

**PCBP2 Antibody (monoclonal) (M07)****Mouse monoclonal antibody raised against a full length recombinant PCBP2.****Catalog # AT3209a****Specification**

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**PCBP2 Antibody (monoclonal) (M07) - Product Information**

Application	WB, IHC, IF, E
Primary Accession	<a href="#">Q15366</a>
Other Accession	<a href="#">BC001155</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	38580

**PCBP2 Antibody (monoclonal) (M07) - 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  
IHC~~1:100~500  
IF~~1:50~200  
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**

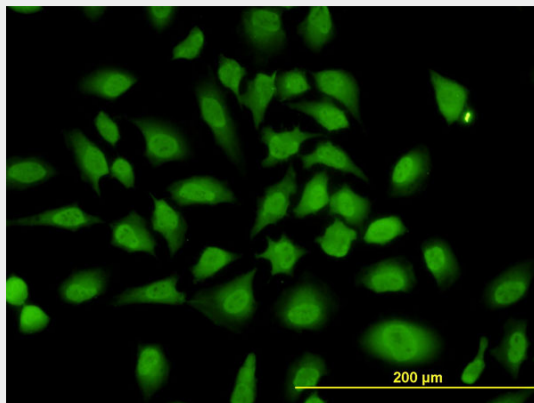
PCBP2 Antibody (monoclonal) (M07) is for research use only and not for use in diagnostic or therapeutic procedures.

**PCBP2 Antibody (monoclonal) (M07) - Protocols**

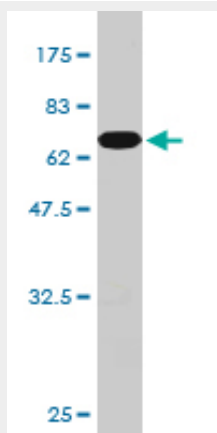
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

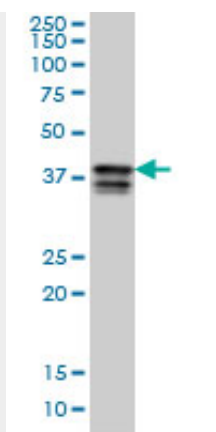
#### PCBP2 Antibody (monoclonal) (M07) - Images



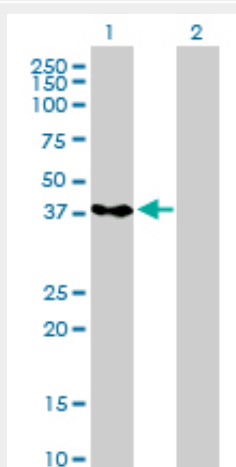
Immunofluorescence of monoclonal antibody to PCBP2 on HeLa cell. [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (65.56 KDa) .



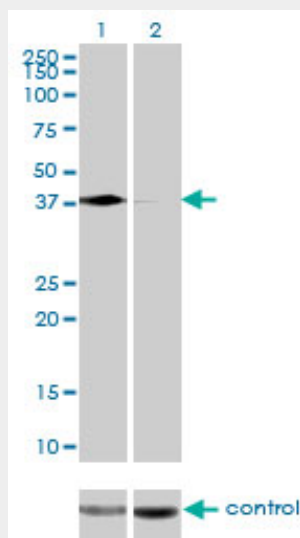
PCBP2 monoclonal antibody (M07), clone 5F12 Western Blot analysis of PCBP2 expression in K-562 ( Cat # AT3209a )



Western Blot analysis of PCBP2 expression in transfected 293T cell line by PCBP2 monoclonal antibody (M07), clone 5F12.

