

Product datasheet for **RG214115**

PTPRD (NM_002839) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPRD (NM_002839) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTPRD
Synonyms:	HPTP; HPTPD; HPTPDELTA; PTPD; R-PTP-delta; RPTPDELTA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214115 representing NM_002839 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGCACGTAGCCAGGCTGCTGCTGCTCCTCACTTTCTTCTCCGCACGGATGCTGAGACACCTC
CAAGGTTTACACGAACACCCGTTGATCAGACAGGGTCTCTGGCGGAGTTGCCTCTTTCATCTGCCAAGC
TACGGGAGACCAAGACCTAAAATTGTCTGGAACAAAAAGAAAGAAAGTCAGCAATCAGAGATTTGAG
GTAATAGAGTTTACGATGGGTCTGGATCAGTTCTCAGAATAACAACCTTACGGACTCCGAGGGATGAGG
CCATTTATGAATGTGTGGCCTCAAATAATGTGGGAGAAATAAGTGTATCCACCAGACTCACAGTTTTGCG
GGAAGATCAAATCCCAGGGCTTCCCTACCATTGACATGGGCCACAGTTGAAGGTGGTTGAGCGTACT
CGCACGGCCACCATGCTTTGTGCAGCCAGTGGTAAATCCGGATCCAGAAATCACTTGGTTTAAAGATTTCT
TACCTGTGGACACAAGCAACAACATGGTCGTATTAAGCAGTTACGATCAGAATCTATTGGTGGTACACC
AATAAGAGGAGCCCTTACAGTTGAGCAGAGTGAAGAGTCTGACCAAGGAAAAATAGAGTGTGTTGCCACC
AACAGCGCGGGCACTCGCTATCCGCTCCTGCCAATTTATATGTCAGAGAGCTGCGAGAAGTTCCGCCGTG
TCCCACCAAGATTCTCTATCCCACCCACTAATCATGAAATCATGCCAGGCGGAAGCGTTAATACACCTG
TGTGGCCGTGGGGTCACCAATGCCTTATGTAAGTGGATGTTGGGGCAGAAGATCTGACACCTGAAGAT
GATATGCCAATAGGAAGAAATGTGCTAGAAGTGAATGATGTAAGACAGTCAGCAAAATACACCTGTGTTG
CTATGTCAACACTGGGTGTCATTGAAGCAATAGCACAGATCACTGTCAAAGCCTTACCCAAACCTCCAGG
AACTCCTGTAGTGACCGAGAGCAGACTACAAGCATCACACTGACGTGGGACTCTGGGAACCTGAGCCT
GTTTCTTATTACATAATTCAGCATAAACCTAAAACTCTGAGGAACCTTACAAAGAAATGATGGGGTGG
CGACCACAGCTACAGTGTGCTGGACTAAGTCCCTACTCGGATTATGAATTCAGGGTGTGCTGTCAA
TAACATTGGGCGGGGCTCCAGCGAACCTGTGCTAACACAAACCTCAGAGCAAGCACCATCCAGTGCC
CCGAGGGATGTCCAGGCAGAAATGTTGAGTTCGACCACCATTTTGGTACAGTGAAGGAACCTGAAGAGC
CAAATGGACAGATCCAAGGATATAGAGTTTATTATACAATGGATCCCACTCAACATGTCAACAACCTGGAT
GAAACACAATGTAGCTGACAGCCAAATCACTACTATTGGCAACTAGTGCCCCAGAAAACATATTCTGTC



