

Product datasheet for **CF501073**

PTP epsilon (PTPRE) Mouse Monoclonal Antibody [Clone ID: OTI4G2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4G2
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:2000, IF 1:100, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PTPRE (NP_006495) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
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:	80.6 kDa
Gene Name:	protein tyrosine phosphatase receptor type E
Database Link:	NP_006495 Entrez Gene 19267 Mouse Entrez Gene 114767 Rat Entrez Gene 5791 Human P23469



[View online »](#)

Background:

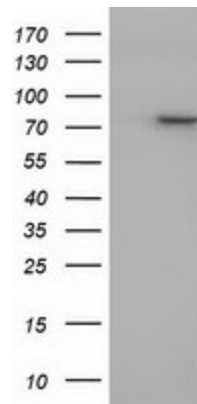
The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic tran signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. Two alternatively spliced transcript variants of this gene have been reported, one of which encodes a receptor-type PTP that possesses a short extracellular domain, a single transmembrane region, and two tandem intracytoplasmic catalytic domains; Another one encodes a PTP that contains a distinct hydrophilic N-terminus, and thus represents a nonreceptor-type isoform of this PTP. Studies of the similar gene in mice suggested the regulatory roles of this PTP in RAS related signal transduction pathways, cytokines induced SATA signaling, as well as the activation of voltage-gated K⁺ channels.

Synonyms:

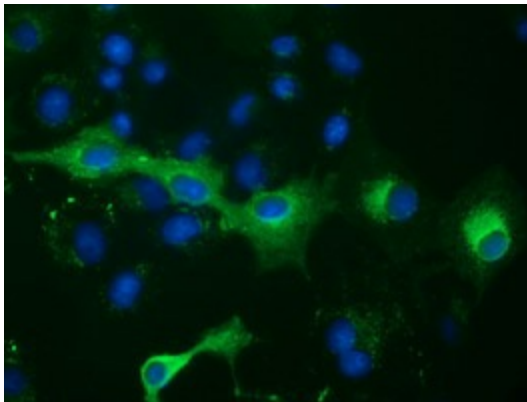
HPTPE; PTPE; R-PTP-EPSILON

Protein Families:

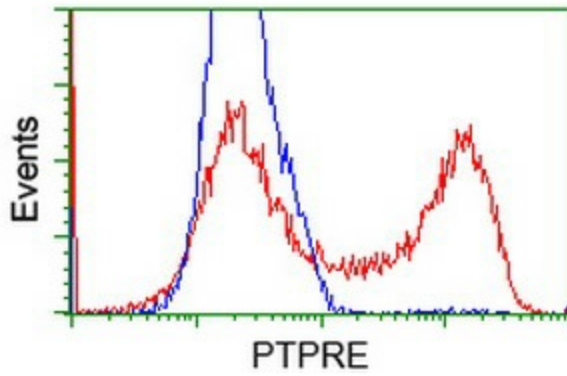
Druggable Genome, Phosphatase, Transmembrane

Product images:

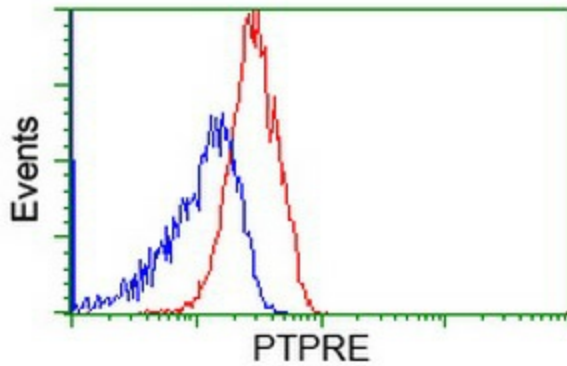
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PTPRE ([RC207950], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTPRE. Positive lysates [LY401950] (100ug) and [LC401950] (20ug) can be purchased separately from OriGene.



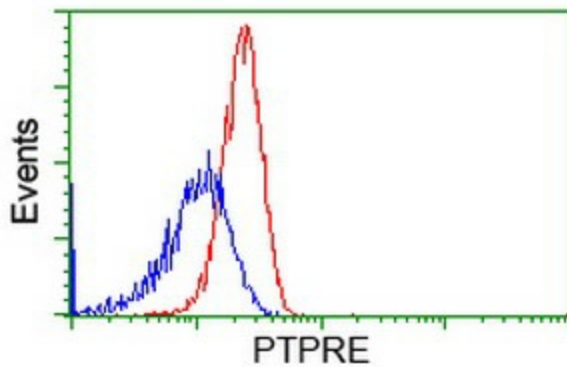
Anti-PTPRE mouse monoclonal antibody ([TA501073]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PTPRE ([RC207950]).



HEK293T cells transfected with either [RC207950] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PTPRE antibody ([TA501073]), and then analyzed by flow cytometry.



Flow cytometric Analysis of Jurkat cells, using anti-PTPRE antibody ([TA501073]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Flow cytometric Analysis of HeLa cells, using anti-PTPRE antibody ([TA501073]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).