

## Product datasheet for RC221938

### PTPRS (NM\_130855) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTPRS (NM_130855) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPRS
Synonyms:	PTPSIGMA; R-PTP-S; R-PTP-sigma
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221938 representing NM_130855 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCCACCTGGGGCCCTGGCATGGTGTCTGTGGTTGGTCCCATGGGCCTCCTTGTGGTCTGCTCG  
TTGGAGGCTGTGCAGCAGAAGAGCCCCAGGTTTATCAAAGAACCAAGGACCAGATCGGCGTGTCCGG  
GGGTGTGGCCTCTTTCGTGTGTGACAGCCACGGGTGACCCCAAGCCACGAGTGACCTGGAACAAGAAGGGC  
AAGAAGGTCAACTCTCAGCGCTTGTAGACGATTGAGTTTGTGAGAGTGCAGGGCAGTGTGAGGATCC  
AGCCGCTGAGGACACCGGGGATGAAAACGTGTACGAGTGTGTGGCCAGAACTCGGTTGGGAGATCAC  
AGTCCATGCCAAGCTTACTGTCTCCGAGAGGACCAGCTGCCCTCTGGCTTCCCCAACATCGACATGGGC  
CCACAGTTGAAGGTGGTGGAGCGGACACGGACAGCCACCATGCTCTGTGCAGCCAGCGGCAACCCTGACC  
CTGAGATCACCTGGTTCAAGGACTTCTGCCTGTGGATCCTAGTGCCAGCAATGGACGCATCAAACAGCT  
GCGATCAGGAGCCCTGCAGATTGAAAGCAGTGAGGAAACCGACCAGGGCAAATATGAGTGTGTGGCCACC  
AACAGCGCCGGCGTGCCTACTCCTCACCTGCCAACCTTACGTGCGAGAGCTTCGAGAAGTCCGCCGCG  
TGGCCCCGCGCTTCTCCATCCTGCCATGAGCCACGAGATCATGCCAGGGGGCAACGTGAACATCACCTG  
GACATGCCCGTGGGTGCGAACGTGCTGGAACCTCACAGATGTCAAGGACTCGGCAACTACACCTGCGTGG  
CCATGTCCAGCCTGGGCGTCAATTGAGGCGGTTGCTCAGATCACGGTGAAATCTCTCCCCAAGCTCCCGG  
GACTCCCATGGTACTGAGAACACAGCCACCAGCATCACCATCACGTGGGACTCGGGCAACCCAGATCCT  
GTGTCCTATTACGTCATCGAATATAAATCCAAGAGCCAAGACGGCCGATCAGATTAAGAGGACATCA  
CCACCACAGTTACAGCATCGGCGGCTGAGCCCCAACTCGGAGTACGAGATCTGGGTGTGCGCCGTCAA  
CTCCATCGGCCAGGGCCCCCAGCGAGTCCGTGGTACCCGCACAGGCGAGCAGCCCCGCGCAGCGG  
CCGCGGAACGTGCAAGCCGGATGCTCAGCGGACACCATTGTTGTCAGTGGGAGGAGCCGTTGGAGC  
CCAACGGCCTGATCCGCGCTACCGCTACTACACCATGGAACCGGAGACCCCGTGGGCAACTGGCA  
GAAGACAACGTGGACGACAGCCTGCTGACCACCGTGGCAGCCTGCTGGAGGACGAGACCTACACCGTG



[View online >](#)

