

## Product datasheet for **TP512012**

### **Ptprs (BC052462) Mouse Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Purified recombinant protein of Mouse protein tyrosine phosphatase, receptor type, S (cDNA clone MGC:63375 IMAGE:6834684), complete cds, with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
<b>Species:</b>	Mouse
<b>Expression Host:</b>	HEK293T



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Expression cDNA >MR212012 representing BC052462  
Clone or AA Sequence: Red=Cloning site Green=Tags(s)

MAPTWSPSVSVVGPVGLFLVLLARGCLAEPPRFIREPKDQIGVSGGVASFVCQATGDPKPRVTWNKKG  
KKVNSQRFETIDFDESSGAVLRIQPLRTPRDENVYECVAQNSVGEITIHAKLTVLREDQLPPGFPNIDMG  
PQLKVVTRTRATMLCAASGNPDPEITWFKDFLPVDPSASNGRIKQLRSGALQIESSEETDQGYECVAT  
NSAGVRYSSPANLYVRRRVAPRFSILPMSHEIMPGGNVNITCAVAVGSPMPYVWMMQGAEDLTPEDDMPV  
GRNVLELTDVKDSANYTCVAMSSLGVIEAVAQITVKS LKAPGTPVVTENTATSITVTWDSGNPDVSY  
VIEYKSKSQDGPYQIKEDITTRYSIGGLSPNSEYEIWVSAVNSIGQGPPSES VVTRTGEQAPASAPRNV  
QARMLSATTMIVQWEEPVEPNGLIRGYRVYYTMEPEHPVGNWQKHNVDSDLTTVGSLLLEDETYTVRVLV  
FTSVGDGPLSDPIQVKTQQGVPGQPMNLRAEAKSETSIGLSWSAPRQESVIKYE L LFREGDRGREVGRTF  
DPTTAFVVEDLKPNT EYAFRLAARSPQGLGAFTAVVRQRTLQAISPKNFVKMIMKTSVLLSWEFPDNYN  
SPTYKIQYNGLTLDVDGRTTKLLITHLKPHTFYNFVLTNRGSSLGGLQQT V TARTAFNMLSGKPSVAPK  
PDNDGFIVVYLPDQSPVTVQNYFIVMVPLRKSRRGGQFPVLLGSPEDMDLEELIQDISRLQRRSLRHSRQ  
LEVPRPYIAARF SILPAVFHPGNQKQYGGFDNRGLEPGHRYVLFVAVLQKNEPTFAASPFSDPFQLDNP  
DPQPIVDGEEGLIWWIGPVLAWFII CIVIAILLYKNKPKDSKRK DSEPRTKCLLNNADLAPHHPKDPVEM  
RRINFQTPGMLSHPPITDMAEHMERL KANDSLKLSQEYESIDPGQQFTWEHSNLEANKPKNRYANVIA  
YDHSRVILQPLEGIMGSDYINANYVDGYRRQNAYIATQG PLPETFGDFWRMVWEQRSATVMMTRLEEK  
RIKCDQYWPNRGTETYGFIQVTL LDTMELATFCVRTFSLHKNGSSEKREVRHFQFTAWPDHGVPEYPTPF  
LAFLLRRVKT CNPPDAGPIVHCSAGVGR TGCFIVIDAMLERIKTEKTVDVYGHVTLMRSQRNYMVQTEDQ  
YGFIEALLEAVGCGNTEVPARSLYTIQKLAQVEPGEHVTGMELEFKRLASSKAHTSRFITASLPCNKF  
KNRLVNILPYESSRVCLQPIRGVEGSDYINASFIDGYRQQKAYIATQG PLAETTEDFWRALWENNSTIVV  
MLTKLREMGREKCHQYWPAERSARYQYFVVDPAEYNMPQYILREFKVT DARDGQSRTVRFQFTDWPEQ  
GAPKSGEGFIDFIGVHKTKEQFGQDGPISVHCSAGVGR TGVFITLSIVLERMRYEGVVDIFQTVKVLRT  
QRPAMVQTEDEYQFCFQA ALEYLGSFDHYAT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-MYC/DDK  
**Predicted MW:** 204.8 kDa  
**Concentration:** >0.05 µg/µL as determined by microplate BCA method  
**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining  
**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol  
**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.  
**Storage:** Store at -80°C after receiving vials.  
**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.  
**Locus ID:** 19280  
**UniProt ID:** [B0V2N1](#)  
**RefSeq Size:** 5588

**Cytogenetics:** 17 29.32 cM

**RefSeq ORF:** 4503

**Synonyms:** PTP-NU3, PTPsigma

**Summary:** Cell surface receptor that binds to glycosaminoglycans, including chondroitin sulfate proteoglycans and heparan sulfate proteoglycans (PubMed:19833921, PubMed:21454754, PubMed:22406547). Binding to chondroitin sulfate and heparan sulfate proteoglycans has opposite effects on PTPRS oligomerization and regulation of neurite outgrowth (PubMed:21454754). Contributes to the inhibition of neurite and axonal outgrowth by chondroitin sulfate proteoglycans, also after nerve transection (PubMed:15797710, PubMed:19833921, PubMed:19780196, PubMed:21454754, PubMed:22519304, PubMed:22406547). Plays a role in stimulating neurite outgrowth in response to the heparan sulfate proteoglycan GPC2 (PubMed:21454754). Required for normal brain development, especially for normal development of the pituitary gland and the olfactory bulb (PubMed:10080191). Functions as tyrosine phosphatase (PubMed:7529177). Mediates dephosphorylation of NTRK1, NTRK2 and NTRK3 (By similarity). Plays a role in down-regulation of signaling cascades that lead to the activation of Akt and MAP kinases (PubMed:15797710). Down-regulates TLR9-mediated activation of NF-kappa-B, as well as production of TNF, interferon alpha and interferon beta (PubMed:26231120).[UniProtKB/Swiss-Prot Function]