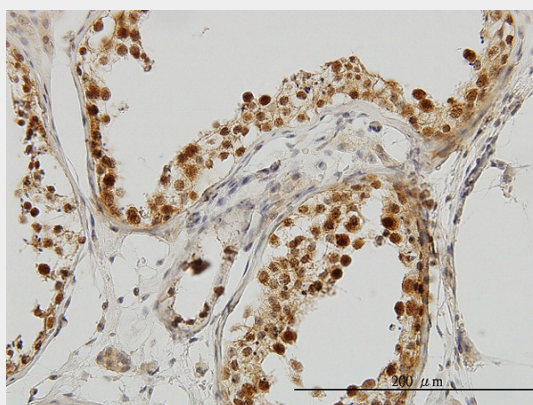
Lane 1: PCBP2 transfected lysate(38.7 KDa).

Lane 2: Non-transfected lysate.

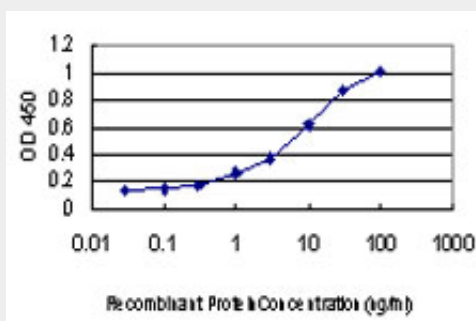


Western blot analysis of PCBP2 over-expressed 293 cell line, cotransfected with PCBP2 Validated

#### Chimera RNAi ( Cat # AT3209a )



Immunoperoxidase of monoclonal antibody to PCBP2 on formalin-fixed paraffin-embedded human testis. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged PCBP2 is approximately 0.1ng/ml as a capture antibody.

#### PCBP2 Antibody (monoclonal) (M07) - Background

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.

#### PCBP2 Antibody (monoclonal) (M07) - References

1. hnRNP L and NF90 interact with hepatitis C virus 5' terminal untranslated RNA and promote efficient replication. Li Y, Masaki T, Shimakami T, Lemon SM. *J Virol*. 2014 Apr 9;88(15):8511-8521.  
2. Selenite targets eIF4E-binding protein-1 to inhibit translation initiation and induce the assembly of non-canonical stress granules. Fujimura K, Sasaki AT, Anderson P. *Nucleic Acids Res*. 2012 Jun 20;40(12):3111-3121.  
3. Poly(C)-binding protein 2 interacts with sequences required for viral replication in HCV 5' UTR and directs HCV RNA replication through circularizing the viral genome. Wang L, Jeng KS, Lai MM. *J Virol*. 2011 Jun 1;85(11):6111-6121.

[Epub ahead of print]4. Identification of RNA Helicase A (RHA) as a New Host Factor in the Replication Cycle of Foot-and-Mouth Disease Virus. Lawrence P, Rieder E. J Virol. 2009 Nov;83(21):11356-66. Epub 2009 Aug 26. 5. Selective localization of PCBP2 to cytoplasmic processing bodies. Fujimura K, Katahira J, Kano F, Yoneda Y, Murata M. Biochim Biophys Acta. 2009 May;1793(5):878-87. Epub 2009 Feb 20. 6. Rapid Changes of mRNA-binding Protein Levels following Glucose and 3-Isobutyl-1-methylxanthine Stimulation of Insulinoma INS-1 Cells. Sus C, Czupalla C, Winter C, Pursche T, Knoch KP, Schroeder M, Hoflack B, Solimena M. Mol Cell Proteomics. 2009 Mar;8(3):393-408. Epub 2008 Oct 14. 7. A link between SIN1 (MAPKAP1) and poly(rC) binding protein 2 (PCBP2) in counteracting environmental stress. Ghosh D, Srivastava GP, Xu D, Schulz LC, Roberts RM. Proc Natl Acad Sci U S A. 2008 Aug 19;105(33):11673-8. Epub 2008 Aug 7. 8. Identification of PCBP2, a facilitator of IRES-mediated translation, as a novel constituent of stress granules and processing bodies. Fujimura K, Kano F, Murata M. RNA. 2008 Mar;14(3):425-31. Epub 2008 Jan 3.