

Product datasheet for RC207878

PCBP1 (NM 006196) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PCBP1 (NM_006196) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: PCBP1

Synonyms: HEL-S-85; hnRNP-E1; hnRNP-X; HNRPE1; HNRPX

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC207878 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGATGCCGGTGTGACTGAAAGTGGACTAAATGTGACTCTCACCATTCGGCTTCTTATGCACGGAAAGG AAGTAGGAAGCATCATTGGGAAGAAAGGGGAGTCGGTTAAGAGGATCCGCGAGGAGAGTGGCGCGCGGAT CAACATCTCGGAGGGGAATTGTCCGGAGAGAATCATCACTCTGACCGGCCCCACCAATGCCATCTTTAAG GCTTTCGCTATGATCATCGACAAGCTGGAGGAAGATATCAACAGCTCCATGACCAACAGTACCGCGGCCA GCAGGCCCCGGTCACCCTGAGGCTGGTGGTGCCGGCCACCCAGTGCGGCTCCCTGATTGGGAAAGGCGG GTGTAAGATCAAAGAGATCCGCGAGAGTACGGGGGGCGCAGGTCCAGGTGGCGGGGGATATGCTGCCCAAC TCCACCGAGCGGGCCATCACCATCGCTGGCGTGCCGCAGTCTGTCACCGAGTGTGTCAAGCAGATTTGCC TGGTCATGCTGGAGACGCTCTCCCAGTCTCCGCAAGGGAGAGTCATGACCATTCCGTACCAGCCCATGCC GGCCAGCTCCCCAGTCATCTGCGCGGGCGGCCAAGATCGGTGCAGCGACGCTGCGGGCTACCCCCATGCC ACCCATGACCTGGAGGGACCACCTCTAGATGCCTACTCGATTCAAGGACAACACCACTTTCTCCGCTCG ATCTGGCCAAGCTGAACCAGGTGGCAAGACAACAGTCTCACTTTGCCATGATGCACGGCGGGACCGGATT CGCCGGAATTGACTCCAGCTCTCCAGAGGTGAAAGGCTATTGGGCAAGTTTGGATGCATCTACTCAAACC ACCCATGAACTCACCATTCCAAATAACTTAATTGGCTGCATAATCGGGCGCCAAGGCGCCAACATTAATG AGATCCGCCAGATGTCCGGGGCCCAGATCAAAATTGCCAACCCAGTGGAAGGCTCCTCTGGTAGGCAGGT TACTATCACTGGCTCTGCCAGTATTAGTCTGGCCCAGTATCTAATCAATGCCAGGCTTTCCTCTGAG AAGGCATGGGGTGCAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC207878 protein sequence

Red=Cloning site Green=Tags(s)

MDAGVTESGLNVTLTIRLLMHGKEVGSIIGKKGESVKRIREESGARINISEGNCPERIITLTGPTNAIFK AFAMIIDKLEEDINSSMTNSTAASRPPVTLRLVVPATQCGSLIGKGGCKIKEIRESTGAQVQVAGDMLPN STERAITIAGVPQSVTECVKQICLVMLETLSQSPQGRVMTIPYQPMPASSPVICAGGQDRCSDAAGYPHA THDLEGPPLDAYSIQGQHTISPLDLAKLNQVARQQSHFAMMHGGTGFAGIDSSSPEVKGYWASLDASTQT THELTIPNNLIGCIIGRQGANINEIRQMSGAQIKIANPVEGSSGRQVTITGSAASISLAQYLINARLSSE KGMGCS

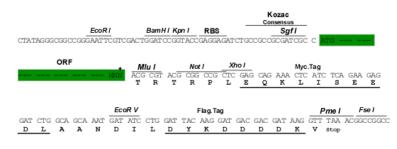
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6022 c06.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_006196

ORF Size: 1068 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 006196.4</u>

 RefSeq Size:
 1772 bp

 RefSeq ORF:
 1071 bp

 Locus ID:
 5093

 UniProt ID:
 Q15365

 Cytogenetics:
 2p13.3

 Domains:
 KH

Protein Pathways: Spliceosome

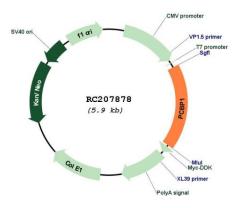
MW: 37.5 kDa

Gene Summary:

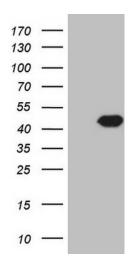
This intronless gene is thought to have been generated by retrotransposition of a fully processed PCBP-2 mRNA. This gene and PCBP-2 have paralogues (PCBP3 and PCBP4) which are thought to have arisen as a result of duplication events of entire genes. The protein encoded by this gene appears to be multifunctional. It along with PCBP-2 and hnRNPK corresponds to the major cellular poly(rC)-binding protein. It contains three K-homologous (KH) domains which may be involved in RNA binding. This encoded protein together with PCBP-2 also functions as translational coactivators of poliovirus RNA via a sequence-specific interaction with stem-loop IV of the IRES and promote poliovirus RNA replication by binding to its 5'-terminal cloverleaf structure. It has also been implicated in translational control of the 15-lipoxygenase mRNA, human Papillomavirus type 16 L2 mRNA, and hepatitis A virus RNA. The encoded protein is also suggested to play a part in formation of a sequence-specific alpha-globin mRNP complex which is associated with alpha-globin mRNA stability. [provided]



Product images:

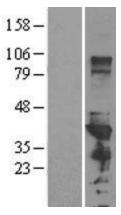


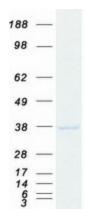
Circular map for RC207878



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PCBP1 (Cat# RC207878, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PCBP1(Cat# [TA806353]). Positive lysates [LY401867] (100ug) and [LC401867] (20ug) can be purchased separately from OriGene.







Western blot validation of overexpression lysate (Cat# [LY401867]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207878 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified PCBP1 protein (Cat# [TP307878]). The protein was produced from HEK293T cells transfected with PCBP1 cDNA clone (Cat# RC207878) using MegaTran 2.0 (Cat# [TT210002]).