

Product datasheet for **RG229043**

SAP1 (PTPRH) (NM_001161440) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SAP1 (PTPRH) (NM_001161440) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTPRH
Synonyms:	R-PTP-H; SAP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG229043 representing NM_001161440
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGGGGCTGGCGGGGGCTCGGGGTCTGGGGGAACCTGGTGTCTGGGCCTGTGCAGCTGGACAG
 GGGCCAGGGCGCCTGCCCAACCCAGGGAGGAACCTGACAGTGGAGACTCAGACCACAGCTCCATCTC
 CCTGAGCTGGGAGGTCCCCGATGGCCTAGACTCACAGAACTCCAACACTGGGTTCACTGTACTGGAGAC
 GGCGGCACAACAGAGACTCGAAACACAACAGCCACCAACGTCACCGTGGATGGCCTTGGACCCGGGTCT
 TGTATACGTGTTCTGTGTGGTGGAGAAAGACGGAGTAAATAGCTCTGTGGAGATTGTCAGTGTGCCAC
 AGCTCCCAACCCAGTGAAGAACCTGACAGTGGAGGCTCAGACCAACAGCTCCATCGCCCTGACCTGGGAG
 GTCCCGATGGCCAGACCCACAGAACTCCACCTACGGGGTTGAGTACACTGGAGATGGTGGCAGAGCAG
 GGACTCGAAGCACAGCACACCAACATCACCGTGGATAGACTTGAACCCGGGTGTTTGTATGTGTTTTT
 CGTGTGGTGGGGAAGAATGGAATCAACAGCTCCCGGGAGACTCGAAATGCCACCACAGCCCCAACCCA
 GTGAGAAACCTCCATATGGAGACTCAGACCAACAGCTCCATCGCCCTATGCTGGGAAGTCCCCGATGGCC
 CATAACCTCAGGACTACACCTACTGGGTAGAGTACACTGGAGACGGTGGTGGCACAGAGACCCGAAACAC
 AACAAATACAGTGTGACAGCTGAGAGACTTGGAGCCGGAACCTTGTACACATTCTGTATGGGCAGAA
 AAAAATGGAGCACGTGGCTCCAGGCAGAATGTCAGCATCTCCACAGTCCCAACGCAGTGAACAAGCTCA
 GCAAGCAGGACTGGACCAACAGCACCATTGCTTTGCGCTGGACAGCTCCCAGGGCCAGGCCAGTCTTC
 CTACAGCTACTGGGTCTCATGGTCCAGGGAAGGCATGACTGACCCAGGACCCAAAGCACCTCAGTACT
 GACATCACCTAAAGGAAGTGAAGCTGGCAGCCTGTACCACCTACCGTCTGGCCGAGAGGAATGAGG
 TCAGAGGCTATAACAGCACCCCTCACTGCAGCCACTGCTCCAATGAGGTACAGATCTCCAGAATGAAAC
 TCAGACTAAGAAGTCACTGATGCTGTGGTGGAAAGGCCCTGGAGACCCCACTCTCAGTTGTACGTATAC
 TGGGTCCAGTGGCCAGCAAGGGACATCCCGGAGGGGGCAAGATCCCAAGCGAATTGGGTCAACCAGA
 CCAGCAGGACCAATGAGACGTGGTACAAAGTGGAGGCCCTGGAACCCGGGACGCTGTACAATTTACCGT
 GTGGGCAGAGAGGAATGACGTAGCCAGTCCACGCAGAGCCTCTGTGCTCCACATACCCAGACACAGTC
 ACCATCACTTCTGTGTGACACCTCAGCGGGCTATGGAGTCACTTGTCTGCTGCTGCCCCAGGGAG
 GCTACGAGGCCTTTGAGTGGAGGTGGGAGGACAGCGGGCTCCCAGGACAGATCTTCATGTGGGGAGGC
 TGTGTCTGTGTTGGTCTCGGGCCGGCTCGTCTACCCAGCCACCATCACGACCATCTGGGACGGAATG
 AAGGTCGTGTCTACTCTGTGGTCTGCCACCCGAGAGTGCAGGGGTCTTGGCCGAGCCTTTGTGGGCA
 TCCTCCTGTTTCTCATCCTCGTGGCCCTGCTGATTTTCTCCTGAAGAGGAGGAATAAGAAGAAGCAGCA
 GAAACCAGAAGTCAAGGATCTGGTCTTTAGCTCCCAGGGGACATCCCAGCTGAAGACTTCGCTGACCAC
 GTCAGGAAGAATGAGAGGGACAGCAACTGTGGTTTTGCAGACGAGTACCAGCAACTCTCCCTGGTGGCC
 ACAGCCAGTCTCAGATGGTGGCTTCGGCTTCAGAGAACAACGCCAAGAACCCTACAGAAATGTGCTGCC
 CTATGACTGGTCCCGGTGCCTCTGAAGCCATCCATGAGGAGCCAGGCTCTGACTACATCAATGCCAGC
 TTCATGCCCGTCTCTGGAGCCCCAGGAGTTCATTGCAACCCAGGGTCCCCTGCCACAGACAGTGGGTG
 ACTTCTGGCGCCTGGTGTGGGAACAGCAGAGCCACACCCCTGGTCTGCTGACCAACTGCATGGAGGCCGG
 CCGGGTGAAGTGTGAGCATTACTGGCCTCTGGACTCGCAGCCCTGCACCCATGGGCACCTGCGGGTAACC
 CTGGTAGATGAGGAAGTATGGAGAAGTGGACGGTGGCGGAACTGCTGCTCCTCCAGTGGAGGAGCAGA
 AGACACTGTCTGTGCGCAATTCCACTACCAGGCTGGCCGATCACGGCGTTCCCTCCTCCCAGACAC
 CTTGCTGGCTTTCTGGAGGATGCTTCGGCAGTGGCTGGATCAGACCATGGAGGGAGGCCACCCATTGTG
 CACTGCAGTGTGGCGTGGTTCGCACAGGAACCCCTATTGCCCTGGACGTCTGCTCCGGCAGTGCAGT
 CCGAGGGTCTCCTTGGGCCCTTCACTTTGTAAGGAAGATGAGAGAGAGTGGCCGTTGATGGTGCAGAC
 TGAGGCTCAGTACGATTCCTGCATCAGTGCATCCTGCGGTTCTCCAACAGTACAGCCAGGCCCCAGCC
 GAGAAGGAAGTCCCGTATGAGGATGTCGAAAACCTCATCTACGAGAAGTGGCCGCCATCAAGGCCACA
 AGTTGGAGGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG229043 representing NM_001161440
 Red=Cloning site Green=Tags(s)

