

Product datasheet for TP310035L

OriGene Technologies, Inc.

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PCBP2 (NM_005016) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human poly(rC) binding protein 2 (PCBP2), transcript variant 1, 1 mg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC210035 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MDTGVIEGGLNVTLTIRLLMHGKEVGSIIGKKGESVKKMREESGARINISEGNCPERIITLAGPTNAIFK AFAMIIDKLEEDISSSMTNSTAASRPPVTLRLVVPASQCGSLIGKGGCKIKEIRESTGAQVQVAGDMLPN STERAITIAGIPQSIIECVKQICVVMLETLSQSPPKGVTIPYRPKPSSSPVIFAGGQDRYSTGSDSASFP HTTPSMCLNPDLEGPPLEAYTIQGQYAIPQPDLTKLHQLAMQQSHFPMTHGNTGFSGIESSSPEVKGYWA

GLDASAQTTSHELTIPNDLIGCIIGRQGAKINEIRQMSGAQIKIANPVEGSTDRQVTITGSAASISLAQY

LINVRLSSETGGMGSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 38.5 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Bioactivity: Pull-down assay (PMID: <u>25855805</u>)

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 005007



Locus ID: 5094

UniProt ID: Q15366, A0A384N6B9

RefSeq Size: 3187

Cytogenetics: 12q13.13

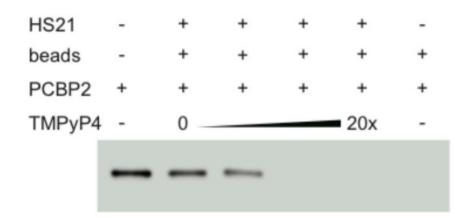
RefSeq ORF: 1098

Synonyms: hnRNP-E2; HNRNPE2; HNRPE2

Summary: The protein encoded by this gene appears to be multifunctional. Along with PCBP-1 and

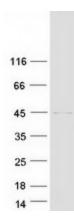
hnRNPK, it is one of the major cellular poly(rC)-binding proteins. The encoded protein contains three K-homologous (KH) domains which may be involved in RNA binding. Together with PCBP-1, this protein also functions as a translational coactivator of poliovirus RNA via a sequence-specific interaction with stem-loop IV of the IRES, promoting 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. This multiexon structural mRNA is thought to be retrotransposed to generate PCBP-1, an intronless gene with functions similar to that of PCBP2. This gene and PCBP-1 have paralogous genes (PCBP3 and PCBP4) which are thought to have arisen as a result of duplication events of entire genes. This gene also has two processed pseudogenes (PCBP2P1 and PCBP2P2). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2018]

Product images:



The i-motif stabilizing ligand (TMPyP4) displaces telomere-associated human poly-C binding protein (PCBP) from human C-rich telomeric DNA. Biotinylated C-rich telomeric DNA HS21 oligo was bound to streptavidin magnetic beads and incubated with PCBP2 (OriGene [TP310035]) in the absence or presence of TMPyP4 at different concentrations. The bound PCBP2 was eluted and analyzed in Western blot with an anti-PCBP2 antibody. Figure cited from Nucleic Acids Res, PMID: 25855805





Coomassie blue staining of purified PCBP2 protein (Cat# [TP310035]). The protein was produced from HEK293T cells transfected with PCBP2 cDNA clone (Cat# [RC210035]) using MegaTran 2.0 (Cat# [TT210002]).