

Product datasheet for **RG218964**

PTP gamma (PTPRG) (NM_002841) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTP gamma (PTPRG) (NM_002841) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTP gamma
Synonyms:	HPTPG; PTPG; R-PTP-GAMMA; RPTPG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218964 representing NM_002841 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGGAGGTTACTGGAACCGTGTGGTGGATTTGTTCCCTGAAAATCACCAGTCCGTGCTCATTATG
TCGTGTGCTTCCCGCGTTGACAGAAGGCTACGTTGGGGCCCTGCACGAGAATAGACACGGCAGCGCAGT
GCAGATCCGCAGGCGCAAGGCTTCAGGCGACCCGTAAGGCTACTCTGGTGCCTATGGTCTGAGCAC
TGGGTACGCTCTAGTGTAGCTGTGGGAGCCGTCACCAGTCTCCTATTGACATTTAGACCAGTATGCGC
GTGTTGGGAAGAATACCAGAACTGCAACTCGATGGCTTCGACAATGAGTCTTCTAACAAAACCTGGAT
GAAAAACACAGGGAAAACAGTCGCCATCCTTCTGAAAGACGACTATTTTGTGAGTGGAGCTGGTCTACCT
GGCAGATTCAAAGCTGAGAAGGTGGAATTTCACTGGGGCCACAGCAATGGCTCAGCGGGCTCTGAACACA
GCATCAATGGCAGGAGGTTTCTGTTGAGATGCAGATTTTCTTTTACAATCCAGATGACTTTGACAGCTT
TCAAACCGCAATTTCTGAGAACAGAATAATCGGAGCCATGGCCATATTTTTCAAGTCAGTCCGAGGGAC
AATTCTGCACTGGATCCTATTATCCACGGGTTGAAGGGTGTGTCATACATGAGAAGGAGACCTTTCTGG
ATCCTTTCGTCTCCGGGACCTCCTGCCTGCATCCCTGGGAGCTATTATCGGTACACAGGTTCCCTGAC
CACACCACCGTAGCGAAATAGTGGAGTGGATAGTCTCCGGAGACCCGTCATCTCTTACCATCAG
CTTGAGGCTTTTTATTCCATCTTACCACGGAGCAGCAAGACCATGTCAAGTCGGTGGAGTATCTGAGAA
ATAAATTCGACCACAGCAGCGTCTGCATGACAGGGTGGTGTCCAAGTCCGCCGTCCGTGACTCCTGGAA
CCACGACATGACAGACTTCTTAGAAAACCCACTGGGGACAGAAGCCTCTAAAGTTTGAGCTCTCCACCC
ATCCACATGAAGGTGCAGCCTCTGAACCAGACGCACTGCAGGTGTCTGGAGCCAGCCGGAGACTATCT
ACCACCCACCCATCATGAACTACATGATCTCCTACAGCTGGACCAAGAATGAGGACGAGAAGGAGAAGAC
GTTTACAAAGGACAGCGACAAAGACTTGAAAGCCACCATTAGCCATGTCTCACCCGATAGCCTTTACCTG
TTCCGAGTCCAGCCGTGTGTCGGAACGACATGCGCAGCGACTTAGCCAGACGATGCTGTTTCAAGCTA
ATACCACTCGAATATTCCAAGGGACCAGAATAGTGAACAGGAGTGCCACAGCGTCTCCTGCCTCTTC
AGCCGACATGGCCCCATCAGCTCGGGTCTTCTACCTGGACGTCTCTGGCATCCCATTTCTCATTGT



[View online »](#)

