

## Product datasheet for RG202161

## TCPTP (PTPN2) (NM 080422) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: TCPTP (PTPN2) (NM\_080422) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: TCPTP

Synonyms: PTN2; PTPT; TC-PTP; TCELLPTP; TCPTP

Mammalian Cell

Selection:

Neomycin

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG202161 representing NM\_080422

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCCCACCACCATCGAGCGGGAGTTCGAAGAGTTGGATACTCAGCGTCGCTGGCAGCCGCTGTACTTGG AAATTCGAAATGAGTCCCATGACTATCCTCATAGAGTGGCCAAGTTTCCAGAAAACAGAAATCGAAACAG ATACAGAGATGTAAGCCCATATGATCACAGTCGTGTTAAACTGCAAAATGCTGAGAATGATTATATTAAT GCCAGTTTAGTTGACATAGAAGAGGCACAAAGGAGTTACATCTTAACACAGGGTCCACTTCCTAACACAT GCTGCCATTTCTGGCTTATGGTTTGGCAGCAGAAGACCAAAGCAGTTGTCATGCTGAACCGCATTGTGGA GAAAGAATCGGTTAAATGTGCACAGTACTGGCCAACAGATGACCAAGAGATGCTGTTTAAAGAAACAGGA TTCAGTGTGAAGCTCTTGTCAGAAGATGTGAAGTCGTATTATACAGTACATCTACTACAATTAGAAAATA TCAATAGTGGTGAAACCAGAACAATATCTCACTTTCATTATACTACCTGGCCAGATTTTGGAGTCCCTGA ATCACCAGCTTCATTTCTCAATTTCTTGTTTAAAGTGAGAGAATCTGGCTCCTTGAACCCTGACCATGGG CCTGCGGTGATCCACTGTAGTGCAGGCATTGGGCGCTCTGGCACCTTCTCTCTGGTAGACACTTGTCTTG TTTTGATGGAAAAAGGAGATGATATTAACATAAAACAAGTGTTACTGAACATGAGAAAATACCGAATGGG TCTTATTCAGACCCCAGATCAACTGAGATTCTCATACATGGCTATAATAGAAGGAGCAAAATGTATAAAG GGAGATTCTAGTATACAGAAACGATGGAAAGAACTTTCTAAGGAAGACTTATCTCCTGCCTTTGATCATT CACCAAACAAAATAATGACTGAAAAATACAATGGGAACAGAATAGGTCTAGAAGAAGAAAAACTGACAGG TGACCGATGTACAGGACTTTCCTCTAAAATGCAAGATACAATGGAGGAGAACAGTGAGAGTGCTCTACGG AAACGTATTCGAGAGGACAGAAAGGCCACCACAGCTCAGAAGGTGCAGCAGATGAAACAGAGGCTAAATG AGAATGAACGAAAAAGAAAAAGGCCAAGATTGACAGACACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG202161 representing NM\_080422

Red=Cloning site Green=Tags(s)

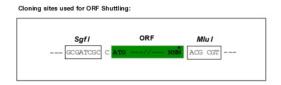
MPTTIEREFEELDTQRRWQPLYLEIRNESHDYPHRVAKFPENRNRNRYRDVSPYDHSRVKLQNAENDYIN ASLVDIEEAQRSYILTQGPLPNTCCHFWLMVWQQKTKAVVMLNRIVEKESVKCAQYWPTDDQEMLFKETG FSVKLLSEDVKSYYTVHLLQLENINSGETRTISHFHYTTWPDFGVPESPASFLNFLFKVRESGSLNPDHG PAVIHCSAGIGRSGTFSLVDTCLVLMEKGDDINIKQVLLNMRKYRMGLIQTPDQLRFSYMAIIEGAKCIK GDSSIQKRWKELSKEDLSPAFDHSPNKIMTEKYNGNRIGLEEEKLTGDRCTGLSSKMQDTMEENSESALR KRIREDRKATTAQKVQQMKQRLNENERKRKRPRLTDT

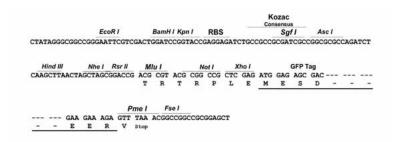
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





**ACCN:** NM\_080422

ORF Size: 1161 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 <a href="mailto:customercom">customercom</a> 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.



## TCPTP (PTPN2) (NM\_080422) Human Tagged ORF Clone - RG202161

**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: <u>NM 080422.2</u>, <u>NP 536347.1</u>

 RefSeq Size:
 1721 bp

 RefSeq ORF:
 1164 bp

 Locus ID:
 5771

 UniProt ID:
 P17706

 Cytogenetics:
 18p11.21

**Domains:** Y\_phosphatase, PTPc\_motif

**Protein Families:** Druggable Genome, Phosphatase, Transmembrane

**Gene Summary:** The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP)

family. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of

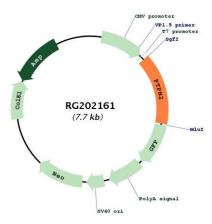
cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic

transformation. Epidermal growth factor receptor and the adaptor protein Shc were reported

to be substrates of this PTP, which suggested the roles in growth factor mediated cell signaling. Multiple alternatively spliced transcript variants encoding different isoforms have been found. Two highly related but distinctly processed pseudogenes that localize to chromosomes 1 and 13, respectively, have been reported. [provided by RefSeq, May 2011]



## **Product images:**



Circular map for RG202161