

## Product datasheet for **SC309552**

### PTPN13 (NM\_080684) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTPN13 (NM_080684) Human Untagged Clone
Tag:	Tag Free
Symbol:	PTPN13
Synonyms:	FAP-1; hPTP1E; PNP1; PTP-BAS; PTP-BL; PTP1E; PTPL1; PTPLE
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_080684, the custom clone sequence may differ by one or more nucleotides

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CAGACAGAGGATCAATATATTTTCTGCTATCAAGTCATCCTTTATGTCCTGACACGTCTT
CAAGCAGAAGAAGAGCAAAAACAGCAGCCTCAGCTTCTGAAGTGA
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- Restriction Sites:** Please inquire
- ACCN:** NM\_080684
- 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).
- 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:** [NM\\_080684.1](#), [NP\\_542415.1](#)

**RefSeq Size:** 7546 bp

**RefSeq ORF:** 6885 bp

**Locus ID:** 5783

**UniProt ID:** [Q12923](#)

**Cytogenetics:** 4q21.3

**Domains:** Y\_phosphatase, B41, PDZ

**Protein Families:** Druggable Genome, Phosphatase

**Gene Summary:** The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP is a large intracellular protein. It has a catalytic PTP domain at its C-terminus and two major structural domains: a region with five PDZ domains and a FERM domain that binds to plasma membrane and cytoskeletal elements. This PTP was found to interact with, and dephosphorylate, Fas receptor and I $\kappa$ B $\alpha$  through the PDZ domains. This suggests it has a role in Fas mediated programmed cell death. This PTP was also shown to interact with GTPase-activating protein, and thus may function as a regulator of Rho signaling pathways. Four alternatively spliced transcript variants, which encode distinct proteins, have been reported. [provided by RefSeq, Oct 2008]

Transcript Variant: This variant (3) lacks multiple in-frame segments of the coding region, compared to variant 4. The encoded protein (isoform 3) lacks 191 internal amino acids, compared to isoform 4.