TCCATGGCAACTGGGATGGGCCCCCTCCAGTGGCAGCCAGGCCACAGTGGCCTCGGTGGTCACCAGCA
 CGCTGCTCGCCGGCCTGGGGTTCCGGCGGTGGTGGCATCTCTCTTTCCCCAGCACTGTGTGGCCACGCG
 CCTCCCGACGGCCGCCTCAGCCAGCAAGCAGGCGGCTAGGCCAGTCTAGCCACCACAGAGGCCCTTGGCT
 TCTCCAGGGCCCGATGGTGATTCGTCAACAACCAAGGACGGCGAGGGCACCGAGGAAGGAGAGAAGGATG
 AGAAAAGCGAGAGTGAGGATGGGAGCGGGAGCACGAGGAGGATGGAGAGAAGGACTCCGAAAAGAAGGA
 GAAGAGTGGGGTGACCCACGCTGCCGAGGAGCGGAATCAGACGGAGCCCAGCCCCACACCCTCGTCTCT
 AACAGGACTGCCGAGGGAGGCATCAGACTATACCTGGGCATGAGCAGGATCACACTGCCGTCCCCACAG
 ACCAGACGGGCGGAAGGAGGGATGCCGGCCAGGCTGGACCCGACATGGTCCACTCCACCCAAGTGCC
 CCCCACCGCCACAGAGGAGCAGTATGCAGGGAGTGATCCCAAGAGGCCCGAAATGCCATCTAAAAAGCCT
 ATGTCCCAGGGGACCGATTTTCTGAAGACAGCAGATTTACTGTTAATCCAGCGAAAAAACACCT
 CTGGAATGATAAGCCGCCTGCTCCAGGGAGGATGGAGTGGATCATCCCTCTGATTGTGGTATCAGCCTT
 GACCTTCGTGTGCCTCATCCTTCTATTGCTGTGCTCGTTTACTGGAGAGGGTGTAAACAAAATAAAGTCC
 AAGGGCTTCCCAGACGTTTCCGTGAAGTGCCTTCTTCTGGGAGAGAGGAGAGAAGGGGAGCAGAAAAT
 GTTTTCAGACTGCTCATTCTATGTGGAAGACAGCAGTTCACCTCGAGTGGTCCCTAATGAAAGTATTCC
 TATTATTCCTATCCGGATGACATGGAAGCCATTCTGTCAAACAGTTTGTCAAACATCGGTGAGCTC
 TATTCTAATAACCAGCATGGGTTCTCTGAGGATTTTGGAGAAAGTCCAGCGCTGTACTGCTGATATGAACA
 TCACTGCAGAGCATTCCAATCATCCAGAAAACAAGCACAAAAACAGATACATCAACATTTTAGCATATGA
 TCACAGTAGGGTGAAGTTAAGACCTTTACCAGGAAAAGACTCTAAGCACAGCGACTACATTAATGCAAAAC
 TATGTTGATGGTTACAACAAAGCAAAAGCCTACATTGCCACCCAAGGACCTTTGAAGTCTACATTTGAAG
 ATTTCTGGAGGATGATTTGGGAACAAAACACTGGAATCATTGTGATGATTACGAACCTTGTGAAAAAGG
 AAGACGAAAATGTGATCAGTATTGGCCAACAGAGAACAGTGAGGAATATGGAAACATTATTGTACGCTG
