OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC211163

PTPRS (NM_130853) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPRS (NM_130853) 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:

>RC211163 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCCCACCTGGGGCCCTGGCATGGTGTCTGTGGTTGGTCCCATGGGCCTCCTTGTGGTCCTGCTCG
TTGGAGGCTGTGCAGCAGAAGAGCCCCCCAGGTTTATCAAAGAACCCAAGGACCAGATCGGCGTGTCGGG
GGGTGTGGCCTCTTTCGTGTGTCAGGCCACGGGTGACCCCAAGCCACGAGTGACCTGGAACAAGAAGGGC
AAGAAGGTCAACTCTCAGCGCTTTGAGACGATTGAGTTTGATGAGAGTGCAGGGGCAGTGCTGAGGATCC
AGCCGCTGAGGACACCGCGGGATGAAAACGTGTACGAGTGTGTGGCCCAGAACTCGGTTGGGGAGATCAC
AGTCCATGCCAAGCTTACTGTCCTCCGAGAGGACCAGCTGCCCTCTGGCTTCCCCAACATCGACATGGGC
CCACAGTTGAAGGTGGTGGAGCGGACACGGACAGCCACCATGCTCTGTGCAGCCAGCGGCAACCCTGACC
CTGAGATCACCTGGTTCAAGGACTTCCTGCCTGTGGATCCTAGTGCCAGCAATGGACGCATCAAACAGCT
GCGATCAGGAGCCCTGCAGATTGAAAGCAGTGAGGAAACCGACCAGGGCAAATATGAGTGTGTGGCCACC
AACAGCGCCGGCGTGCGCTACTCCTCACCTGCCAACCTCTACGTGCGAGTCCGCCGCGTGGCCCCGCGCT
TCTCCATCCTGCCCATGAGCCACGAGATCATGCCAGGGGGCAACGTGAACATCACCTGCGTGGCCGTGGG
CTCGCCCATGCCATACGTGAAGTGGATGCAGGGGGCCGAGGACCTGACCCCCGAGGATGACATGCCCGTG
GGTCGGAACGTGCTGGAACTCACAGATGTCAAGGACTCGGCCAACTACACCTGCGTGGCCATGTCCAGCC
TGGGCGTCATTGAGGCGGTTGCTCAGATCACGGTGAAATCTCTCCCCAAAGCTCCCGGGACTCCCATGGT
GACTGAGAACACAGCCACCAGCATCACCATCACGTGGGACTCGGGCAACCCAGATCCTGTGTCCTATTAC
GTCATCGAATATAAATCCAAGAGCCAAGACGGGCCGTATCAGATTAAAGAGGACATCACCACCACACGTT
ACAGCATCGGCGGCCTGAGCCCCAACTCGGAGTACGAGATCTGGGTGTCGGCCGTCAACTCCATCGGCCA
GGGGCCCCCCAGCGAGTCCGTGGTCACCCGCACAGGCGAGCAGGCCCCGGCCAGCGCGCCGCGGAACGTG
CAAGCCCGGATGCTCAGCGCGACCACCATGATTGTGCAGTGGGAGGAGCCGGTGGAGCCCAACGGCCTGA
TCCGCGGCTACCGCGTCTACTACACCATGGAACCGGAGCACCCCGTGGGCAACTGGCAGAAGCACAACGT
GGACGACAGCCTGCTGACCACCGTGGGCAGCCTGCTGGAGGACGAGACCTACACCGTGCGGGTGCTCGCC

View online »