AAAGTCCTGGCTTTACCTCAATTGGAGATGGTCCCCTTTCAAGTGACATACAAGTCATCACTCAGACAG
 GAGTACCAGGGCAGCCACTAAACTTCAAAGCAGAACCTGAGTCTGAAACAAGTATTTTGCTCTTTGGAC
 ACCTCCACGTTGAGATACCATTGCCAATATGAACTGGTCTACAAAGATGGGGAGCATGGAGAGGAGCAA
 CGAATTACCATTGAGCCAGGGACATCATATAGGCTGCAAGGACTGAAACCAAACAGCTTATACTATTTCC
 GTCTGGCTGCACGCTCCCTCAAGGCTGGGTGCTTCTACTGCAGAAATATCAGCTAGAACCATGCAGTC
 AAAGCCGTGAGCTCCTCCTCAAGACATTAGTTGCACCAGCCCAAGTCCACTAGTATTTTGGTAAGTTGG
 CAACCTCCACCAGTGAAAAACAGAATGGCATTATCACTGAATACTCCATCAAGTACACTGCAGTGGATG
 GGAAGATGACAAGCCTCACGAGATTTTGGGAATTCCTTCGGACACTACCAAATACCTTTTGGAACAGCT
 GGAAAAATGGACTGAATACCGGATCACTGTGACAGCCCATACAGATGTCGGCCCTGGCCCTGAGAGCTTG
 TCCGTGTTGATTGAAACCAATGAAGATGTTCTAGTGGTCTCCTCGCAAAGTCGAGGTAGAGGCTGTCA
 ACTCAACATCTGTTAAAGTCTCATGGCGCTCACCCGTGCCAATAAACAGCATGGCCAGATAAGAGGATA
 TCAGGTGCATTATGTGAGGATGGAAAAATGGTGAGCCCAAGGGCCAGCCCATGCTGAAAGATGTCATGCTG
 GCTGATGCACAGTGGGAATTTGATGATACTACTGAACATGACATGATCATTTCTGGGCTCCAGCCTGAAA
 CTTCTACTCCCTCACCGTACAGCCTACACAACCAAGGAGATGGTGTGCGAGCAAGCCCAAAGTGGT
 GTCCACCCTGGGCGAGTCCAGGGAAACCTCGGCTTGTGATTAACCACACTCAGATGAATACTGCTCTT
 ATTCAGTGGCACCTCCGGTGGACACATTTGGACCTTTCAGGGTACCCTCTAAAAATTTGGCCGAAGG
 ATATGGAGCCACTTACTACTCTTGTGATTTCTGAAAAAGAAGATCACTTTACAGCTACAGACATCCACAA
 GGGAGCATCATACGTTTCAAGGCTCTCAGCCAGAAAACAAAGTGGGCTTTGGGGAGGAGATGGTGAAGGAG
 ATTTCCATTCCAGAAGAAGTACCAACTGGATTCCCTCAAACCTTCACTCAGAAGGCACCACTTCAACCT
 CCGTCCAGTTATCTTGGCAACCCTGTCTGGCAGAGAGAAATGGCATTATCACCAGTATACCCTTCT
 TTATAGGGATATCAACATCCCCCTTCTCCCGATGGAGCAGCTTATTGTTCCAGCTGACACCCTATGACA
 CTCACTGGCTTAAAACAGATACCACATACGATGTAAAAGTACGTGCTCATACGAGCAAAGGGCCCGGGC
 CATATAGTCCCAGTGTCCAGTTCAGGACACTGCCTGTGGATCAAGTGTGCAAAAAATTTTTCATGTCAA
 AGCAGTAATGAAGACTTCCGTGTTGCTGTCTTGGGAGATTCCAGAGAATTATAACTCCGCTCAGCTGCTTTC
 AAAATTTCTTATGATGATGGGAAAAATGGTAGAAGAAGTGGATGGCCGAGCCACACAGAAGTTAATTGTCA
 ACCTGAAGCCTGAGAAATCATATTCATTTGTGCTGACAAATCGTGGAAACAGTGTGGTGGGCTGCAGCA
 CAGGGTACGGCAAAGACTGCACCAGATGTATTACGTACCAAGCCTGCCTTATTGGGAAGACCAACTTG
 GATGGCATGATTACTGTGCAACTGCCTGAAGTACCTGCAATGAGAATATAAAAGTTACTACATAATAA
 TTGTGCCCTTGAAGAAATCTCGCGGAAATTTATCAAGCCATGGGAGAGTCCAGATGAAATGGAATTAGA
 TGAGCTGCTTAAGGAGATATCTAGGAAGCGCAGAAGCATCCGTTATGGGAGAGAAGTTGAATTAAGCCA
 TATATTGCCGCTCACTTTGATGTCTTCCCACTGAGTTCACCCTGGGGGATGACAAGCATTATGGTGGAT
 TTACAAAACAGCAACTCCAAAGTGGTCAAGAATATGTCTTCTTTGTGTTAGCAGTAAATGGAACATGCAGA
 GTCTAAGATGTATGCAACCAGCCCTTACTCCGACCCCGTGGTGTCAATGGATCTGGATCCGACGCAATC
 ACGGATGAAGAAGAAGGCTTGATCTGGGTTGTAGGTCTGTCTTGCAGTGGTCTTTATCATCTGCATTG
 TCATTGCTATTCTTTTATAAAAGGAAGAGGGCAGAGTCCGACTCTAGAAAAAGCAGCATACCGAACAA
 TAAGGAGATCCCTTACACCACCAACAGACCCTGTAGAAGTGGGGCCTTAACTTTCAAACACCGGGT
 ATGGCTAGCCATCCTCCAATACCCATCTTGAAGTGCAGACCACATTGAAAGATTGAAAGCAAATGACA
 ACTTGAAGTTTCCAGGAATATGAGTCAATTGACCCTGGCCAGCAGTTCCTTGGGAACATTCAAACCT
 GGAAGTAAACAAACAAAGAATAGATACGCGAATGTAATCGCATATGATCATTCCCGGTTCTCCTATCA
 GCTATAGAAGGGATCCCAGGAAGTGAATGTGAATGCCAATACATAGATGGGTATAGGAAGCAAATG
 CCTATATTGCAACACAGGGATCTCTCCCGAAACATTTGGGGACTTTTGGAGAATGATATGGGAACAACG
 GAGTGCCACAGTTGTGATGATGACAAAACCTAGAAGAAAGATCAAGGGTGAAGTGTGACCAGTATTGGCCT
 AGCAGAGGCACAGAAACCCAGGACTCGTTCAAGTAAACGCTGCTTGATACTGTGGAGCTGGCCACATATT
 GTGTTGCAACATTTGCACTTTACAAGAATGTTCAAGTGAAGAAGAGAAGTGAAGCAATTCCAGTTTAC
 CGCCTGGCCTGATCATGGTGTCCAGAACACCCTACACCTTTTCTAGCTTTCTTACGTAGAGTCAAACCC
 TGTAACCCTCCCGATGCTGGTCCGATGGTGTGCACTGCAGTGGGGAGTTGGCCGACTGGTGTCTTCA
 TCGTCATAGATGCCATGTTAGAAAGAATAAAGCATGAAAAAAGTGTAGATATTTATGGCCATGTAACCTT
 AATGAGAGCCCAGAGGAATATATGGTTCAAACAGAAGACCAATACATCTTTATCCATGATGCAGTGTTA
 GAAGCAGTGACTTGTGGAATACCGAAGTGCAGCTAGAAACTGTATGCCTACATTCAGAAGCTGACAC
 AAATAGAAACGGGAGAGAATGTCACAGGAATGGAGCTCGAATTTAAGCGTCTAGCCAGCTCAAAGCTCA
 CACCTCAAGGTTTATCAGTGCCAATCTCCATGTAATAAATTCAAAAATCGCCTTGTTAATATTATGCCA
 TATGAATCCAAAGGATGCTGACAGCCTATCCGTGGAGTGAAGGATCTGATTACATCAATGCCAGTT

