

PCBP2 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full-length recombinant PCBP2.

Catalog # AT3208a

Product Information

Application	WB, E
Primary Accession	Q15366
Other Accession	BC001155
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1B6
Calculated MW	38580

Additional Information

Gene ID	5094
Other Names	Poly(rC)-binding protein 2, Alpha-CP2, Heterogeneous nuclear ribonucleoprotein E2, hnRNP E2, PCBP2
Target/Specificity	PCBP2 (AAH01155, 1 a.a. ~ 362 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	PCBP2 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

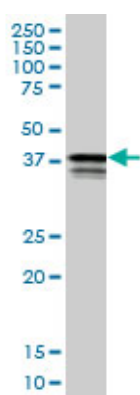
The protein encoded by this gene appears to be multifunctional. Along with PCBP-1 and hnRNP, it is one of the major cellular poly(rC)-binding proteins. The encoded protein contains three K-homologous (KH) domains which may be involved in RNA binding. Together with PCBP-1, this protein also functions 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.

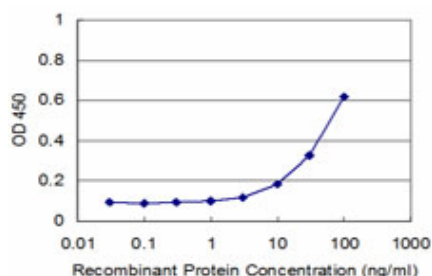
References

miR-328 functions as an RNA decoy to modulate hnRNP E2 regulation of mRNA translation in leukemic blasts. Eiring AM, et al. *Cell*, 2010 Mar 5. PMID 20211135. The 5'CL-PCBP RNP complex, 3' poly(A) tail and 2A(pro) are required for optimal translation of poliovirus RNA. Ogram SA, et al. *Virology*, 2010 Feb 5. PMID 19945132. PCBP2 mediates degradation of the adaptor MAVS via the HECT ubiquitin ligase AIP4. You F, et al. *Nat Immunol*, 2009 Dec. PMID 19881509. Selective localization of PCBP2 to cytoplasmic processing bodies. Fujimura K, et al. *Biochim Biophys Acta*, 2009 May. PMID 19230839. Depletion of the poly(C)-binding proteins alphaCP1 and alphaCP2 from K562 cells leads to p53-independent induction of cyclin-dependent kinase inhibitor (CDKN1A) and G1 arrest. Waggoner SA, et al. *J Biol Chem*, 2009 Apr 3. PMID 19211566.

Images



PCBP2 monoclonal antibody (M02), clone 1B6. Western Blot analysis of PCBP2 expression in K-562 (Cat # L009V1).



Detection limit for recombinant GST tagged PCBP2 is approximately 3ng/ml as a capture antibody.

Citations

- [Chloride intracellular channel 1 identified using proteomic analysis plays an important role in the radiosensitivity of HEp-2 cells via reactive oxygen species production.](#)

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