

#### 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

# Product datasheet for TA506055M

# 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 (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> <u>Entrez Gene 5788 Human</u> <u>P08575</u>



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

	CD45 (PTPRC) Mouse Monoclonal Antibody [Clone ID: OTI2H1] – TA506055M
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	rs: Cell adhesion molecules (CAMs), Fc gamma R-mediated phagocytosis, Primary immunodeficiency, T cell receptor signaling pathway

## **Product images:**

158-106-79-48-35-23-170 — 130 — 130 — 100 — 70 — 55 — 40 — 35 — 25 —

15 -

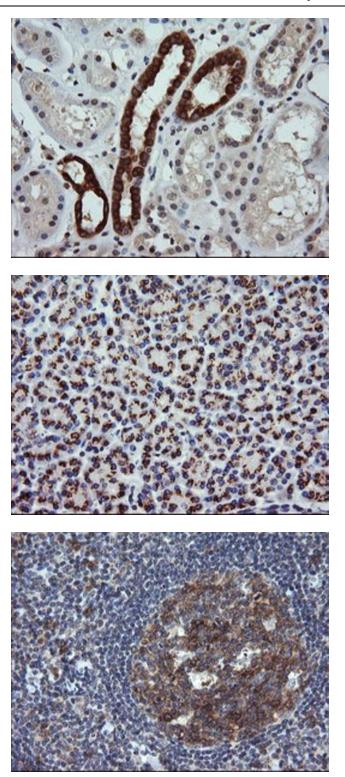
10 -

HepG2 HeLa SVT2 A549 COS7 Jurkat MDCK PC12 MCF7

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.

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

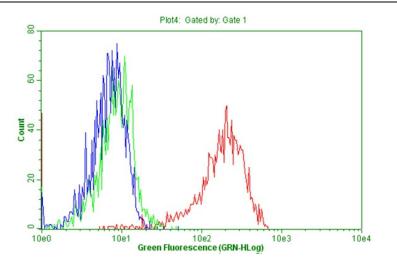


Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-PTPRC mouse monoclonal antibody. ([TA506055]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

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). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

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). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US



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

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US