

## Product datasheet for RC215893

### Protein Phosphatase 1 beta (PPP1CB) (NM\_002709) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Protein Phosphatase 1 beta (PPP1CB) (NM_002709) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Protein Phosphatase 1 beta
Synonyms:	HEL-S-80p; MP; NSLH2; PP-1B; PP1B; PP1beta; PP1c; PPP1beta; PPP1CD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215893 representing NM_002709 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGACGGGGAGCTGAACGTGGACAGCCTCATCACCCGGCTGCTGGAGGTACGAGGATGTCGTCCAG  
GAAAGATTGTGCAGATGACTGAAGCAGAAGTTCGAGGCTTATGTATCAAGTCTCGGGAGATCTTTCTCAG  
CCAGCCTATTCTTTGGAATTGGAAGCACCGCTGAAAATTTGGGAGATATTCATGGACAGTATACAGAT  
TACTGAGATTATTTGAATATGGAGTTTCCCACCAGAAGCCAATATCTTTCTTAGGAGATTATGTGG  
ACAGAGGAAAGCAGTCTTTGAAACCATTGTTTGCTATTGGCTATAAAATCAAATATCCAGAGAAGT  
CTTTCTCTTAAGAGGAAACCATGAGTGTGCTAGCATCAATCGCATTTATGGATTCTATGATGAATGCAAA  
CGAAGATTTAATATTAATTTGTGGAAGACCTTCACTGATTGTTTTAACTGTCTGCCTATAGCAGCCATTG  
TGGATGAGAAGATCTTCTGTTGTCATGGAGGATTGTCACCAGACCTGCAATCTATGGAGCAGATTCGGAG  
AATTATGAGACCTACTGATGTCCCTGATACAGGTTTGCTCTGTGATTTGCTATGGTCTGATCCAGATAAG  
GATGTGCAAGGCTGGGGAGAAAATGATCGTGGTGTTCCTTTACTTTGGAGCTGATGTAGTCAGTAAAT  
TTCTGAATCGTCATGATTTAGATTTGATTTGTCGAGCTCATCAGGTGGTGAAGATGGATATGAATTTT  
TGCTAAACGACAGTTGGTAACCTTATTTTCAGCCCAAATTAAGTGTGGCAGTTTGATAATGCTGGTGA  
ATGATGAGTGTGGATGAACTTTGATGTGTTCAATTCAGATATTGAAACCATCTGAAAAGAAAGTAAAT  
ACCAATGATGGTGGACTGAATTCGGACGCTCTGACTCCACCTCGAACAGCTAATCCGCCGAAGAAAAG  
G

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC215893 representing NM\_002709  
Red=Cloning site Green=Tags(s)

MADGELNVDSLITRLLLEVRGCRPGKIVQMTEAEVRGLCIKSREIFLSQPILLELEAPLKICGDIHGQYTD  
 LLRLFEYGGFPPEANYLFLGDYVDRGKQSLATICLLLAYKIKYPENFFLLRGNHECASINRIYGFYDECK  
 RRFNIKWLKTFDFCNCLPIAAIVDEKIFCCHGGLSPDLQSMEQIRIRMRPTDVPDGLLCDLLWSDPK  
 DVQGWGENDRGVSFTFGADVVSKFLNRHDLDLICRAHQVVEDGYEFFAKRQLVTLF SAPNYCGEFDNAGG  
 MMSVDETLMCSFQILKPSEKKAKYQYGLNSGRPVTPPRTANPPKKR

TRTRPLEQKLISEEDLAANDILDYKDDDDK

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6194\\_a07.zip](https://cdn.origene.com/chromatograms/mk6194_a07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_002709

**ORF Size:** 981 bp

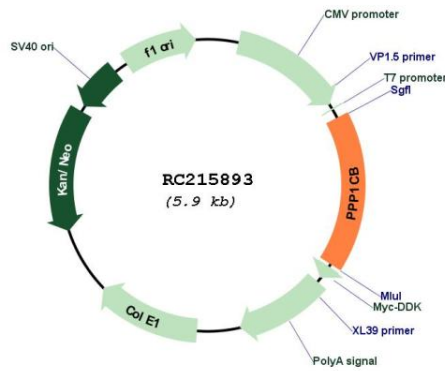
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

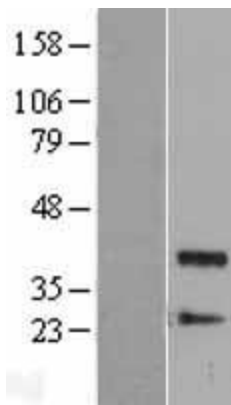
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002709.3</a>
<b>RefSeq Size:</b>	4991 bp
<b>RefSeq ORF:</b>	984 bp
<b>Locus ID:</b>	5500
<b>UniProt ID:</b>	<a href="#">P62140</a>
<b>Cytogenetics:</b>	2p23.2
<b>Domains:</b>	Metallophos, PP2Ac
<b>Protein Families:</b>	Druggable Genome, Phosphatase
<b>Protein Pathways:</b>	Focal adhesion, Insulin signaling pathway, Long-term potentiation, Oocyte meiosis, Regulation of actin cytoskeleton, Vascular smooth muscle contraction
<b>MW:</b>	37 kDa
<b>Gene Summary:</b>	<p>The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Mouse studies suggest that PP1 functions as a suppressor of learning and memory. Two alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RC215893



Western blot validation of overexpression lysate (Cat# [LY400955]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215893 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).