TTCACCTCCGTCGGCGACGGGCCCCTCTCGGACCCCATCCAGGTCAAGACGCAGCAGGGAGTGCCGGGCC
AGCCCATGAACCTGCGGGCCGAGGCCAGGTCGGAGACCAGCATCACGCTGTCCTGGAGCCCCCCGCGGCA
GGAGAGTATCATCAAGTACGAGCTCCTCTTCCGGGAAGGCGACCATGGCCGGGAGGTGGGAAGGACCTTC
GACCCGACGACTTCCTACGTGGTGGAGGACCTGAAGCCCAACACGGAGTACGCCTTCCGCCTGGCGGCCC
GCTCGCCGCAGGGCCTGGGCGCCTTCACCCCCGTGGTGCGGCAGCGCACGCTGCAGTCCATCTCGCCCAA
GAACTTCAAGGTGAAAATGATCATGAAGACATCAGTTCTGCTCAGCTGGGAGTTCCCTGACAACTACAAC
TCACCCACACCCTACAAGATCCAGTACAATGGGCTCACACTGGATGTGGATGGCCGTACCACCAAGAAGC
TCATCACGCACCTCAAGCCCCACACCTTCTACAACTTTGTGCTGACCAATCGCGGCAGCAGCCTGGGCGG
CCTCCAGCAGACGGTCACCGCCTGGACTGCCTTCAACCTGCTCAACGGCAAGCCCAGCGTCGCCCCCAAG
CCTGATGCTGACGGCTTCATCATGGTGTATCTTCCTGACGGCCAGAGCCCCGTGCCTGTCCAGAGCTATT
TCATTGTGATGGTGCCACTGCGCAAGTCTCGTGGAGGCCAATTCCTGACCCCGCTGGGTAGCCCAGAGGA
CATGGATCTGGAAGAGCTCATCCAGGACATCTCACGGCTACAGAGGCGCAGCCTGCGGCACTCGCGTCAG
CTGGAGGTGCCCCGGCCCTATATTGCAGCTCGCTTCTCTGTGCTGCCACCCACGTTCCATCCCGGCGACC
AGAAGCAGTATGGCGGCTTCGATAACCGGGGCCTGGAGCCCGGCCACCGCTATGTCCTCTTCGTGCTTGC
CGTGCTTCAGAAGAGCGAGCCTACCTTTGCAGCCAGTCCCTTCTCAGACCCCTTCCAGCTGGATAACCCG
GACCCCCAGCCCATCGTGGATGGCGAGGAGGGGCTTATCTGGGTGATCGGGCCTGTGCTGGCCGTGGTCT
TCATAATCTGCATTGTCATTGCTATCCTGCTCTACAAGAACAAACCCGACAGTAAACGCAAGGACTCAGA
ACCCCGCACCAAATGCCTCCTGAACAATGCCGACCTCGCCCCTCACCACCCCAAGGACCCTGTGGAAATG
AGACGCATTAACTTCCAGACTCCAGGCATGCTTAGCCACCCGCCAATTCCCATCGCAGACATGGCGGAGC
ACACGGAGCGGCTCAAGGCCAACGACAGCCTCAAGCTCTCCCAGGAGTATGAGTCCATCGACCCTGGACA
GCAGTTCACATGGGAACATTCCAACCTGGAAGTGAACAAGCCGAAGAACCGCTATGCCAACGTCATCGCC
TATGACCACTCCCGTGTCATCCTCCAGCCCATTGAAGGCATCATGGGCAGTGATTACATCAATGCCAACT
ACGTGGACGGCTACCGGCGTCAGAACGCGTACATTGCCACGCAGGGGCCGCTGCCTGAGACCTTTGGGGA
CTTCTGGCGTATGGTGTGGGAGCAGCGGTCGGCGACCATCGTCATGATGACGCGGCTGGAGGAGAAGTCA
CGGATCAAGTGTGATCAGTATTGGCCCAACAGAGGCACGGAGACCTACGGCTTCATCCAGGTCACGTTGC
TAGATACCATCGAGCTGGCCACATTCTGCGTCAGGACATTCTCTCTGCACAAGAATGGCTCCAGTGAGAA
ACGCGAGGTCCGCCAGTTCCAGTTTACGGCGTGGCCGGACCATGGCGTGCCCGAATACCCAACGCCCTTC
CTGGCTTTCCTGCGGAGAGTCAAGACCTGCAACCCGCCAGATGCCGGCCCCATCGTGGTTCACTGCAGTG
CCGGTGTGGGCCGCACAGGCTGCTTTATCGTCATCGACGCCATGCTTGAGCGGATCAAGCCAGAGAAGAC
AGTCGATGTCTATGGCCACGTGACGCTCATGAGGTCCCAGCGCAACTACATGGTGCAGACGGAGGACCAG
TACAGCTTCATCCACGAGGCCCTGCTGGAGGCCGTGGGCTGTGGCAACACAGAAGTGCCCGCACGCAGCC
TCTATGCCTACATCCAGAAGCTGGCCCAGGTGGAGCCTGGCGAACACGTCACTGGCATGGAACTCGAGTT
CAAGCGGCTGGCTAACTCCAAGGCCCACACGTCACGCTTCATCAGTGCCAATCTGCCTTGTAACAAGTTC
AAGAACCGCCTGGTGAACATCATGCCCTATGAGAGCACACGGGTCTGTCTGCAACCCATCCGGGGTGTGG
AGGGCTCTGACTACATCAACGCCAGCTTCATTGATGGCTACAGGCAGCAGAAGGCCTACATCGCGACACA
GGGGCCGCTGGCGGAGACCACGGAAGACTTCTGGCGCATGCTGTGGGAGAACAATTCGACGATCGTGGTG
ATGCTGACCAAGCTGCGGGAGATGGGCCGGGAGAAGTGTCACCAGTACTGGCCGGCCGAGCGCTCTGCCC
GCTACCAGTACTTTGTGGTAGATCCGATGGCAGAATACAACATGCCTCAGTATATCCTGCGAGAGTTCAA
GGTCACAGATGCCCGGGATGGCCAGTCCCGGACTGTCCGGCAGTTCCAGTTCACAGACTGGCCGGAACAG
GGTGTGCCAAAGTCGGGGGAGGGCTTCATCGACTTCATTGGCCAAGTGCATAAGACTAAGGAGCAGTTTG
GCCAGGACGGCCCCATCTCTGTCCACTGCAGTGCCGGCGTGGGCAGGACGGGCGTCTTCATCACGCTTAG
CATCGTGCTGGAGCGGATGCGGTATGAAGGCGTGGTGGACATCTTTCAGACGGTGAAGATGCTACGAACC
CAGCGGCCGGCCATGGTGCAGACAGAGGATGAGTACCAGTTCTGTTACCAGGCGGCACTGGAGTACCTCG
GAAGCTTTGACCACTATGCAACC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211163 protein sequence
Red=Cloning site Green=Tags(s)

