

PCBP1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5581

Specification

PCBP1 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Calculated MW Isotype Antigen Source

WB,E <u>O15365</u> <u>O5E9A3</u>, <u>P60335</u>, <u>O19048</u> Human Bovine 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



Single-stranded nucleic acid binding protein that binds preferentially to oligo dC (PubMed:15731341, PubMed:7556077, PubMed:7607214, PubMed:7607214, PubMed:7607214, PubMed:8152927, PubMed:8152927, PubMed:8152927). 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.

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

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)