

Product datasheet for **MC225026**

Ptprs (NM_011218) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ptprs (NM_011218) Mouse Untagged Clone
Tag: Tag Free
Symbol: Ptprs
Synonyms: AL022616; PTP; PTP-NU3; PTPNU-3; PTPsigma; Ptpt9; R-PTP-S; RPTPsigma
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC225026 representing NM_011218
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGCCACCTGGAGTCCCAGCGTGGTGTCTGTGGTGGTCTGTGGGGCTCTTCTCGTACTGCTGG
 CCAGAGGATGCTTGGCTGAAGAACCACCCAGGTTTATCAGAGAGCCCAAGGATCAGATTGGAGTGTCCGG
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 AAGAAAGTGAACCTCACAGCGCTTCGAGACCATTGACTTTGACGAGAGCTCTGGGGCGGTCTGAGGATCC
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 CTGAGATCACCTGGTTAAAGGACTTCTGCCTGTGGACCCAGTCCAGCAACGGGCGGATCAAGCAGCT
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AGCCCATGAACCTTGC GGCTGAGGCCAAGTCAGAGACCAGCATTGGGCTCTCGTGGAGTGCACCACGACA
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CATGATGACGCGACTGGAGGAGAAATCACGGATCAAATGTGACCAATACTGGCCTAACCGAGGCACCGAG
ACATACGGCTTATCCAGGTCA CCTACTAGATACCATGGAGCTGGCTACCTTCTGCGTCAAGACTTTTT
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GTCTGCTGCAGCCATCCGCGGTGTGGAGGGCTCTGACTACATCAATGCCAGCTTATCGACGGCTATA
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TGCCACAGTACATTCTGCGTGAGTTTAAGGTCACAGATGCCCGGATGGCCAGTCCCGGACCGTCCGACA
GTTCCAGTTCACGGACTGGCCAGAGCAGGGTGCACCCAAGTCAGGGGAAGGCTTCATTGACTTCATCGGC
CAAGTGCATAAGACCAAGGAGCAGTTTGGCCAGGACGGACCCATCTCAGTGCAGTGCAGCGCCGGAGTGG
GCAGGACCGGAGTGTTTCATCACCTGAGCATCGTGCTTGAGCGGATGCGCTACGAGGGCGTGGTGGACAT
TTCCAGACAGTGAAGGTGCTTCGGACCCAGAGGCCTGCCATGGTGCAGACAGAGGACGAGTACCACTTC
TGCTTCCAGGCGGCTTTGGAATACCTGGGCAGTTTTGATCATTATGCAACATAA

GCTAGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATG
ATATCCTGGATT

Restriction Sites:	Sgfl-NheI
ACCN:	NM_011218
Insert Size:	5724 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_011218.2 , NP_035348.2
RefSeq Size:	6874 bp
RefSeq ORF:	5724 bp
Locus ID:	19280
UniProt ID:	B0V2N1
Cytogenetics:	17 29.32 cM

Gene 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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).