TTATTGATGGATACAGACAACAGAAAGCCTACATCGCTACCCAGGGGCCCTTGGCAGAGACCACTGAAGA
 CTTCTGGCGGATGCTCTGGGAACACAATTCACCATAGTTGTGATGCTCACCAAGCTGCGTAAAATGGGC
 AGAGAGAAATGTCACCAATACTGGCCAGCAGAACGGTCTGCAAGATACCAGTACTTTGTTGTAGATCCCA
 TGGCTGAGTACAACATGCCACAGTATATCTAAGGGAATCAAGGTCACAGATGCCAGGGACGGCCAGTC
 CCGAACAGTAAGGCAGTTCAGTTCAGTACTGACTGGCCAGAGCAAGGAGTGCCAAAGTCCGGAGAAGGATTT
 ATTGACTTCATCGCCAAGTCCATAAAAACAAAAGACAGTTTGGCCAAGATGGACCCATTTAGTCCATT
 GCAGCGCGGGCGTTGGAAGAAGTGGAGTCTTATAACGCTAAGCATTGTTTTGGAAGAAGATGAGATATGA
 AGGAGTTGTAGATATCTCCAGACTGTCAAATGTTAAGAACACAACGACCAGCTATGGTACAGACAGAG
 GATCAATATCAGTTTTCTATCGTGCCGCACTAGAGTACCTGGGAGCTTTGACCACTATGCAACG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG214115 representing NM_002839
 Red=Cloning site Green=Tags(s)

