

## Product datasheet for RC217690

### PTPRN2 (NM\_002847) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTPRN2 (NM_002847) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPRN2
Synonyms:	IA-2beta; IAR; ICAAR; PTPRP; R-PTP-N2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217690 representing NM_002847 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGGCCCGCTCCCCTGCTGCTGCTGCTACTGCTGCTGCTGCCGCCACGCGTCTGCCTGCCGCC  
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AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
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**Protein Sequence:**

>RC217690 representing NM\_002847  
 Red=Cloning site Green=Tags(s)

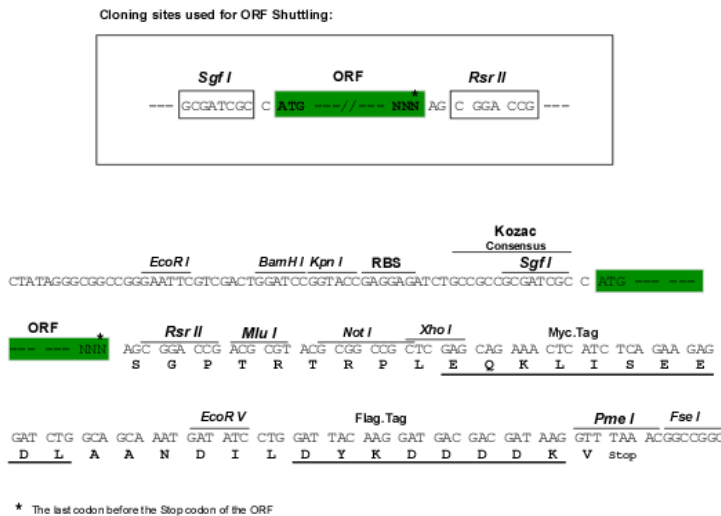
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 VPKNRSLAVLTYDHSRVLKKAENSHSHSDYINASPIMDHDPRNPAYIATQGPLPATVADFQMVWESGCV  
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 WYDRGVPSSSRSLDFRRKVNKCYRGRSCPIIVHCSDGAGRSQYVYVLDMLNMAKGAKEIDIAATLEH  
 LRDQRPGMVQTKQEFALTAVAEEVNAILKALPQ

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-RsrII

Cloning Scheme:



ACCN: NM\_002847

ORF Size: 3045 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\\_002847.2](#), [NP\\_002838.1](#)

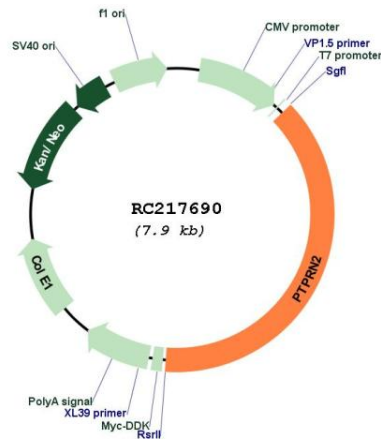
RefSeq Size: 4842 bp

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  
**MW:** 111.3 kDa

**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]

**Product images:**



Circular map for RC217690