



# PTPRS Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-06068                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Reactivity</b>                  | Human;Rat;Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Applications</b>                | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Gene Name</b>                   | PTPRS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Immunogen</b>                   | Synthesized peptide derived from human protein . at AA range: 320-400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Specificity</b>                 | PTPRS Polyclonal Antibody detects endogenous levels of protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Dilution</b>                    | WB 1:500-2000 ELISA 1:5000-20000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Synonyms</b>                    | EC:3.1.3.48;PTPSIGMA;R PTP S;R PTP sigma;Receptor-type tyrosine-protein phosphatase S;PTPRS;Receptor-type tyrosine-protein phosphatase S (R-PTP-S) (EC 3.1.3.48) (Receptor-type tyrosine-protein phosphatase sigma) (R-PTP-sigma)                                                                                                                                                                                                                                                                                                                     |
| <b>Observed Band</b>               | 75-100 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Calculated Molecular Weight</b> | 128aa,14 kDa; 1948aa,217 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Cell Pathway</b>                | Cell membrane ; Single-pass type I membrane protein . Cell projection, axon . Perikaryon . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane . Cell junction, synapse, synaptosome . Cell junction, synapse, postsynaptic density . Cell projection, neuron projection . Cell projection, growth cone . Is rapidly internalized when dendritic cells are stimulated with the TLR9 ligand cytidine-phosphate-guanosine (CpG) (PubMed:26231120). Detected in a punctate pattern along neurites and axon growth cones (By similarity). . |
| <b>Tissue Specificity</b>          | Detected in peripheral blood plasmacytoid dendritic cells (at protein level) (PubMed:26231120). Detected in all tissues tested except for placenta and liver (PubMed:8524829, PubMed:8992885). Detected in peripheral blood plasmacytoid dendritic cells (PubMed:26231120).                                                                                                                                                                                                                                                                           |

**Function**

alternative products:Additional isoforms seem to exist,catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,function:Interacts with LAR-interacting protein LIP.1.,PTM: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.,similarity:Belongs to the protein-tyrosine phosphatase family. Receptor class 2A subfamily.,similarity:Contains 2 tyrosine-protein phosphatase domains.,similarity:Contains 3 Ig-like C2-type (immunoglobulin-like) domains.,similarity:Contains 8 fibronectin type-III domains.,subunit:Interacts with PPFA1, PPFA2 and PPFA3.,tissue specificity:Detected in all tissues tested except for placenta and liver.,

**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.

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**