 AAGAGCACAAAATACATGCCTGCTACACTGTTCTGCTGTTTTCAATCAGAAAATACAAAAGTGAAAAAGG
 GTCAGAAAGGAAAATCCCAAGGGTGTGAGAATGAAAGGGTAGTGATCCAGTATCACTATACACAGTGGCC
 TGACATGGGAGTTCCCGAGTATGCCCTTCCAGTACTGACTTTCGTGAGGAGATCCTCAGCAGCTCGGATG
 CCAGAAAACGGCCCTGTGTTGGTGCAGTGCAGTGGTGTGGGAGAACAGGCACCTATATTGTAATAG
 ACAGCATGCTGCAACAGATAAAAAGACAAAAGCACAGTTAACGTCCTGGGATTCCTGAAGCATATCAGGAC
 ACAGCGTAACTACCTCGTCCAGACTGAGGAGCAGTACATTTTCCATGATGCCTTGTGGAAAGCCATT
 CTTGGAAGGAGACTGAAGTATCTTCAAATCAGCTGCACAGCTATGTTAACAGCATCCTTATACCAGGAG
 TAGGAGGAAAGACAGACTGGAAAAGCAATTCAAGCTGGTCACACAGTGTAAAGCAAAATATGTGGAATG
 TTTCAAGTGTGCAAAAGAGTGTAAACAAAAGAAAAGAACAGAACTCTTCAAGTGTGCCATCTGAGCGTGT
 CGAGTGGGCTTGCACCATTGCCTGGAATGAAAGGAACAGATTACATTAATGCTTCTTATATCATGGGCT
 ATTATAGGAGCAATGAATTTATTATAACTCAGCATCCTCTGCCACATACTACGAAAGATTTCTGGCGAAT
 GATTTGGGATCATAACGCACAGATCATTGTGATGCTGCCAGACAACCAGAGCTTGGCAGAAGATGAGTTT
 GTGACTGGCCAAGTCGAGAAGAATCCATGAACTGTGAGGCTTTACCGTCACCCTTATCAGCAAAGACA
 GACTGTGCCTCTAATGAAGAACAATATCATCCATGACTTTATCCTTGAAGCTACACAGGATGACTA
 TGTCTTAGAAGTTCGGCACTTTTCAAGTGTCCAAATGGCCTAACCCAGATGCCCCATAAGTAGTACCTTT
 GAACCTTCAACGTCATCAAGGAAGAGGCTTAAACAAGGGATGGTCCCACCATTGTTTATGATGAGTATG
 GAGCAGTTTCAGCAGGAATGTTATGTGCCCTTACCACCCTGTCCAGCAACTGGAGAATGAAAATGCTGT
 GGATGTTTTCCAGTTGCAAAAATGATCAATCTTATGAGGCTGGAGTATTCACAGACATTGAACAATAC
 CAGTTCATCTATAAAGCAAGGCTTAGCTTGGTCAGCACTAAAGAAAATGGAAATGGTCCCATGACAGTAG
 ACAAAAATGTTGCTGTTCTTATTGCAGATGAATCAGACCCTGCTGAGAGCATGGAGTCCCTAGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

