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PCBP2 Antibody (monoclonal) (M07)

Mouse monoclonal antibody raised against a full length recombinant PCBP2.
Catalog # AT3209a

Specification

PCBP2 Antibody (monoclonal) (M07) - Product Information

Application	**IF, WB, IHC, E**
Primary Accession	Q15366
Other Accession	BC001155
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

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.

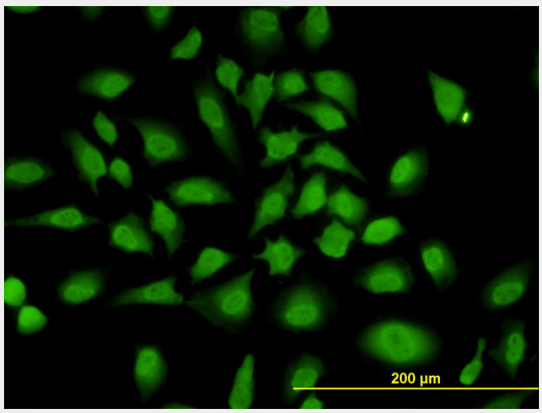
PCBP2 Antibody (monoclonal) (M07) - Protocols

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

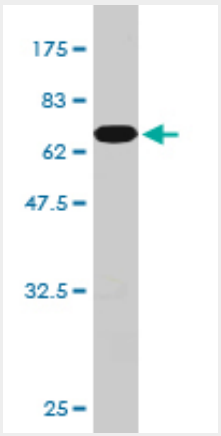
- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

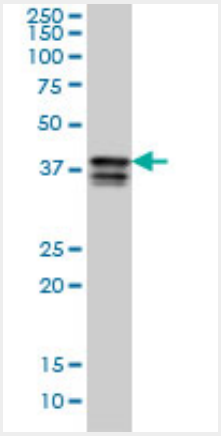
PCBP2 Antibody (monoclonal) (M07) - Images



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



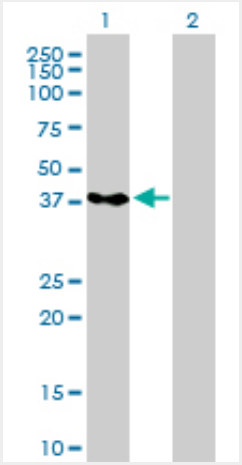
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (65.56 KDa) .



PCBP2 monoclonal antibody (M07), clone 5F12 Western Blot analysis of PCBP2 expression in

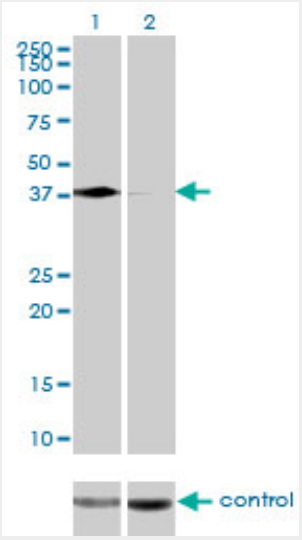
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K-562 ((Cat # AT3209a)

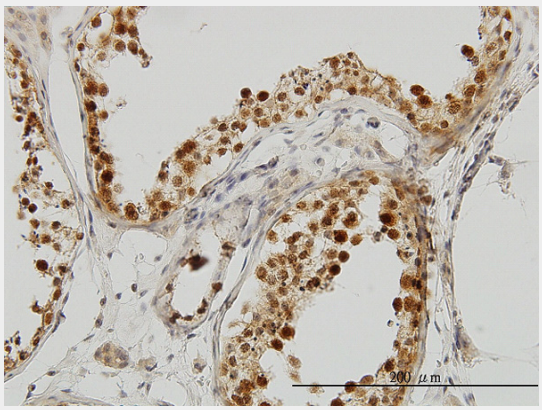


Western Blot analysis of PCBP2 expression in transfected 293T cell line by PCBP2 monoclonal antibody (M07), clone 5F12.

Lane 1: PCBP2 transfected lysate(38.7 KDa).
Lane 2: Non-transfected lysate.

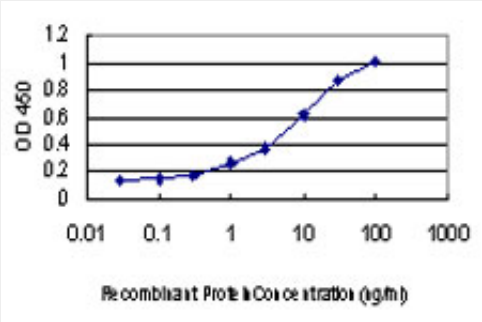


Western blot analysis of PCBP2 over-expressed 293 cell line, cotransfected with PCBP2 Validated Chimera RNAi ((Cat # AT3209a)



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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. Thsi 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 SMJ Virol. 2014 Apr 9.2.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 20.3.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. [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 CellsSus 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.