

## Product datasheet for **RC212878**

### **PTPN20B (PTPN20) (NM\_001042363) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTPN20B (PTPN20) (NM_001042363) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPN20B
Synonyms:	bA42B19.1; bA142I17.1; CT126; PTPN20A; PTPN20B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212878 representing NM_001042363 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTGGACAGCCAGAGGCCCTTCAGAAGAGACAGGTGGAGCAGTGAGGATGAGGAGGCTGCAGGGCCAT  
CACAGGCTCTCTCCCTCTACTTTCTGATACGCGCAAAATTGTTTCTGAAGGAGAACTAGATCAGTTGGC  
TCAGATTCGGCCATTAATATTCAATTTTCATGAGCAGACAGCCATCAAGGATTGTTTGAAAATCCTTGAG  
GAAAAACAGCAGCGTATGATATCATGCAGGAATTTATGGCTTTAGAACTTAAGAATCTGCCTGGTGA  
TCAACTCTGGGAATCAACCAAGCAACAGAGAAAAAATAGATACCGAGATATTCTCCATATGATTCAAC  
ACGCGTTCCTCTTGAAAAAGCAAGGACTACATCAATGCTAGTTATATTAGAATAGTCAATTGTGGAGAA  
GAGTATTTTTATATCGCTACTCAAGGACCACTGCTGAGCACCATAGATGACTTTTGGCAAATGGTGTGG  
AAAATAATTCAAATGTTATTGCCATGATAACCAGAGAGATAGAAGGTGGAATTATCAAATGCTACCATTA  
CTGGCCCATTTCTCTGAAGAAGCCATTGGAATTGAAACACTTCCGTGATTCTGGGAACTACCAGATA  
CTTCAATATTTTCATCATTGCAATGTTTCAAGTTGTGGAGAAGTCCACGGAACTAGTCACTCTGTAAAC  
AGTTGCAGTTCACCAAGTGGCCAGACCATGGCACTCCTGCCTCAGCAGATAGCTTCAAAAATATATTCC  
TTATGAAGGAAGAGCCACCTTACAGGACCCATGGTTGTTCACTGCAGTGCCGGCATAGGCCGGACAGGG  
GTGTTCTATGTGTGGATGTCGTGTTCTGTGCCATCGTAAGAAGTGTTCATTCAACATCATGGATATAG  
TGGCCAAATGAGAGAACAACGTTCTGGCATGGTTCAAACGAAGGAGCAGTATCACTTTTGTGTACGATAT  
TGTGCTTGAAGTCTTTCGAAACTTCTGACTTTGGAT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC212878 representing NM\_001042363  
Red=Cloning site Green=Tags(s)

MWTARGPFRDRWSEDEEAAGPSQALSPLLSDTRKIVSEGELDQLAQIRPLIFNFHEQTAIKDCLKILE  
 EKTAAYDIMQEFMALELKNLPGFNSGNQPSNREKNRYRDILPYDSTRVPLGKSKDYINASYIRIVNCGE  
 EYFYIATQGPLLSTIDDFWQMVLENNNSVIAMITREIEGGIICKYHYWPI SLKKPLELKHFRVFLENYQI  
 LQYFIIRMFQVVEKSTGTSHSVKQLQFTKWPDHGTPASADSF IKYIRYARKSHLTGPMVVHCSAGIGRTG  
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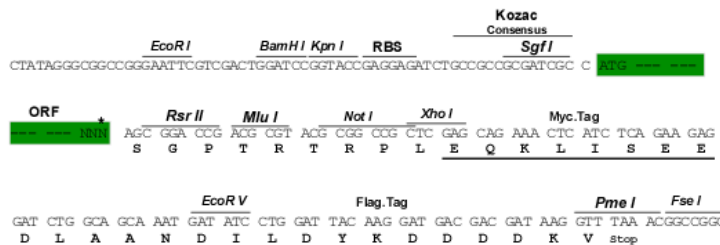
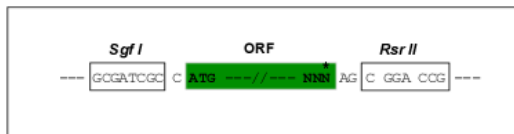
SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8053\\_c03.zip](https://cdn.origene.com/chromatograms/mk8053_c03.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001042363

**ORF Size:** 1017 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\\_001042363.4](#), [NP\\_001035822.1](#)

**RefSeq Size:** 2872 bp

**RefSeq ORF:** 1020 bp

**Locus ID:** 26095

**UniProt ID:** [Q4JDL3](#)

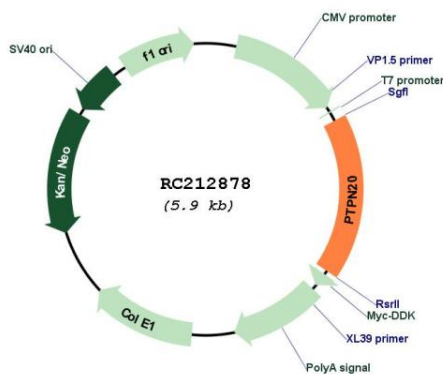
**Cytogenetics:** 10q11.22

**Protein Families:** Druggable Genome, Phosphatase

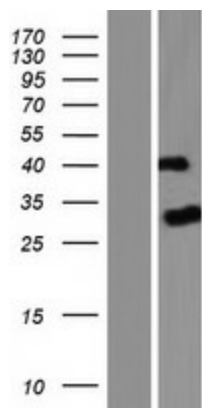
**MW:** 39 kDa

**Gene Summary:** The product of this gene belongs to the family of classical tyrosine-specific protein tyrosine phosphatases. Many protein tyrosine phosphatases have been shown to regulate fundamental cellular processes. The encoded protein appears to be targeted to sites of actin polymerization. A pseudogene of this gene has been defined on chromosome 10. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]

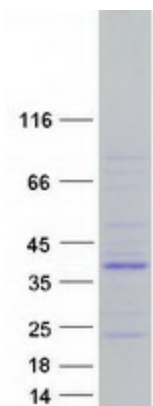
## Product images:



Circular map for RC212878



Western blot validation of overexpression lysate (Cat# [LY420852]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212878 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTPN20 protein (Cat# [TP312878]). The protein was produced from HEK293T cells transfected with PTPN20 cDNA clone (Cat# RC212878) using MegaTran 2.0 (Cat# [TT210002]).