

### **PCBP1** Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5581

#### **Specification**

# PCBP1 Antibody (Center) - Product Information

Application WB,E
Primary Accession 015365

Other Accession <u>Q5E9A3</u>, <u>P60335</u>, <u>O19048</u>

Reactivity
Predicted
Bovine
Host
Clonality
Calculated MW
Isotype
Antigen Source
Human
Bovine
Rabbit
Rabbit
Rabbit
Rabbit
Rabbit
Rabbit
Polyclonal
H=37,M=37 KDa
Rabbit IgG
HUMAN

# PCBP1 Antibody (Center) - Additional Information

**Gene ID** 5093

**Antigen Region** 

188-217

## **Other Names**

Poly(rC)-binding protein 1, Alpha-CP1, Heterogeneous nuclear ribonucleoprotein E1, hnRNP E1, Nucleic acid-binding protein SUB23, PCBP1

### **Dilution**

WB~~1:2000

## Target/Specificity

This PCBP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 188-217 amino acids from the Central region of human PCBP1.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

PCBP1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PCBP1 Antibody (Center) - Protein Information

Name PCBP1 {ECO:0000303|PubMed:7607214, ECO:0000312|HGNC:HGNC:8647}

### **Function**



Tel: 858.875.1900 Fax: 858.875.1999

Single-stranded nucleic acid binding protein that binds preferentially to oligo dC (PubMed:<a href="http://www.uniprot.org/citations/7607214" target="\_blank">7607214</a>, PubMed:<a href="http://www.uniprot.org/citations/7556077" target="\_blank">7556077</a>, PubMed:<a href="http://www.uniprot.org/citations/8152927" target="\_blank">8152927</a>, PubMed:<a href="http://www.uniprot.org/citations/15731341" target="\_blank">15731341</a>). Together with PCBP2, required for erythropoiesis, possibly by regulating mRNA splicing (By similarity).

#### **Cellular Location**

Nucleus. Cytoplasm. Note=Loosely bound in the nucleus (PubMed:7607214). May shuttle between the nucleus and the cytoplasm (PubMed:7607214).

#### **Tissue Location**

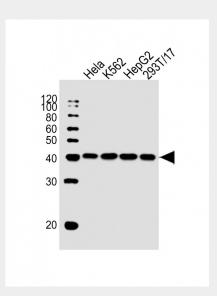
Abundantly expressed in skeletal muscle, thymus and peripheral blood leukocytes while a lower expression is observed in prostate, spleen, testis, ovary, small intestine, heart, liver, adrenal and thyroid glands.

#### PCBP1 Antibody (Center) - Protocols

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

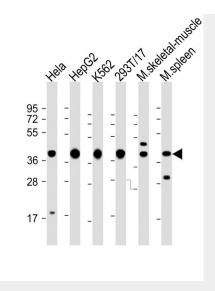
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

#### PCBP1 Antibody (Center) - Images



All lanes: Anti-PCBP1 Antibody (Center) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: K562 whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: 293T/17 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





All lanes: Anti-PCBP1 Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: K562 whole cell lysate Lane 4: 293T/17 whole cell lysate Lane 5: mouse skeletal muscle lysate Lane 6: mouse spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# PCBP1 Antibody (Center) - Background

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 thought to have arisen as a result of duplication events of entire genes. The protein encoded by this gene appears to be multifunctional. It along with PCBP-2 and hnRNPK corresponds to the major cellular 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 coactivators 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.

#### PCBP1 Antibody (Center) - References

Cloke, B., et al. Endocrinology 151(8):3954-3964(2010) Wang, H., et al. Cancer Cell 18(1):52-62(2010) Zhang, T., et al. Mol. Cancer 9, 72 (2010): Waggoner, S.A., et al. J. Biol. Chem. 284(14):9039-9049(2009) Huo, L.R., et al. Biochim. Biophys. Acta 1784(11):1524-1533(2008)