

PCBP2 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP12231b**Specification**

PCBP2 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q15366](#)**PCBP2 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 5094**Other Names**

Poly(rC)-binding protein 2, Alpha-CP2, Heterogeneous nuclear ribonucleoprotein E2, hnRNP E2, PCBP2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PCBP2 Antibody (C-term) Blocking peptide - Protein Information**Name** PCBP2 {ECO:0000303|PubMed:7607214, ECO:0000312|HGNC:HGNC:8648}**Function**

Single-stranded nucleic acid binding protein that binds preferentially to oligo dC (PubMed:12414943, PubMed:7607214). Major cellular poly(rC)-binding protein (PubMed:12414943). Also binds poly(rU) (PubMed:12414943). Acts as a negative regulator of antiviral signaling (PubMed:19881509, PubMed:35322803). Negatively regulates cellular antiviral responses mediated by MAVS signaling (PubMed:19881509). It acts as an adapter between MAVS and the E3 ubiquitin ligase ITCH, therefore triggering MAVS ubiquitination and degradation (PubMed:19881509). Negatively regulates the cGAS-STING pathway via interaction with CGAS, preventing the formation of liquid-like droplets in which CGAS is activated (PubMed:35322803). Together with PCBP1, 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

Detected in all tissues examined.

PCBP2 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

PCBP2 Antibody (C-term) Blocking peptide - Images**PCBP2 Antibody (C-term) Blocking peptide - Background**

The protein encoded by this gene appears to be multifunctional. Along with PCBP-1 and hnRNP K, 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 multi-exon 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 (C-term) Blocking peptide - References

Eiring, A.M., et al. Cell 140(5):652-665(2010) Ogram, S.A., et al. Virology 397(1):14-22(2010) You, F., et al. Nat. Immunol. 10(12):1300-1308(2009) Fujimura, K., et al. Biochim. Biophys. Acta 1793(5):878-887(2009) Waggoner, S.A., et al. J. Biol. Chem. 284(14):9039-9049(2009)