CGGGTGCTCGCCTTACCTCCGTGCGGACGGGCCCTCTCGGACCCATCCAGGTCAAGACGCAGCAGG  
 GAGTGCCGGGCCAGCCATGAACCTGCGGGCCGAGGCCAGGTGCGAGACCAGCATCACGCTGCTGGAG  
 CCCCCGCGGCAGGAGATATCAAGTACGAGCTCCTCTCCGGGAAGGCGACCATGGCCGGGAGGTG  
 GGAAGGACCTTCGACCCGACGACTTCTACGTGGTGGAGGACCTGAAGCCCAACACGGAGTACGCCCTCC  
 GCCTGGCGGCCGCTCGCCGACGGGCTGGGCGCCTTACCCCGTGGTGGGACGCGACGCTGCAGTC  
 CATCTCGCCCAAGAACTCAAGGTGAAAATGATCATGAAGACATCAGTTCTGCTCAGTGGGAGTTCCT  
 GACAACACAACCTACCCACACCTACAAGATCCAGTACAATGGGCTCACACTGGATGGATGGCCGTA  
 CCACCAAGAAGCTCATCAGCACCTCAAGCCCCACACTTCTACAACCTTGTGCTGACCAATCGCGGACG  
 CAGCCTGGGCGGCTCCAGCAGACGGTACCCGCTGGACTGCCTTCAACCTGCTCAACGGCAAGCCAGC  
 GTCGCCCCAAGCCTGATGCTGACGGCTTTCATCATGGTGTATCTTCTGACGGCCAGAGCCCGTGCCTG  
 TCCAGAGCTATTTTATTGTGATGGTGCCTGCGCAAGTCTCGTGGAGGCCAATTCCTGACCCCGTGGG  
 TAGCCAGAGGACATGGATCTGGAAGAGCTCATCCAGGACATCTCAGGGTACAGAGGCGCAGCCTGCGG  
 CACTCGCTCAGTGGAGGTGCCCCGGCCTATATTGACGCTCGTTCTCTGTGCTGCCACCCACGTTCC  
 ATCCCGGCGACCAGAAGCAGTATGGCGGCTTCGATAACCGGGGCTGGAGCCGGCCACCGCTATGTCT  
 CTTCTGCTTGGCGTTCAGAAGAGCGAGCCTACCTTTCAGCCAGTCCCTTCTCAGACCCCTCCAG  
 CTGGATAACCCGACCCCGACCCATCGTGGATGGCGAGGAGGGCTTATCTGGGTGATCGGGCCTGTGC  
 TGGCCGTGGTCTTATAATCTGCATTGTCTATCTGCTCTACAAGAAACCCGACAGTAAACG  
 CAAGGACTCAGAACCCCGACCAAAATGCCTCCTGAAACAATGCCGACCTCGCCCTCACCACCCCAAGGAC  
 CCTGTGGAATGAGACGCATTAACCTCCAGACTCCAGGCATGCTTAGCCACCCGCAATTCCTATCGCAG  
 ACATGGCGGAGCACACGGAGCGGCTCAAGGCCAACGACAGCCTCAAGCTCTCCAGGAGTATGAGTCCAT  
 CGACCTGGACAGCAGTTCATATGGGAACATCCAACCTGGAAGTGAACAAGCCGAAGAACCCTATGCC  
 AACGTATCGCCTATGACCACTCCCGTGCATCTCCAGCCATTGAAGGCATCATGGGCGAGTATTACA  
 TCAATGCCAACTACGTGGACGGTACCGGTGTCAGAACGGTACATTGCCACGCGAGGGCCGCTGCTGTA  
 GACCTTTGGGACTTCTGGCGTATGGTGTGGGAGCAGCGTTCGGGACCATCGTTCATGATGACCGGCTG  
 GAGGAGAAGTACGGATCAAGTGTGATCAGTATTGGCCAAACAGAGGCACGGAGACCTACGGCTTATCC  
 AGGTACGTTGCTAGATACCATCGAGCTGGCCACATTCTGCGTACAGGACATTCTCTGACACAAGAATGG  
 CTCCAGTGAAGACGCGAGGTCCGCCAGTTCAGTTTACGGCGTGGCCGGACCATGGCGTCCCGAATAC  
 CCAACGCCCTTCTGGCTTCTGCGGAGAGTCAAGACCTGCAACCCGCCAGATGCCGGCCCATCGTGG  
 TTCCTGACGAGTCCGGTGTGGGCCGCACAGGCTGCTTTATCGTTCATCGACCCATGCTTGAGCGGATCAA  
 GCCAGAGAAGACAGTTCATGCTATGGCCACGTGACGCTCATGAGTCCCAGCGCAACTACATGGTGCAG  
 ACGGAGGACAGTACAGTTCATCCACGAGGCCCTGCTGGAGGCCGTGGGCTGTGGAACACAGAAGTGC  
 CCGCACGACGCTTATGCCTACATCCAGAAGCTGGCCAGGTGGAGCCTGGCGAACACGCTCACTGGCAT  
 GGAACCTGAGTTCAAGCGGCTGGCTAACTCCAAGGCCACACGTACGCTTTCATCAGTGCCTTCTGCT  
 TGTAACAAGTTCAAGAACCCTGGTGAACATCATGCCCTATGAGAGCACACGGGTCTGTGCTGCAACCCA  
 TCCGGGGTGTGGAGGGCTCTGACTACATCAACGCCAGTTCATTGATGGCTACAGGCAGCAGAAGCCCTA  
 CATCGGACACAGGGGCCGCTGGCGGAGACCACGGAAGACTTCTGGCGCATGCTGTGGGAGAACAATTGCG  
 ACGATCGTGGTGTGCTGACCAAGCTGCGGGAGATGGGCCGGGAGAAGTGTACCCAGTACTGGCCGGCCG  
 AGCGCTCTGCCGCTACAGTACTTTGTGGTAGATCCGATGGCAGAATACAACATGCCTCAGTATATCCT  
 GCGAGAGTTCAAGGTACAGATGCCCGGATGGCCAGTCCCGACTGTCGGGAGTCCAGTTCACAGAC  
 TGGCCGGAACAGGTGTGCCAAAGTGGGGGAGGCTTTCATCGACTTATTGGCCAAGTGCATAAGACTA  
 AGGAGCAGTTTGGCCAGGACGGCCCATCTCTGTCCACTGCAGTCCCGGCGTGGGAGGACGGGCGTCTT  
 CATCACGCTTAGCATCGTGTGAGCGGATGCGGTATGAAGCGTGGTGGACATCTTTCAGACGGTGAAG  
 ATGCTACGAACCCAGCGGCCGATGGTGCAGACAGAGGATGAGTACCAGTTCTGTTACCAGGCGGCAC  
 TGGAGTACCTCGGAAGCTTTGACCACTATGCAACC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:** >RC221938 representing NM\_130855  
 Red=Cloning site Green=Tags(s)