MAGAGGGLGVWGNL VLLGLCSWTGARAPAPNPGRNLTVETQTTSSISLSWEVPDGLDSQNSNYWVQCTGD
 GGTETRNTTATNVTVDGLGPGSLYTCSVWVEKDGVNSSVEIVTSATAPNPVRNL TVEAQTNSSIALTWE
 VPDGPDQPNSTYGYEYTDGGGRAGTRSTAHTNITVDRLEPGCL YVFSVWVGKNGINSSRETRNATTAPNP
 VRNLHMETQTNSSIALCWEVPDGPYPQDYTYWVEYTDGGGTETRNTTNTSVTAERLEPGTLTYTF SVWAE
 KNGARGSRQNVSI STVPNAVTSLSKQDWTNSTIALRWTAPQGGQSSSYWVSWVREGMDPRTQSTSGT
 DITLKELEAGSLYHLTVWAERNEVRGYNSTLTAATAPNEVTDLQNETQTKNSVMLWVKAPGDPHSQLYVY
 WVQWASKGHPRRGQDPQANWVNQTSRTNETWYKVEALEPGTL YNFTVWAERNVASTQSLCASTYPDTV
 TITSCVST SAGYGNLIWSCPQGGYEAFELEVGGQRGSQDRSSCGEAVSVLGLGPARSYPATITTIWDMG
 KVVSHSVVCHTESAGVIAGAFVGI LLFLILVGLL IFFLKRRNKKKQKPELRDLVFSSPGDIPAEDFADH
 VRKNERDSNCGFADEYQQLSLVGHSSQSMVASASENNAKNRYRNVL PYDWSRVPLKPIHEEPGSDYINAS
 FMPGLWSPQEF IATQGPLPQTVGDFWRLVWEQQSHTLVMLTNCMEAGR VKCEHYWPLDSQPCTHGLRVT
 LVDEEV MENWTVRELLLLQVEEQKTL SVRQFHYQAWPDHGV PSSPDTLLAFWRMLRQWLDQTMEGGPPIV
 HCSAGVGRGTGLIALDVLRLQLQSEGLLGPFSFVRKMRESRPLMVQTEAQYVFLHQCILRFLQSSAQAPA
 EKEVPYEDVENLIYENVAIAKHKLEV

TRTRPLE - GFP Tag - V

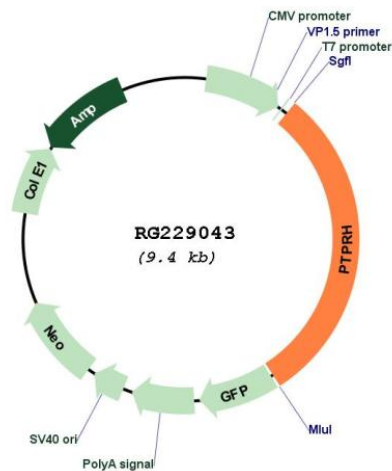
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001161440

ORF Size: 2811 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_001161440.1](#), [NP_001154912.1](#)

RefSeq Size: 3401 bp

RefSeq ORF: 2814 bp

Locus ID: 5794

UniProt ID: [Q9HD43](#)

Cytogenetics: 19q13.42

Protein Families: Druggable Genome, Transmembrane

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 a single intracytoplasmic catalytic domain, and thus represents a receptor-type PTP. The extracellular region contains eight fibronectin type III-like repeats and multiple N-glycosylation sites. The gene was shown to be expressed primarily in brain and liver, and at a lower level in heart and stomach. It was also found to be expressed in several cancer cell lines, but not in the corresponding normal tissues. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2009]