Gene 5788 Human</u><br><u>P08575</u>   |



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|                   | CD45 (PTPRC) Mouse Monoclonal Antibody [Clone ID: OTI2H1] – TA506055S   |
|-------------------|---|
| 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 Pathway   | s: Cell adhesion molecules (CAMs), Fc gamma R-mediated phagocytosis, Primary<br>immunodeficiency, T cell receptor signaling pathway   |

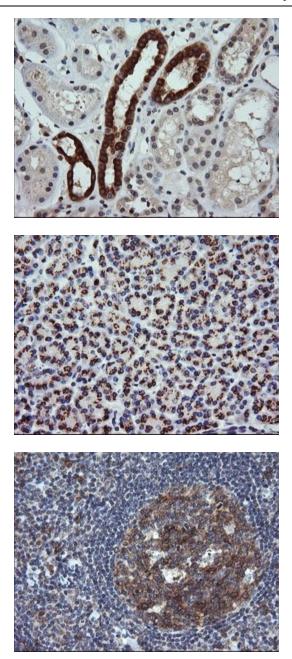
## **Product images:**

HepG2 HeLa SVT2 A549 COS7 Jurkat MDCK PC12 MCF7 158-106-79-48-35-23-170 . 130 100 -70 -55 -40 35 25 . 15 -

10 -

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.

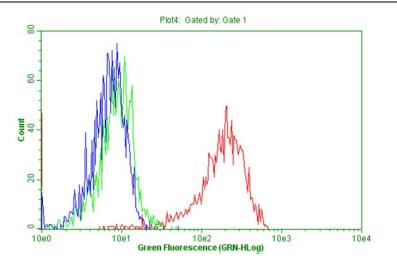
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Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-PTPRC mouse monoclonal antibody. ([TA506055]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min)

Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-PTPRC mouse monoclonal antibody. ([TA506055]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min)

Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-PTPRC mouse monoclonal antibody. ([TA506055]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min)

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Flow cytometric Analysis of living Jurkat cells, using anti-PTPRC antibody ([TA506055]), (Red), compared to IgG isotype control, (green) and PBS, (blue).

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