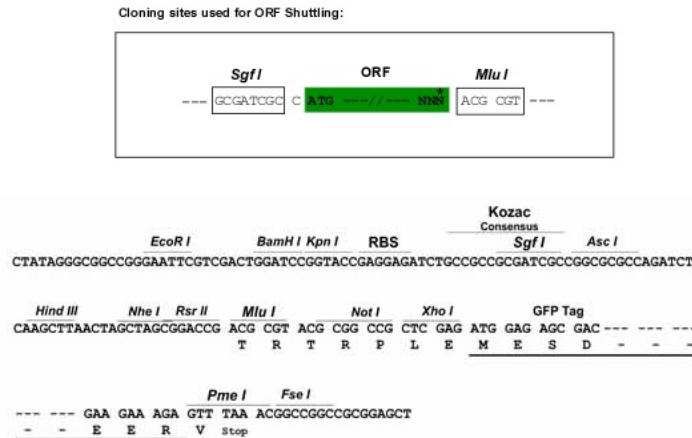
Protein Sequence: >RG218964 representing NM_002841
 Red=Cloning site Green=Tags(s)

MRRLLPCWWILFLKITSSVLHYVVCFPALTEGYV GALHENRHGSAVQIRRRKASGDPYWAYSGAYGPEH
 WVTSSVSCGRHQSPIDILDQYARVGEEYQELQLDGF DNESNK TWMKNTGKTVAILLKDDYFVSGAGLP
 GRFKAEKVEFHGHSNGSAGSEHSINGRRFPVEMQIFFYNPDDFDSFQTAI SENRIIGAMAIFFQVSPRD
 NSALDPIIHGLKGVVHHEKETFLDPFVLRDLLPASLGSYYRYTGLSTTPPCSEIWEIVFRRPVPI SYHQ
 LEAFYSIFTTEQQDHVKSVEYLRNNFRPQQR LHDRVVS KSAVRDSWNHDMTDFLENPLGTEASKVCS SPP
 IHMKVQPLNQ TALQVSWSQPETIYHPPIMNYMISYSWTKNEDEKEKFTTKDSDKDLKATISHVSPDSL YL
 FRVQAVCRNDRSDFSQTMLFQANTTRIFQGRIVKTVPTASPASSADMAPISSGSSTWTSSGIPFSV
 SMATGMGPSSSGSQTAVASVVTSTLLAGLFGGGGISSFPSTVWPTRLPTAASASKQAARPVLATTEALA
 SPGPDGDSPTKDGEGTEEGEKDEKSESEDGEREHEEDGEKDEKKEKSGVTHAAEERNQTEPSPTPSSP
 NRTAEGGHQTI PGHEQDHTAVPTDQTGGRRDAGPGLDPMVTSTQVPPTATEEQYAGSDPKRPEMP SKKP
 MSRGDRFSEDSRFITVNP AEKNTSGMISRPAPGRMEWIIPLIVVSALTFVCLILLIAVLVYWRGCKNIKS
 KGFPRRFREVPSSGERGEKSRKCFQTAHFYVEDSSSPRVVPNESIPIIPDDMEAI PVKQFVKHIGEL
 YSNQHGFSDFE EVQRCTADMNITAEHSNH PENKHKNYINILAYDHSRKLRLPLPGKDSKHSYINAN
 YVDGYNKAKAYIATQGPLKSTFEDFWRMIWEQNTGIIVMITNLVEKRRKCDQYWP TENSEEYGNII VTL
 KSTKIHACYTVRRFSIRNTKVKKGQKGNPKGRQNERVVIQYHYTQWPD MGVP EYALPVLTFVRRSSAARM
 PETGPVLVHCSAGVGRGTGYIVIDSMLQQIKDKSTVNVLGFLKHIRTQRNYLVQTEEQYIF IHDALLEAI
 LGKETEVSNNQLHSYVNSILIPGVGGKTRLEKQFKLVTQCNAKYVECFSAQKECNKEKNRNSVVP SERA
 RVGLAPLPGMKGTDYINASYIMGYRSNEFIITQHPLPHTTKDFWRMIWDHNAQIIVMLPDNQSLAEDEF
 VYWPSREESMNCEAFVTLISKDRLCLSNEEQII IHDFILEATQDDYVLEVRHFQCPKWPNDAPISSTF
 ELINVIKEEALTRDGPTIVHDEYGA VSAGMLCALTTLSQQLENAVDVFQVAKMINLMRPGVFTDIEQY
 QFIYKARLSLVSTKENGNGPMTVDKNGAVLIAEDSDPAESMESLV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002841

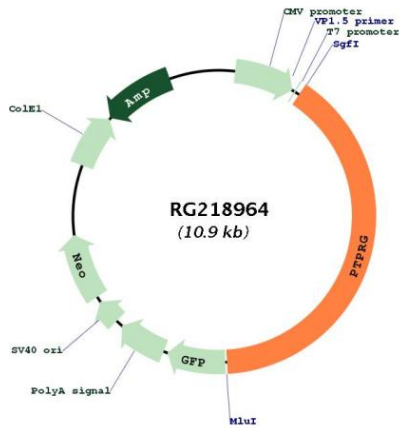
ORF Size: 4335 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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_002841.2 , NP_002832.2
RefSeq Size:	5787 bp
RefSeq ORF:	4338 bp
Locus ID:	5793
UniProt ID:	P23470
Cytogenetics:	3p14.2
Domains:	Y_phosphatase, carb_anhydrase, PTPc_motif, FN3
Protein Families:	Druggable Genome, Phosphatase

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 possesses an extracellular region, a single transmembrane region, and two tandem intracytoplasmic catalytic domains, and thus represents a receptor-type PTP. The extracellular region of this PTP contains a carbonic anhydrase-like (CAH) domain, which is also found in the extracellular region of PTPRBETA/ZETA. This gene is located in a chromosomal region that is frequently deleted in renal cell carcinoma and lung carcinoma, thus is thought to be a candidate tumor suppressor gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG218964