

Product datasheet for SC120495

PTPRN2 (NM_002847) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPRN2 (NM_002847) Human Untagged Clone
Tag:	Tag Free
Symbol:	PTPRN2
Synonyms:	IA-2beta; IAR; ICAAR; PTPRP; R-PTP-N2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC120495 sequence for NM_002847 edited (data generated by NextGen Sequencing)

```

ATGGGGCCGCGCTCCCGTCTGCTGCTGCTACTGCTGCTGCTGCCGCCACGCGTCTCTG
CCTGCCGCCCCCTTCGTCCGTCCCCCGCGCCGGCAGCTCCCGGGGCGTCTGGGCTGCCTG
CTCGAGGAGGGCCTCTGCGGAGCGTCCGAGGCCTGTGTGAACGATGGAGTGTGGAAAGG
TGCCAGAAGGTTCCGGCAATGGACTTTTACCGCTACGAGGTGTCGCCCGTGGCCCTGCAG
CGCCTGCGCGTGGCGTTGCAGAAGCTTTCCGGCACAGGTTTACAGTGGCAGGATGACTAT
ACTCAGTATGTGATGGACCAGGAACCTGCAGACCTCCCGAAAACCTACCTGAGGCGTCTCT
GAAGCATCCAGCCAGCCAGGCCCTCAAAACACAGCGTTGGCAGCGAGAGGAGGTACAGT
CGGGAGGGCGGTGCTGCCCTGGCCAACGCCCTCCGACGCCACCTGCCCTTCTGGAGGCC
CTGTCCCAGGCCCCAGCCTCAGACGTGCTCGCCAGGACCATACGGCGCAGGACAGACCC
CCCGCTGAGGGTATGACCGCTTCTCCGAGAGCATCCTGACCTATGTGGCCACACGTCT
GCGCTGACCTACCTCCCGGGCCCCGGACCCAGCTCCGCGAGGACCTCCTGCCGCGGACC
CTCGGCCAGCTCCAGCCAGATGAGCTCAGCCCTAAGGTGGACAGTGGTGTGGACAGACAC
CATCTGATGGCGGCCCTCAGTGCCTATGCTGCCAGAGGCCCCAGCTCCCCCGGGGAG
GGCAGCCTGGAGCCACAGTACCTTCTGCGTGCACCCTCAAGAATGCCAGGCCTTTGCTG
GCACCAGCCGCCCCCAGAAGTGGCCTTACCTCTGGGAGATTCGAAGACCCCTCTAGC
ACAGGCGATGGAGCACGGATTACATCCCTCCTGAAGGACCTGCAGAGGCAGCCGGCTGAG
GTGAGGGCCTGAATGGCCTGGAGCTGGACGGCATGGCCGAGCTGATGGCTGGCCTGATG
CAAGGCGTGGACCATGGAGTAGCTCGAGGCAGCCCTGGGAGAGCGGCCCTGGGAGAGTCT
GGAGAACAGGCGGATGGCCCCAAGGCCACCCTCCGTGGAGACAGCTTTCAGATGACGGA
GTGCAGGACGACGATGATAGACTTTACCAAGAGGTCCATCGTCTGAGTGCCACACTCGGG
GGCCTCCTGCAGGACCACGGGTCTCGACTTTACCTGGAGCCCTCCCCTTTGCAAGGCC
CTCGACATGGAGAGGAAGAAGTCCGAGCACCCCTGAGTCTTCCCTGTCTTTCAGAAGAGGAG
ACTGCCGAGTGGAGAACGTCAAGAGCCAGACGATTCCAAGATCTGCTGGGGCAGCAG
CCGCATTCGGAGCCCGGGGCCGCTGCGTTTGGGGAGCTCCAAAACAGATGCCTGGGCC
TCGAAGGAGGAGCAGAGCCTTCCAGCGGTGCTCAGGAGGCCCTCAGCGACGGCCTGCAA