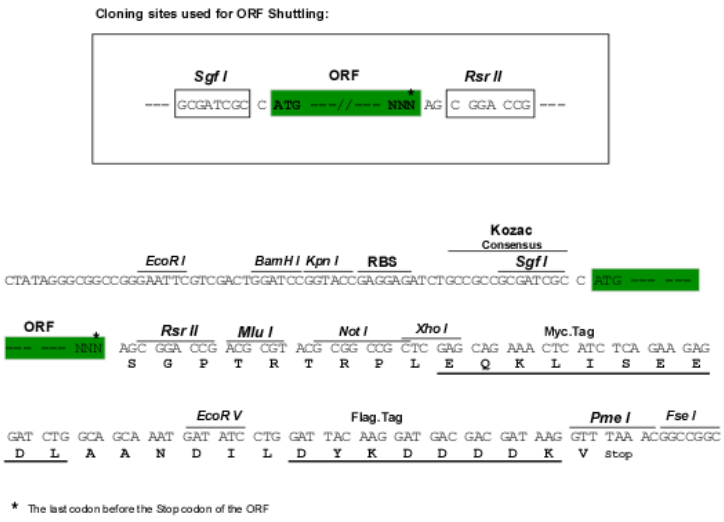
MAPTWGPGMVSVVGPMGLLVVLLVGGCAAEEPPRFIKEPKDQIGVSGGVASFVCQATGDPKPRVTWNKKG
KKVNSQRFETIEFDESAGAVLRIQPLRTPRDENVYECVAQNSVGEITVHAKLTVLREDQLPSGFPNIDMG
PQLKVVERTRTATMLCAASGNPDPEITWFKDFLPVDPSASNGRIKQLRSGALQIESSEETDQGKYECVAT
NSAGVRYSSPANLYVRVRRVAPRFSILPMSHEIMPGGNVNITCVAVGSPMPYVKWMQGAEDLTPEDDMPV
GRNVLELTDVKDSANYTCVAMSSLGVIEAVAQITVKSLPKAPGTPMVTENTATSITITWDSGNPDPVSYY
VIEYKSKSQDGPYQIKEDITTTRYSIGGLSPNSEYEIWVSAVNSIGQGPPSESVVTRTGEQAPASAPRNV
QARMLSATTMIVQWEEPVEPNGLIRGYRVYYTMEPEHPVGNWQKHNVDDSLLTTVGSLLEDETYTVRVLA
FTSVGDGPLSDPIQVKTQQGVPGQPMNLRAEARSETSITLSWSPPRQESIIKYELLFREGDHGREVGRTF
DPTTSYVVEDLKPNTEYAFRLAARSPQGLGAFTPVVRQRTLQSISPKNFKVKMIMKTSVLLSWEFPDNYN
SPTPYKIQYNGLTLDVDGRTTKKLITHLKPHTFYNFVLTNRGSSLGGLQQTVTAWTAFNLLNGKPSVAPK
PDADGFIMVYLPDGQSPVPVQSYFIVMVPLRKSRGGQFLTPLGSPEDMDLEELIQDISRLQRRSLRHSRQ
LEVPRPYIAARFSVLPPTFHPGDQKQYGGFDNRGLEPGHRYVLFVLAVLQKSEPTFAASPFSDPFQLDNP
DPQPIVDGEEGLIWVIGPVLAVVFIICIVIAILLYKNKPDSKRKDSEPRTKCLLNNADLAPHHPKDPVEM
RRINFQTPGMLSHPPIPIADMAEHTERLKANDSLKLSQEYESIDPGQQFTWEHSNLEVNKPKNRYANVIA
YDHSRVILQPIEGIMGSDYINANYVDGYRRQNAYIATQGPLPETFGDFWRMVWEQRSATIVMMTRLEEKS
RIKCDQYWPNRGTETYGFIQVTLLDTIELATFCVRTFSLHKNGSSEKREVRQFQFTAWPDHGVPEYPTPF
LAFLRRVKTCNPPDAGPIVVHCSAGVGRTGCFIVIDAMLERIKPEKTVDVYGHVTLMRSQRNYMVQTEDQ
YSFIHEALLEAVGCGNTEVPARSLYAYIQKLAQVEPGEHVTGMELEFKRLANSKAHTSRFISANLPCNKF
KNRLVNIMPYESTRVCLQPIRGVEGSDYINASFIDGYRQQKAYIATQGPLAETTEDFWRMLWENNSTIVV
MLTKLREMGREKCHQYWPAERSARYQYFVVDPMAEYNMPQYILREFKVTDARDGQSRTVRQFQFTDWPEQ
GVPKSGEGFIDFIGQVHKTKEQFGQDGPISVHCSAGVGRTGVFITLSIVLERMRYEGVVDIFQTVKMLRT
QRPAMVQTEDEYQFCYQAALEYLGSFDHYAT

