

Product datasheet for TP310035

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, 20 μg

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

RefSeg Size: 3187

Cytogenetics: 12q13.13

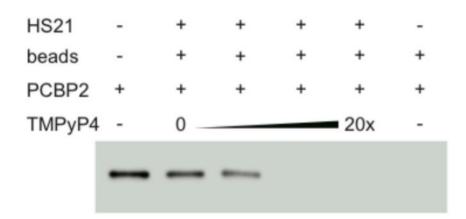
RefSeq ORF: 1098

Synonyms: hnRNP-E2; HNRNPE2; HNRPE2

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

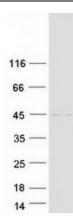
hnRNPK, it is one of the major cellular poly(rC)-binding proteins. The encoded protein contains three K-homologous (KH) domains which may be involved in RNA binding. Together with PCBP-1, this protein also functions as a translational coactivator of poliovirus RNA via a sequence-specific interaction 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]).