```



[View online »](#)

```

TTGGAGGTCCAGCCTTCCGAGGAAGAGGCGGGGCTACATCGTGACAGACAGAGACCCC
CTGCGCCCCGAGGAAGGAAGGCGGTGGTGGAGGACGTCGCCCCCTCTGCAGGTGCC
AGCAGTGCGTTTCGCTGACGTGGAGGTTCTCGGACCAGCAGTGACCTTCAAAGTGAGCGCC
AATGTCCAAAACGTGACCACTGAGGATGTGGAGAAGGCCACAGTTGACAACAAAGACAAA
CTGGAGGAAACCTCTGGACTGAAAATCTTCAAACCGGAGTCGGGTCGAAAAGCAAACCTG
AAGTTCCTGCCTCCTCAGGCGGAGCAAGAAGACTCCACCAAGTTCATCGCGCTCACCTGT
GTCTCCCTCGCCTGCATCCTGGGCGTCTCTGGCCTCTGGCCTCATCTACTGCCTCCG
CATAGCTCTCAGCACAGGCTGAAGGAGAAGCTCTCGGGACTAGGGGGCGACCCAGGTGCA
GATGCCACTGCCGCTACCAGGAGCTGTGCCGCCAGCGTATGGCCACGCGGCCACCAGAC
CGACCTGAGGGCCCGCACACGTACGCATCAGCAGCGTCTCATCCCAGTTCAGCGACGGG
CCGATCCCCAGCCCCCGCACGCAGCAGCGCCTCATCTGGTCCGAGGAGCCTGTGCAG
TCCAACATGGACATCTCCACCGGCCACATGATCCTGTCTACATGGAGGACCACCTGAAG
AACAGAACCAGGCTGGAGAAGGAGTGGGAAGCGCTGTGCGCTACCAGGCGGAGCCCAAC
AGCTCGTTCGTGGCCAGAGGGAGGAGAAGCTGCCAAGAACCCTCCCTGGCCGTGCTG
ACCTATGACCACTCCCGGCTCTGCTGAAGGCGGAGAACGCCACAGCCACTCAGACTAC
ATCAACGCTAGCCCCATCATGGATCACGACCCGAGGAACCCCGCTACATCGCCACCCAG
GGACCGCTGCCGCCACCGTGGCTGACTTTTGGCAGATGGTGTGGGAGAGCGGCTGCGTG
GTGATCGTCATGCTGACACCCCTCGCGGAGAACGGCGTCCGGCAGTGCTACCACTACTGG
CCGGATGAAGGCTCCAATCTCTACCACATCTATGAGGTGAACCTGGTCTCCGAGCACATC
TGGTGTGAGGACTTCTGGTGGAGGCTCTATCTGAAGAACCTCGACACCAACGAGACG
CGCACCGTGACGAGTCCACTTCTGAGTTGGTATGACCGAGGAGTCCCTTCTCCTCA
AGGTCCCTCCTGGACTTCCGAGAAAAGTAAACAAGTGTACAGGGGCCGTTCTTGTCCA
ATAATTGTTTCATTGCAGTGACGGTGCAGGCCGGAGCGGCACCTACGTCCCTGATCGACAT
GTTCTCAACAAGATGGCCAAAGGTGCTAAAGAGATTGATATCGCAGCGACCCCTGGAGCAC
TTGAGGGACCAGAGACCCGGCATGGTCCAGACGAAGGAGCAGTTTGTGATTCGCGCTGACA
GCCGTGGCTGAGGAGGTGAACGCCATCCTCAAGGCCCTTCCCCAGTGA
    
```

Clone variation with respect to NM_002847.3
 622 t=>c;897 c=>t;974 g=>a;999 t=>c

5' Read Nucleotide Sequence:

```

>OriGene 5' read for NM_002847 unedited
GCCCGTTGACGCAAAGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTC
ATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTTGCAGCGGCCGGAATTCGG
CACGAGGGAGGAGCCGGCGCGCGCCTCCCTGGGCCCGGACTCGGCCGCTCCCGCCG
CCTCCCGCGCGGCATGGACTGAGCGCCCGGCCAGGCCGCGGGGATGGGGCCGCCGCT
CCCCTGCTGCTGCTACTGCTGCTGCTGCCGCCACGCTCCTGCCTGCCGCCCTTC
GTCCGTCCCCCGCGCCGCGAGTCCCGGGGCGTCTGGGCTGCCTGCTCGAGGAGGGCT
CTGCGGAGCGTCCGAGGCTGTGTGAACGATGGAGTGTGGGAAGGTGCCAGAAGTTCC
GGCAATGGACTTTTACCGCTACGAGGTGTGCGCCGTGGCCCTGCAGCGCCTGCGCGTGGC
GTTGCAGAAGCTTTCCGGCACAGGTTTACGTTGGCAGGATGACTATACTCAGTATGTGAT
GGACCAGGAACCTGCAGACCTCCCGAAAACCTACCTGAGGCGTCTGAAGCATCCAGCCC
AGCCAGGCCCTCAAACACAGCGTTGGCAGCGAGAGGAGGTACAGTCGGGAGGGCGGTGCT
GNCCTGGNNCAACGCCTNCGACGCCACCTGGCCTTTCTGGGAGCCCTGTNCCAGGCCCA
GCCTCAGACGTGCTCGCCAGGACCATACNGNCCANGACAGACCCCGCCTGAGGTGATGA
CCGCTCCTNCGAGAGCATCCTGACCTATGTGNCCACACGTNTGCGCTGACCTACCCCTC
CGNCCCCGAGACAGCTCCGCGAGGACCCTCTGGCGGNACCCTCGCCAGCTNCGAGCCAG
ATGAGCTCAGCCCTAGGTGGAACGGGNNNTGGGACAGAACCCCATCTGATGGCGGCCCT
CAGTGGCTATGCTGGCCAGAGGCCCCAGCTCCCGCGGGGGAGGGCAAGCTGGAGGCCAC
GAACCTNNTGGGTGCACCTNAAA
    
```

