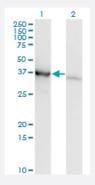


# PCBP1 monoclonal antibody (M01), clone 1G2

Catalog # H00005093-M01 Size 50 ug

# **Applications**

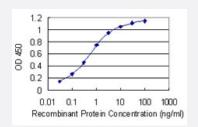


### Western Blot (Transfected lysate)

Western Blot analysis of PCBP1 expression in transfected 293T cell line by PCBP1 monoclonal antibody (M01), clone 1G2.

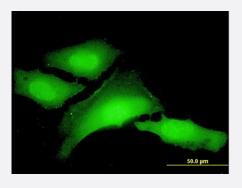
Lane 1: PCBP1 transfected lysate(37.5 KDa).

Lane 2: Non-transfected lysate.



### Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged PCBP1 is 0.03 ng/ml as a capture antibody.



#### **Immunofluorescence**

Immunofluorescence of monoclonal antibody to PCBP1 on HeLa cell . [antibody concentration 10 ug/ml]

# **Specification**

**Product Description** 

Mouse monoclonal antibody raised against a partial recombinant PCBP1.



#### **Product Information**

Immunogen	PCBP1 (AAH39742, 181 a.a. $\sim$ 280 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	IPYQPMPASSPVICAGGQDRCSDAAGYPHATHDLEGPPLDAYSIQGQHTISPLDLAKLNQVARQQ SHFAMMHGGTGFAGIDSSSPEVKGYWASLDASTQT
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (100)
Isotype	lgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

# **Applications**

Western Blot (Transfected lysate)

Western Blot analysis of PCBP1 expression in transfected 293T cell line by PCBP1 monoclonal antibody (M01), clone 1G2.

Lane 1: PCBP1 transfected lysate(37.5 KDa).

Lane 2: Non-transfected lysate.

**Protocol Download** 

Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged PCBP1 is 0.03 ng/ml as a capture antibody.

**Protocol Download** 

- ELISA
- Immunofluorescence

Immunofluorescence of monoclonal antibody to PCBP1 on HeLa cell . [antibody concentration 10 ug/ml]

# Gene Info — PCBP1

Entrez GenelD 5093



#### **Product Information**

GeneBank Accession#	BC039742
Protein Accession#	AAH39742
Gene Name	PCBP1
Gene Alias	HNRPE1, HNRPX, hnRNP-E1, hnRNP-X
Gene Description	poly(rC) binding protein 1
Omim ID	601209
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This intronless gene is thought to have been generated by retrotransposition of a fully processed PCBP-2 mRNA. This gene and PCBP-2 have paralogues (PCBP3 and PCBP4) which are thoug ht to have arisen as a result of duplication events of entire genes. The protein encoded by this gen e appears to be multifunctional. It along with PCBP-2 and hnRNPK corresponds to the major cellul ar poly(rC)-binding protein. It contains three K-homologous (KH) domains which may be involved in RNA binding. This encoded protein together with PCBP-2 also functions as translational coactiv ators of poliovirus RNA via a sequence-specific interaction with stem-loop IV of the IRES and promote 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. [provided by RefSeq
Other Designations	alpha-CP1 heterogeneous nuclear ribonucleoprotein E1 heterogenous nuclear ribonucleoprotein E1 heterogenous nuclear ribonucleoprotein X nucleic acid binding protein sub 2.3

# **Publication Reference**

TGFβ-induced expression of long noncoding lincRNA Platr18 controls breast cancer axonogenesis.

Simon Grelet, Cécile Fréreux, Clémence Obellianne, Ken Noguchi, Breege V Howley, Annamarie C Dalton, Philip H Howe. Life Science Alliance 2022 Feb; 5(2):e202101261.

Application: WB, Mouse, Mouse mammary gland

Heterogeneous nuclear ribonucleoprotein E1 binds polycytosine DNA and monitors genome integrity.

Bidyut K Mohanty, Joseph Aq Karam, Breege V Howley, Annamarie C Dalton, Simon Grelet, Toros Dincman, William S Streitfeld, Je-Hyun Yoon, Lata Balakrishnan, Walter J Chazin, David T Long, Philip H Howe.

Life Science Alliance 2021 Jul; 4(9):e202000995.

Application: WB, Human, Monkey, A549, E1KD cells





• TGFβ promotes breast cancer stem cell self-renewal through an ILEI/LIFR signaling axis.

Woosley AN, Dalton AC, Hussey GS, Howley BV, Mohanty BK, Grelet S, Dincman T, Bloos S, Olsen SK, Howe PH. Oncogene 2019 May; 38(20):3794.

Application: WB, Mouse, NMuMG cells

A CREB3-regulated ER-Golgi trafficking signature promotes metastatic progression in breast cancer.

Howley BV, Link LA, Grelet S, El-Sabban M, Howe PH.

Oncogene 2018 Mar; 37(10):1308.

Application: WB-Ce, Human, BoM-1833, MCF-7, MDA-MB-231, LM2-4175 cells

hnRNP E1 protects chromosomal integrity by translational regulation of Cdc27.

Link LA, Howley BV, Hussey GS, Howe PH.

Molecular Cancer Research 2016 Apr; 14(7):634.

Application: IP-WB, Mouse, NMuMG cell