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6795_a05.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

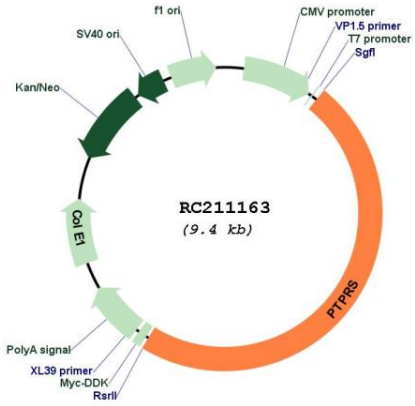


ACCN: NM_130853

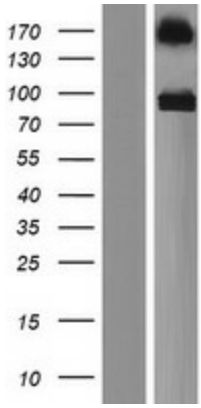
ORF Size:	4503 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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:	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_130853.3
RefSeq Size:	6006 bp
RefSeq ORF:	4506 bp
Locus ID:	5802
UniProt ID:	Q13332
Cytogenetics:	19p13.3
Protein Families:	Druggable Genome, Phosphatase, Transmembrane
MW:	168.4 kDa

Gene Summary: 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]

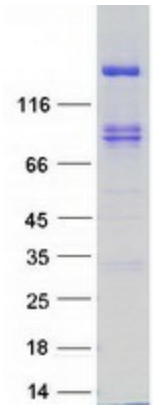
Product images:



Circular map for RC211163



Western blot validation of overexpression lysate (Cat# [LY408782]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211163 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTPRS protein (Cat# [TP311163]). The protein was produced from HEK293T cells transfected with PTPRS cDNA clone (Cat# RC211163) using MegaTran 2.0 (Cat# [TT210002]).