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PTPRS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant PTPRS.
Catalog # AT3497a

Product Information

Application	WB
Primary Accession	Q13332
Other Accession	BC029496
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b kappa
Clone Names	1H6
Calculated MW	217041

Additional Information

Gene ID	5802
Other Names	Receptor-type tyrosine-protein phosphatase S, R-PTP-S, Receptor-type tyrosine-protein phosphatase sigma, R-PTP-sigma, PTPRS
Target/Specificity	PTPRS (AAH29496, 31 a.a. ~ 128 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000
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	PTPRS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

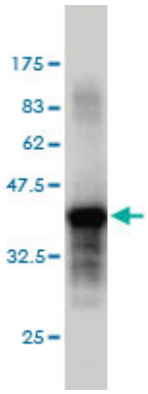
Background

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 contains an extracellular region, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus represents a receptor-type PTP. The extracellular region of this protein is composed of multiple Ig-like and fibronectin type III-like domains. Studies of the similar gene in mice suggested that this PTP may be involved in cell-cell interaction, primary axonogenesis, and axon guidance during embryogenesis. This PTP has been also implicated in the molecular control of adult nerve repair. Four alternatively spliced transcript variants, which encode distinct proteins, have been reported.

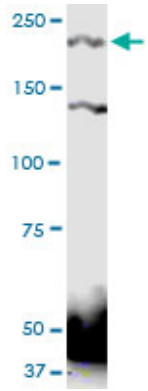
References

A new role for RPTPsigma in spinal cord injury: signaling chondroitin sulfate proteoglycan inhibition. Duan Y, et al. Sci Signal, 2010 Feb 23. PMID 20179269.Trans-synaptic adhesions between netrin-G ligand-3 (NGL-3) and receptor tyrosine phosphatases LAR, protein-tyrosine phosphatase delta (PTPdelta), and PTPsigma via specific domains regulate excitatory synapse formation. Kwon SK, et al. J Biol Chem, 2010 Apr 30. PMID 20139422.Frameshift mutations in coding repeats of protein tyrosine phosphatase genes in colorectal tumors with microsatellite instability. Korff S, et al. BMC Cancer, 2008 Nov 10. PMID 19000305.Genetic variation in receptor protein tyrosine phosphatase sigma is associated with type 2 diabetes in Swedish Caucasians. L?ngberg EC, et al. Eur J Endocrinol, 2007 Oct. PMID 17893260.Protein-tyrosine phosphatase sigma is associated with ulcerative colitis. Muise AM, et al. Curr Biol, 2007 Jul 17. PMID 17614280.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.52 KDa) .



PTPRS monoclonal antibody (M01), clone 1H6 Western Blot analysis of PTPRS expression in HeLa ((Cat # AT3497a)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.