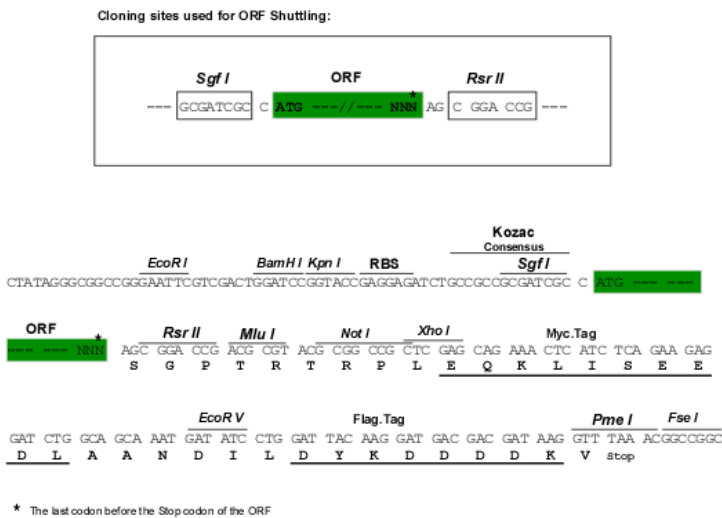
MAPTWPGMVSVVGPMGLLVLLVGGCAAEPPRFIPEKPKDQIGVSGGVASFVCQATGDPKPRVTWNKKG  
 KKVNSQRFETIEFDESAGAVLRIQPLRTPRDENVYECVAQNSVGEITVHAKLTVLREDQLPSGFNIDMG  
 PQLKVVTRTRATMLCAASGNPDPEITWFKDFLPVDPASANGRIKQLRSGALQIESSEETDQKGYECVAT  
 NSAGVRYSSPANLYVRELREVRVAPRFSILPMSHEIMPGGNVNICVAVGSPMPYVVKWMQGAEDLTPED  
 DMPVGRNVLELTDVKDSANYTCVAMSSLVGIEAVAQITVKSLPKAPGTPMVTENTATSITITWDSGNPDP  
 VSYVYIEYKSKSQDGPYQIKEDITTRYISIGGLSPNSEYEIWVSAVNSIGQGPPSESVVTRTGEQAPASA  
 PRNVQARMLSATMIVQWEEPVEPNGLIRGYRYYTMEPEHPVGNWQKHNVDDSLTTVGSLLLEDETYTV  
 RVLAFSTVGDGPLSDPIQVKTQQGVPGQPMNLRAEARSETSITLWSPPRQESI IKYELLFREGDHGREV  
 GRTFDPTTSYVVEDLKPNTHEYAFRLAARSPQGLGAFTPVVRQRTLQSI SPKNFKVKMIMKTSVLLSWEFP  
 DNYNSPTPYKIYNGLTLDVDGRTTKKLI THLKPHTFYNFVL TNRGSSLGGLQQTVAWTA FNLLNGKPS  
 VAPKPADAGFIMVYLPDQSPVPVQSYFIVMVPLRKSRRGGQFL TPLGSPEDMDLEELIQDISRLQRRSLR  
 HSRQLEVPRPYIAARF SVLPPTFHPGDQKQYGGFDNRGLEPGRHYVLFVLA VLKSEPTFAASPFSDPFQ  
 LDNPDPQPIVDGEEGLIWIIGPVLAVVFIICIVIAILL YKNKPD SKRKDSEPRTKCLLNNADLAPHPKD  
 PVEMRRINFQTPGML SHPPIPIADMAEHTERL KANDSLKLSQ EYESIDPGQQFTWEHSNLEVNKPKNRYA  
 NVIAYDHSRVLQPIEGIMGSDYINANYVDGYRCQNAIATQG PLPETFGDFWRMVWEQRSAIVMMTRL  
 EESRKIKCDQYWPNRGTETYGF IQVTL LDTIELATFCVRTFSLHKNGSSEKREVRQFQFTAWPDHGVPEY  
 PTPFLAFLRRVKT CNPPDAGPIVHCSAGVGR TGCFIVIDAMLERIKPEKTV DVYGHVTL MRSQRNYMVQ  
 TEDQYSFIEHALLEAVGCGNTEVPARSL YAYIQKLAQVEPGEHVTGMELEFKRLANSKAHTSRFISANLP  
 CNKFKNRLVNIIMPYESTRVCLQPIRGVEGSDYINASFIDGYRQQKAYIATQG PL AETTEDFWRMLWENNS  
 TIVVMLTKLREMGREKCHQYWAERSARYQYFVVDPM AEYNMPQYILREFKVT DARDGQSR TVRQFQFTD  
 WPEQGVKSGEGFIDF IGQVHKTKEQFGQDGPISVHCSAGVGR TG VFITLSIVLERMRYEGVVDIFQTVK  
 MLRTQRPAMVQTEDEYQFCYQA ALEYLGSFDHYAT

