

Product datasheet for SC310456

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436

OriGene Technologies, Inc.

Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

TCPTP (PTPN2) (NM_080422) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: TCPTP (PTPN2) (NM 080422) Human Untagged Clone

Tag: Tag Free Symbol: TCPTP

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

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_080422, the custom clone sequence may differ by one or more

nucleotides

ATGCCCACCACCATCGAGCGGGAGTTCGAAGAGTTGGATACTCAGCGTCGCTGGCAGCCG CTGTACTTGGAAATTCGAAATGAGTCCCATGACTATCCTCATAGAGTGGCCAAGTTTCCA GAAAACAGAAATCGAAACAGATACAGAGATGTAAGCCCATATGATCACAGTCGTGTTAAA CTGCAAAATGCTGAGAATGATTATATTAATGCCAGTTTAGTTGACATAGAAGAGGCACAA AGGAGTTACATCTTAACACAGGGTCCACTTCCTAACACATGCTGCCATTTCTGGCTTATG GTTAAATGTGCACAGTACTGGCCAACAGATGACCAAGAGATGCTGTTTAAAGAAACAGGA TTCAGTGTGAAGCTCTTGTCAGAAGATGTGAAGTCGTATTATACAGTACATCTACTACAA TTAGAAAATATCAATAGTGGTGAAACCAGAACAATATCTCACTTTCATTATACTACCTGG CCAGATTTTGGAGTCCCTGAATCACCAGCTTCATTTCTCAATTTCTTGTTTAAAGTGAGA GAATCTGGCTCCTTGAACCCTGACCATGGGCCTGCGGTGATCCACTGTAGTGCAGGCATT GGGCGCTCTGGCACCTTCTCTCTGGTAGACACTTGTCTTGTTTTGATGGAAAAAGGAGAT GATATTAACATAAAACAAGTGTTACTGAACATGAGAAAATACCGAATGGGTCTTATTCAG ACCCCAGATCAACTGAGATTCTCATACATGGCTATAATAGAAGGAGCAAAATGTATAAAG GGAGATTCTAGTATACAGAAACGATGGAAAGAACTTTCTAAGGAAGACTTATCTCCTGCC TTTGATCATTCACCAAACAAAATAATGACTGAAAAAATACAATGGGAACAGAATAGGTCTA GAAGAAGAAAACTGACAGGTGACCGATGTACAGGACTTTCCTCTAAAATGCAAGATACA ATGGAGGAGAACAGTGAGAGTGCTCTACGGAAACGTATTCGAGAGGACAGAAAGGCCACC ACAGCTCAGAAGGTGCAGCAGATGAAACAGAGGCTAAATGAGAATGAACGAAAAAGAAAA

AGGCCAAGATTGACAGACACCTAA

Restriction Sites: Please inquire ACCN: NM 080422

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



TCPTP (PTPN2) (NM_080422) Human Untagged Clone - SC310456

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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 080422.1</u>, <u>NP 536347.1</u>

 RefSeq Size:
 1714 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] Transcript Variant: This variant (2) contains an alternate 3' region, which includes a part of the C-terminal coding region, when compared to variant 1. The resulting isoform (2) has a shorter

and distinct C-terminus, as compared to isoform 1.