

## Product datasheet for SC317179

### PTPRB (NM\_001109754) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTPRB (NM_001109754) Human Untagged Clone
Tag:	Tag Free
Symbol:	PTPRB
Synonyms:	HPTP-BETA; HPTPB; PTPB; R-PTP-BETA; VEPTP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC317179 representing NM_001109754. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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**Restriction Sites:** SgfI-MluI

**Plasmid Map:** □

**ACCN:** NM\_001109754

**Insert Size:** 6648 bp

**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:	<a href="#">NM_001109754.2</a>
RefSeq Size:	11332 bp
RefSeq ORF:	6648 bp
Locus ID:	5787
UniProt ID:	<a href="#">P23467</a>
Cytogenetics:	12q15
Protein Families:	Druggable Genome, Phosphatase
Protein Pathways:	Adherens junction
MW:	249.1 kDa
Gene Summary:	<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 contains an extracellular domain, a single transmembrane segment and one intracytoplasmic catalytic domain, thus belongs to receptor type PTP. The extracellular region of this PTP is composed of multiple fibronectin type_III repeats, which was shown to interact with neuronal receptor and cell adhesion molecules, such as contactin and tenascin C. This protein was also found to interact with sodium channels, and thus may regulate sodium channels by altering tyrosine phosphorylation status. The functions of the interaction partners of this protein implicate the roles of this PTP in cell adhesion, neurite growth, and neuronal differentiation. Alternate transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2011]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.</p>