3' Read Nucleotide Sequence:	>OriGene 3' genomic read for NM_002847 unedited ACTATGGTACCGCGCCCGCATTCTANGATCGAGTTTTTTTTTTTTTTTTTTTGTGAAATC AGAGTTTAAATATGACACAATTAATATATTTGTATATCTCACACCGGAGGTTTCTCTTCA AACATAAGGAGTTAGAAATTACAAGTAGGCATATGCTTCTATATTCAGATAAATTCATT TCGATTAATTAATCCAGATAGAGAGAAGTAATTTGGAAAAGAAATGATAGCTATATT AAAGCAGATATTCATTACAATACCATGTAGAGACATAAGCAATATTTGGCATCATTCTG TCCGCTCAGTAGGCCGTGTTCCCTCTGGTAGGGCCTTTGGAGAGTACCATCTATCTAAGA TGGAGGAATGCTGTGGGAAGGGCGGGATGGAGGTGCGTTTTCTACGCTGAACCCACACA GGAAATCTGCAGCCACACAGCTGCCTCTGCGCCGCCCTCCATGTGATCATCCTGGTCAA TGAAGTGAATTGCCTATTTCTGGGGTAGGGGTGATGGCGAATCGGATACTCAAATGTT ATTTTGTCAAATCCGAATCATCTCTACGTGCTTAGGTTTACATGATGTCAAAACACGTGG TTCATTAAGTGATCCCGGAAGAGGGGCAGGGCCGGTCCGCTGGTTTCTCACTTCCCTTC CAGGCTCTACGCAGTGCCTGCAGGTCGCCCTGATCTCTCCGGGAGGGGAATGCTCGCAG CCCTCTCCGAGNTGCCCTGATCTCCTTCTCTCCAGAGGAAATGGTCCCTCTCTGGGGC CCCACAGTCCCGACGTGCTGGAGAGCCAGCGGGCCTGGCAGGGNTCGTGTGCTCCCG GGGACCCTCTAGCTTGCTCAAGCCAGATTGTTCTTCTGTTGTGGTATCTCACAGGTAG CTTCACGGGGCATCGTTTTTCATACGGAAAAACATTATTTACT
Restriction Sites:	NotI-NotI
ACCN:	NM_002847
Insert Size:	5500 bp
OTI Disclaimer:	<p>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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_002847.2 , NP_002838.1
RefSeq Size:	4767 bp

RefSeq ORF: 3048 bp

Locus ID: 5799

UniProt ID: [Q92932](#)

Cytogenetics: 7q36.3

Domains: Y_phosphatase, PTPc_motif

Protein Families: Druggable Genome, Phosphatase

Protein Pathways: Type I diabetes mellitus

Gene Summary: This gene encodes a protein with sequence similarity to receptor-like protein tyrosine phosphatases. However, tyrosine phosphatase activity has not been experimentally validated for this protein. Studies of the rat ortholog suggest that the encoded protein may instead function as a phosphatidylinositol phosphatase with the ability to dephosphorylate phosphatidylinositol 3-phosphate and phosphatidylinositol 4,5-diphosphate, and this function may be involved in the regulation of insulin secretion. This protein has been identified as an autoantigen in insulin-dependent diabetes mellitus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2015]
Transcript Variant: This variant (1) encodes isoform 1.