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PTPRJ Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PTPRJ.
Catalog # AT3496a

Product Information

Application	WB, E
Primary Accession	Q12913
Other Accession	NM_002843
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	6G11
Calculated MW	145941

Additional Information

Gene ID	5795
Other Names	Receptor-type tyrosine-protein phosphatase eta, Protein-tyrosine phosphatase eta, R-PTP-eta, Density-enhanced phosphatase 1, DEP-1, HPTP eta, Protein-tyrosine phosphatase receptor type J, R-PTP-J, CD148, PTPRJ, DEP1
Target/Specificity	PTPRJ (NP_002834.2, 38 a.a. ~ 137 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	PTPRJ Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

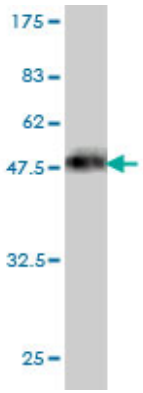
Background

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 transformation. This PTP possesses an extracellular region containing five fibronectin type III repeats, a single transmembrane region, and a single intracytoplasmic catalytic domain, and thus represents a receptor-type PTP. This protein is present in all hematopoietic lineages, and was shown to negatively regulate T cell receptor signaling possibly through interfering with the phosphorylation of Phospholipase C Gamma 1 and Linker for Activation of T Cells. This protein can also dephosphorylate the PDGF beta receptor, and may be involved in UV-induced signal transduction. Multiple transcript variants encoding different isoforms have been found for this gene.

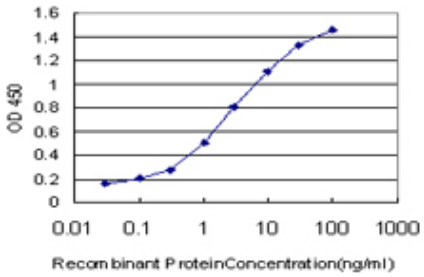
References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. Phosphatome profiling reveals PTPN2, PTPRJ and PTEN as potent negative regulators of PKB/Akt activation in Ras-mutated cancer cells. Omerovic J, et al. Biochem J, 2010 Jan 27. PMID 19922411. An unbiased screen identifies DEP-1 tumor suppressor as a phosphatase controlling EGFR endocytosis. Tarcic G, et al. Curr Biol, 2009 Nov 17. PMID 19836242. Missense polymorphisms of PTPRJ and PTPN13 genes affect susceptibility to a variety of human cancers. Mita Y, et al. J Cancer Res Clin Oncol, 2010 Feb. PMID 19672627. Tumor suppressor density-enhanced phosphatase-1 (DEP-1) inhibits the RAS pathway by direct dephosphorylation of ERK1/2 kinases. Sacco F, et al. J Biol Chem, 2009 Aug 14. PMID 19494114.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



Detection limit for recombinant GST tagged PTPRJ is approximately 0.03ng/ml as a capture antibody.