

Product datasheet for **RC206355**

PBP (PEBP1) (NM_002567) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PBP (PEBP1) (NM_002567) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PBP
Synonyms: HCNP; HCNPpp; HEL-210; HEL-S-34; HEL-S-96; PBP; PEBP; PEBP-1; RKIP
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC206355 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCCGGTGGACCTCAGCAAGTGGTCCGGGCCCTTGAGCCTGCAAGAAGTGGACGAGCAGCCGAGCACC
 CACTGCATGTCACCTACGCCGGGGCGCGGTGGACGAGCTGGGCAAAGTCTGACGCCACCCAGGTTAA
 GAATAGACCCACCAGCATTTCGTTGGATGGTCTTGATTACGGGAAGCTCTACACCTTGGTCTGACAGAC
 CCGGATGCTCCCAGCAGGAAGGATCCCAAATACAGAGAATGGCATCATTTCTGGTGGTCAACATGAAGG
 GCAATGACATCAGCAGTGGCACAGTCCCTCCGATTATGTGGGCTCGGGGCTCCCAAGGGCACAGGCCT
 CCACCGCTATGTCTGGCTGGTTTACGAGCAGGACAGGCCGCTAAAGTGTGACGAGCCATCCTCAGCAAC
 CGATCTGGAGACCACCGTGGCAAATTAAGGTGGCGTCTTCCGTA AAAAGTATGAGCTCAGGGCCCGG
 TGGCTGGCACGTGTTACCAGGCCGAGTGGGATGACTATGTGCCAAACTGTACGAGCAGCTGTCTGGGAA
 G

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206355 protein sequence
 Red=Cloning site Green=Tags(s)

MPVDLSKWSGPLSLQEVEQPQHPLHVTYAGAAVDELGKVLTPQTQVKNRPTSI SWDGLDSGKLYTLVLT
 PDAPSRKDPKYREWHHFLVVMKGNDISSGTVLSDYVGSPPKGTGLHRYVWLVYEQDRPLKCDEPILSN
 RSGDHRGKFKVASFRKKYELRAPVAGTCYQAEWDDYVPKLYEQLSGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6074_h01.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_002567

ORF Size: 561 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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: [NM_002567.4](#)

RefSeq Size: 1507 bp

RefSeq ORF: 564 bp

Locus ID: 5037

UniProt ID: [P30086](#)

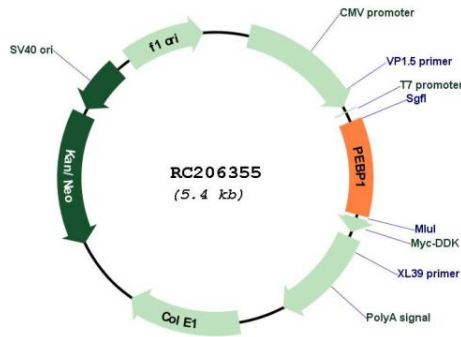
Cytogenetics: 12q24.23

Domains: PBP

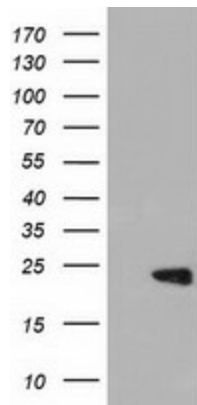
MW: 21.1 kDa

Gene Summary: This gene encodes a member of the phosphatidylethanolamine-binding family of proteins and has been shown to modulate multiple signaling pathways, including the MAP kinase (MAPK), NF-kappa B, and glycogen synthase kinase-3 (GSK-3) signaling pathways. The encoded protein can be further processed to form a smaller cleavage product, hippocampal cholinergic neurostimulating peptide (HCNP), which may be involved in neural development. This gene has been implicated in numerous human cancers and may act as a metastasis suppressor gene. Multiple pseudogenes of this gene have been identified in the genome. [provided by RefSeq, Jul 2015]

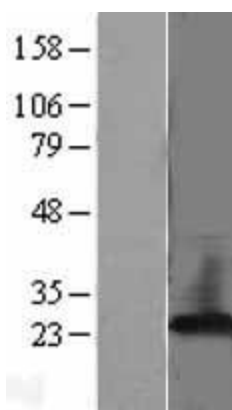
Product images:



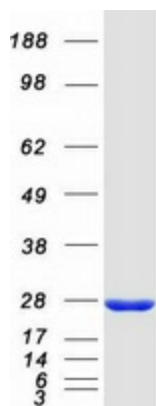
Circular map for RC206355



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PEBP1 (Cat# RC206355, 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-PEBP1 (Cat# [TA501616]). Positive lysates [LY400913] (100ug) and [LC400913] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400913]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206355 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PEBP1 protein (Cat# [TP306355]). The protein was produced from HEK293T cells transfected with PEBP1 cDNA clone (Cat# RC206355) using MegaTran 2.0 (Cat# [TT210002]).