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Product datasheet for RC213126

PTPRN2 (NM_130842) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPRN2 (NM_130842) 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:

>RC213126 representing NM_130842
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCCGCCGCTCCCGCTGCTGCTGCTGCTACTGCTGCTGCTGCCGCCACGCGTCCTGCCTGCCGCCC
CTTCGTCCGTCCCCCGCGGCCGGCAGCTCCCGGGGCGTCTGGATGGAGTGTTTGGAAGGTGCCAGAAGGT
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GCAGAGCCTTCCAGCGGGTGCTCAGGAGGCCCTCAGCGACGGCCTGCAATTGGAGGTCCAGCCTTCCGAG

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GAAGAGGCGCGGGGCTACATCGTGACAGACAGAGACCCCCTGCGCCCCGAGGAAGGAAGGCGGCTGGTGG
AGGACGTCGCCCGCCTCCTGCAGGTGCCCAGCAGTGCGTTCGCTGACGTGGAGGTTCTCGGACCAGCAGT
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TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213126 representing NM_130842
Red=Cloning site Green=Tags(s)

MGPPLPLLLLLLLLLPPRVLPAAPSSVPRGRQLPGRLDGVFGRCQKVPAMDFYRYEVSPVALQRLRVALQ
KLSGTGFTWQDDYTQYVMDQELADLPKTYLRRPEASSPARPSKHSVGSERRYSREGGAALANALRRHLPF
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HYWPDEGSNLYHIYEVNLVSEHIWCEDFLVRSFYLKNLQTNETRTVTQFHFLSWYDRGVPSSSRSLLDFR
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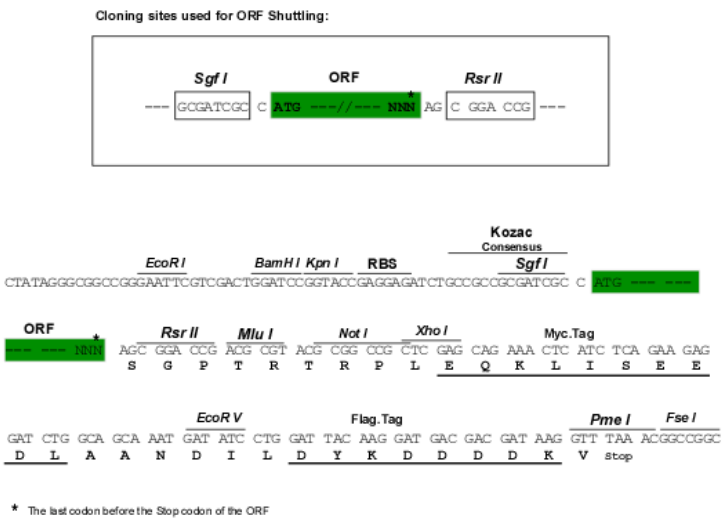
ALTAVAEEVNAILKALPQ

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8012_a12.zip

Restriction Sites: SgfI-RsrII

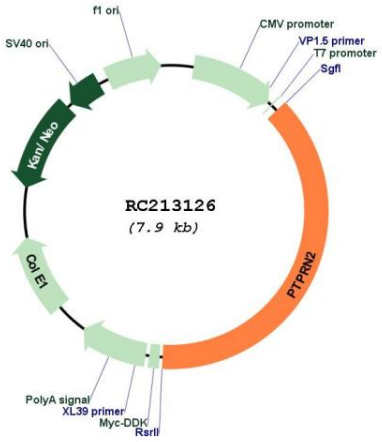
Cloning Scheme:



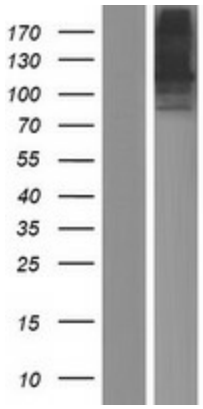
ACCN:	NM_130842
ORF Size:	2994 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_130842.1, NP_570857.1
RefSeq Size:	4716 bp
RefSeq ORF:	2997 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:	109.4 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]

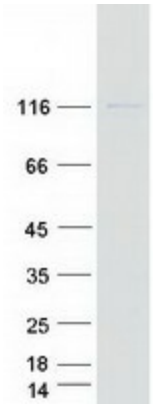
Product images:



Circular map for RC213126



Western blot validation of overexpression lysate (Cat# [LY408895]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213126 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTPRN2 protein (Cat# [TP313126]). The protein was produced from HEK293T cells transfected with PTPRN2 cDNA clone (Cat# RC213126) using MegaTran 2.0 (Cat# [TT210002]).