MVHVARLLLLLLTFFLRDAETPPRFTRTPVDQTVSGGVASFICQATGDPRPKIVWNKKGKVSNQRF
 VIEFDDGSGSVLRIQPLRTPRDEAIYECVASNNVGEISVSTRLLTVLREDQIPRGFPTIDMGPQLKVVERT
 RTATMLCAASGNPDPEITWFKDFLPVDTSNNGRIKQLRSESIGGTPIRGALQIEQSEESDQGYECVAT
 NSAGTRYSAPANLYVRELREVRVPPRFSSIPPTNHEIMPGGSVNITCVAVGSPMPYVKWMLGAEDLTPED
 DMPIGRNVLELNDVRSANYTCVAMSTLGVIEAIAQITVKALPKPPGTPVVTESTATSITLTDWDSGNPEP
 VSYIYIQHKPKNSEELYKEIDGVATTRYSVAGLSPYSDYEFVRVAVNNIGRGPSEPVLQTSEQAPSSA
 PRDVQARMLSSTTILVQWKEPEEPNGQIQGYRVYITMDPTQHVNNWMMKHNVADSQITTIIGNLVQKTYSV
 KVLAFSTIGDGLSSDIQVITQTVPGQPLNFKAPESETSILLSWTPPRSDTIANYELVYKDGEGHEEQ
 RTTIEPGTSYRLQGLKPNLSYFRLAARSPQGLGASTAEISARTMQSKPSAPPQDISCTSPSSTSLVSW
 QPPPVEKQNGIITEYSIKYTAVDGEDDKPHEILGIPSDTTKYLLEQLEKWTEYRITVTAHTDVGPGPESL
 SVLIRTNEDVPSGPPRKEVEAVNSTSVKVSWSRSPVKNQHQGIRGYQVHYVRMENGEPKQPMLKDVML
 ADAQWFEFDDTTEHDMIISGLQPETSYSLTVTAYTTKGDGARSKPKLVSTTGAVPGKPRLVINHTQMNTAL
 IQWHPPVDTFGLQGYRLKFRKDMPELTTLEFSEKEDHFTATDIHKGASYVFRLSARNKVGFGHEEMVKE
 ISIPPEEPTGFPQNLHSEGTSTSVQLSWQPPVLAERNGIITKYTLLYRDINIPLLPMEQLVPAADTTMT
 LTGLKPDTTYDVKVRHAHTSKGPGYSPSVQFRTLVPDQVFAKNFHVAVMKTSVLLSWEIPENYNSAMPF
 KILYDDGKMVEEVDGRATQKLIIVNLKPEKSYSFVLTNRGNSAGGLQHRVTAKTAPDVLRTKPAFIGKTNL
 DGMITVQLPEVPANENIKGYYIIVPLKSRGKFIKPWESPDEMEDELLEKISRKRIRYGREVELKP
 YIAAHFDVLPTEFTLGDGKHGGFTNKQLQSGQEYVFFVLAVMEHAESKMYATSPYSDPVVSMDLDPQPI
 TDEEEGLIWWVGPVLAUVFIICIVIAILLYKRKRAESDRKSSIPNNKEIPSHPTDPVELRRLNFQTPG
 MASHPPPILELADHIERLKANDNLKFSQEYESIDPGQQFTWEHSNLEVNKPKNRYANVIAYDHSRVLLS
 AIEGIPGSDYVNANYIDGYRQNAIYIATQGSLETFGDFWRMIWEQRSATVMMTKLEERSRVKCDQYWP
 SRGTETHGLVQVTLTLDVELATYCVRTFALYKNGSSEKREVRQFQFTAWPDHGVPEHPTPFLAFLRRVKT
 CNPPDAGPMVVHCSAGVGRGTGCFIVIDAMLERIKHEKTVDIYGHVTLMRAQRNYMVQTEDQYIFIHALL
 EAVTCGNTEVPARNLYAYIQKLTQIETGENVTGMELEFKRLASSKAHTSRFISANLPCNFKNRLVNIMP
 YESTRVLQPIRGVEGSDYINASFIDGYRQKAYIATQGPLAETTEDFWRMLWEHNSTIVVMTKLREMG
 REKCHQYVPAERSARYQYFVVDPMAYNMPQYILREFKVTDARDGQSRTVVRQFQFTDWPEQGVKPSGEGF
 IDFIGQVHKTEQFGQDGPISVHCSAGVGRGTGVIITLSIVLERMRMYEGVVDIFQTVKMLRTQRPAMVQTE
 DQYQFSYRAALEYLGSEFDHYAT

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_002839

ORF Size: 5736 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.

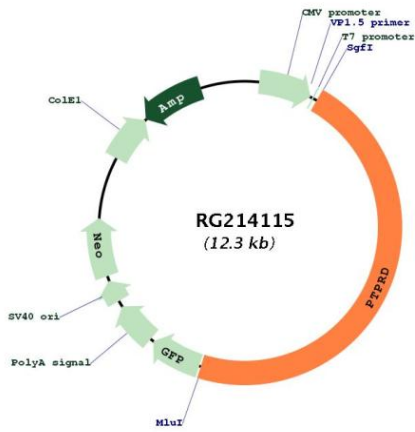
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<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_002839.4
RefSeq Size:	6263 bp
RefSeq ORF:	5739 bp
Locus ID:	5789
UniProt ID:	P23468
Cytogenetics:	9p24.1-p23
Domains:	Y_phosphatase, ig, PTPc_motif, IGc2, IG, FN3
Protein Families:	Druggable Genome, Phosphatase, Transmembrane
Gene Summary:	<p>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 three Ig-like and eight fibronectin type III-like domains. Studies of the similar genes in chicken and fly suggest the role of this PTP is in promoting neurite growth, and regulating neurons axon guidance. Multiple alternatively spliced transcript variants of this gene have been reported. A related pseudogene has been identified on chromosome 5. [provided by RefSeq, Jan 2010]</p>

Product images:



Circular map for RG214115