

## Product datasheet for **RG215011**

### SAP1 (PTPRH) (NM\_002842) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SAP1 (PTPRH) (NM_002842) 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)
ORF Nucleotide Sequence:	>RG215011 representing NM_002842 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGGGGCTGGCGGGGCTCGGGGTCTGGGGAACTGGTGTCTGGGCTGTGCAGCTGGACAG  
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GGCGGCACAACAGAGACTCGAAACACAACGCCACCAACGTACCGTGGATGGCCTTGACCCGGGTCAT  
TGTATACGTGTTCTGTGGGTGGAGAAAGACGGAGTAAATAGCTCTGTGGGACTGTCACTACTGCCAC  
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GTAGAGTACACTGGAGACGGTGGTGGCACAGAGACCCGAAACACAACAAATACCAGTGTGACAGCTGAGA  
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GAATGTACAGATCTCCACAGTCCCAACGCAGTGACAAGCCTCAGCAAGCAGGACTGGACCAACAGCACC



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ATTGCTTTGCGCTGGACAGCTCCCCAGGGCCCAGGCCAGTCTTCCTACAGCTACTGGGTCTCATGGGTCA  
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 CGAAAACCTCATCTACGAGAACGTGGCCGCCATCCAGGCCACAAGTTGGAGGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

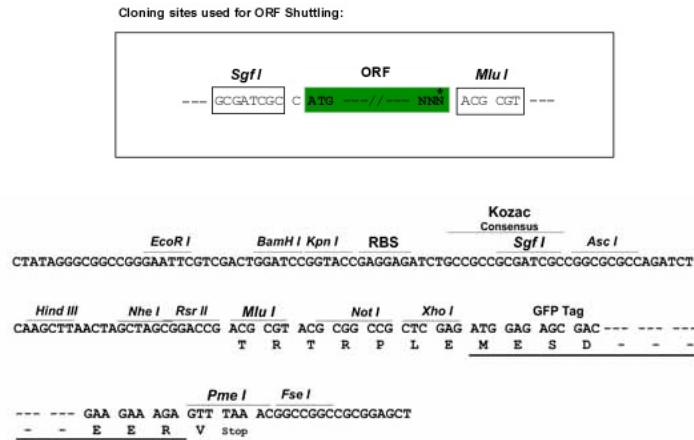
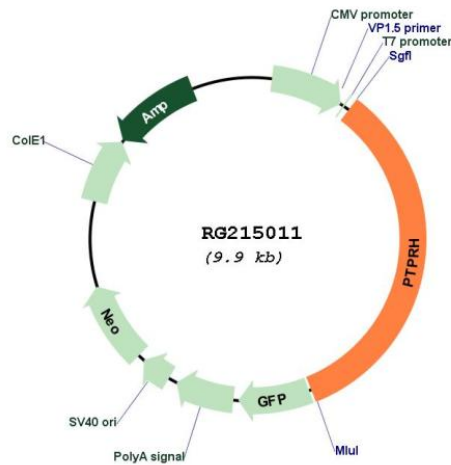
>RG215011 representing NM\_002842  
 Red=Cloning site Green=Tags(s)

MAGAGGLGVWGNL VLLGLCSWTGARAPAPNPGRNLT VETQTTSSISLSWEVPDGLDSQNSNYWVQCTGD  
 GGTETERNTTATNVTVDGLGPGSLYTCSVWVEKDVNSSVGTVTATAPNPVRNLRVEAQTNSSIALTWE  
 VPDGPDQPQNSTYGV EYTDGGRAGTRSTAHTNITVDGLEPGCLYAFSMWVGKNGINSRETRNATT AHN  
 VRNLRVEAQTSSISLSWEVPDGTDPQNSTYCVQCTGDGGRTE TRNTTDRVTVDGLGPGSLYTCSVWVE  
 KDVNSSVEIVTSATAPNPVRNL TVEAQTNSSIALTWEVPDGPDPQNSTYGV EYTDGGRAGTRSTAHTN  
 ITVDRLEPGCLYVFSVWVGKNGINSRETRNATTAPNPVRNLHMETQTNSSIALCWEVPDGPYPQDYTYW  
 VEYTDGGGTETRNTTNTSVTAERLEPGTYLTF SVWAEKNGARGSRQNVSI STVPAVNTLSKQDWTNST  
 IALRWTAPQGPQSSYSYVWVSWVREGMTDPRQTSGTDITLKELEAGSLYHLTVWAERNEVRGYNSTLT  
 AATAPNEVTDLQNETQTKNSVMLWKKAPGDPHSQLYVYVWQWASKGHPRRQDPQANVWVNTSRTNETWY  
 KVEALEPGTLYNFTVWAERN DVASSTQSLCASTYPTVTITSCVST SAGYGVNL IWSCPQGGYAF ELEV  
 GGQRGSQDRSSCGEAVSVLGLGPARSYPATITTIWDMKVVSHSVCHTESAGVIAGAFVGI LLLFLV  
 LLIFFLKRRNKKKQKPELRDLV FSSPGDIPAEDFADHVRKNERDSNCGFADEYQQLSLVGHSSQSMVAS  
 ASENNAKNRYRNVL PYDWSRVPLKPIHEEPGSDYINASFMPGLWSPQEF IATQGPLPQTGVDFWRLVWEQ  
 QSHTLVMLTNCMEAGRKCEHYWPLDSQPCTHGHLRVTLV GEEV MENWTVRELLLLQVEEQKTL SVRFH  
 YQAWPDHGVPSPTLLAFWRMLRQWLDQTM EGGPPIVHCSAGVGRGTGLIALDVLRLQLQSEGLLGPFS  
 FVRKMRESRPLMVQTEAQYVFLHQILRFLQSSAQAPAEKEVPYEDVENLIYENVAAIQAHKLEV

TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**Plasmid Map:**

**ACCN:**

NM\_002842

**ORF Size:**

3345 bp

**OTI Disclaimer:**

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.

<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>RefSeq:</b>	<u>NM_002842.5</u>
<b>RefSeq Size:</b>	3895 bp
<b>RefSeq ORF:</b>	3348 bp
<b>Locus ID:</b>	5794
<b>UniProt ID:</b>	<u>Q9HD43</u>
<b>Cytogenetics:</b>	19q13.42
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Gene Summary:</b>	<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 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]</p>