

Anti-PTPRS antibody



Description	Unconjugated Rabbit polyclonal to PTPRS
Model	STJ191301
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human PTPRS protein.
Immunogen Region	320-400aa
Gene ID	5802
Gene Symbol	PTPRS
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	PTPRS Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Detected in peripheral blood plasmacytoid dendritic cells (at protein level) . Detected in all tissues tested except for placenta and liver . Detected in peripheral blood plasmacytoid dendritic cells .
Purification	PTPRS antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Receptor-type tyrosine-protein phosphatase S R-PTP-S Receptor-type tyrosine-protein phosphatase sigma R-PTP-sigma
Molecular Weight	214 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:9681OMIM:601576
Alternative Names	Receptor-type tyrosine-protein phosphatase S R-PTP-S Receptor-type tyrosine-protein phosphatase sigma R-PTP-sigma
Function	Cell surface receptor that binds to glycosaminoglycans, including chondroitin sulfate proteoglycans and heparan sulfate proteoglycan . Binding to chondroitin sulfate and heparan sulfate proteoglycans has opposite effects on PTPRS oligomerization and regulation of neurite outgrowth. Contributes to the inhibition of neurite and axonal outgrowth by chondroitin sulfate proteoglycans, also after nerve transection. Plays a role in stimulating neurite outgrowth in response to the heparan sulfate proteoglycan GPC2. Required for normal brain development, especially for normal development of the pituitary gland and the olfactory bulb. Functions as tyrosine phosphatase . Mediates dephosphorylation of NTRK1, NTRK2 and NTRK3 . Plays a role in down-regulation of signaling cascades that lead to the activation of Akt and MAP kinases . Down-regulates TLR9-mediated activation of NF-kappa-B, as well as production of TNF, interferon alpha and interferon beta .
Cellular Localization	Cell membrane Cell projection, axon Perikaryon Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane Cell junction, synapse, synaptosome Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Is rapidly internalized when dendritic cells are stimulated with the TLR9 ligand cytidine-phosphate-guanosine (CpG) . Detected in a punctate pattern along neurites and axon growth cones .
Post-translational Modifications	A cleavage occurs, separating the extracellular domain from the transmembrane segment. This process called 'ectodomain shedding' is thought to be involved in receptor desensitization, signal transduction and/or membrane localization .