SGP TRTRRLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6800\\_b07.zip](https://cdn.origene.com/chromatograms/mk6800_b07.zip)

**Restriction Sites:** SgfI-RsrII

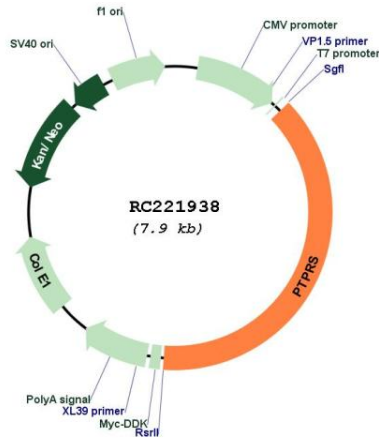
**Cloning Scheme:**



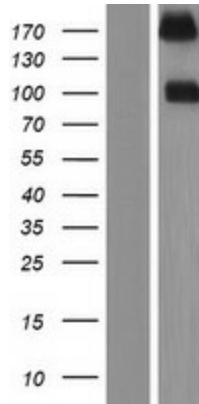
**ACCN:** NM\_130855

<b>ORF Size:</b>	4515 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_130855.3</a>
<b>RefSeq Size:</b>	5171 bp
<b>RefSeq ORF:</b>	4518 bp
<b>Locus ID:</b>	5802
<b>UniProt ID:</b>	<a href="#">Q13332</a>
<b>Cytogenetics:</b>	19p13.3
<b>Protein Families:</b>	Druggable Genome, Phosphatase, Transmembrane
<b>MW:</b>	166.1 kDa
<b>Gene Summary:</b>	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. [provided by RefSeq, Jul 2008]

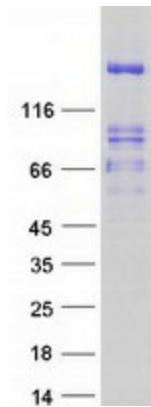
Product images:



Circular map for RC221938



Western blot validation of overexpression lysate (Cat# [LY408880]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221938 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTPRS protein (Cat# [TP321938]). The protein was produced from HEK293T cells transfected with PTPRS cDNA clone (Cat# RC221938) using MegaTran 2.0 (Cat# [TT210002]).