

Product datasheet for **RG205090**

TCPTP (PTPN2) (NM_080423) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TCPTP (PTPN2) (NM_080423) 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 Sequence:	>RG205090 representing NM_080423 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCACCACATCGAGCGGGAGTTCGAAGAGTTGGATACTCAGCGTCGCTGGCAGCCGCTGACTTGG
AAATTCGAAATGAGTCCCATGACTATCCTCATAGAGTGGCCAAGTTTCCAGAAAACAGAAATCGAAACAG
ATACAGAGATGTAAGCCCATATGATCACAGTCGTGTTAACTGCAAAATGCTGAGAATGATTATATTAAT
GCCAGTTTAGTTGACATAGAAGAGGCACAAAGGAGTTACATCTTAACACAGGGTCCACTTCTAACACAT
GCTGCCATTTCTGGCTTATGGTTTGGCAGCAGAAGACCAAGCAGTTGTCATGCTGAACCGCATTGTGGA
GAAAGAATCGGTTAAATGTGCACAGTACTGGCCAACAGATGACCAAGAGATGCTGTTTAAAGAAACAGGA
TTCAGTGTGAAGCTCTTGTGAGAAGATGTGAAGTCGTATTATACAGTACATCTACTACAATTAGAAAATA
TCAATAGTGGTGAACCAGAACAATATCTCACTTTCATTATACTACCTGGCCAGATTTTGGAGTCCCTGA
ATCACCAGCTTCATTTCTCAATTTCTTGTAAAGTGAGAGAATCTGGCTCCTTGAACCTGACCATGGG
CCTGCGGTGATCCACTGTAGTGCAGGCATTGGGCGCTCTGGCACCTTCTCTCTGGTAGACTTGTCTTG
TTTTGATGGAAAAGGAGATGATTAACATAAAAAGTGTACTGAACATGAGAAAATACCGAATGGG
TCTTATTCAGACCCAGATCAACTGAGATTCTCATACATGGCTATAATAGAAGGACAAAATGTATAAAG
GGAGATTCTAGTATACAGAAACGATGGAAGAAGTCTTAAGGAAGACTTATCTCCTGCCTTTGATCATT
CACAAAACAAAATAATGACTGAAAATAACAATGGGAACAGAATAGGTCTAGAAGAAGAAAACAGCAGG
TGACCGATGTACAGGACTTTCCTCTAAAATGCAAGATACAATGGAGGAGAACAGTGAGAGGCCAAGATTG
ACAGACACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205090 representing NM_080423
 Red=Cloning site Green=Tags(s)

MPTTIEREFEELDTQRRWQPLYLEIRNESHDPYHRVAKFPENRRNRNRYRDVSPYDHSRVKQLQNAENDYIN
 ASLVDIEEAQRSYILTQGPLPNTCCHFWMVWQKTKAVVMLNRIVEKESVKCAQYWPTDDQEMLFKETG
 FSVKLLSEDVKSYYTVHLLQLENINSGETRTISHFYHTTWPDFGVPESPASFLNLFKVVRESGSLNPDHG
 PAVIHCSAGIGRSGTFSLVDVDTCLVLMKGGDDINIKQVLLNMRKYRMGLIQTPDQLRF SYMAIIEGAKCIK
 GDSSIQKRWKELSKEDLSPAFDHSPNKIMTEKYNGNRIGLEEEKLTGDRCTGLSSKMQDTMEENSERPRLL
 TDT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_080423

ORF Size: 1059 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.

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_080423.2](#)

RefSeq Size: 1623 bp

RefSeq ORF: 1062 bp

Locus ID: 5771

UniProt ID: [P17706](#)

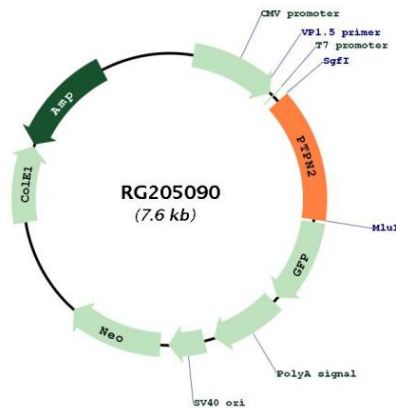
Cytogenetics: 18p11.21

Domains: Y_phosphatase

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 RG205090