

CEBPA Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9477b**Specification**

CEBPA Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P49715](#)**CEBPA Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 1050**Other Names**

CCAAT/enhancer-binding protein alpha, C/EBP alpha, CEBPA

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.

CEBPA Antibody (C-term) Blocking Peptide - Protein Information**Name** CEBPA ([HGNC:1833](#))**Function**

Transcription factor that coordinates proliferation arrest and the differentiation of myeloid progenitors, adipocytes, hepatocytes, and cells of the lung and the placenta. Binds directly to the consensus DNA sequence 5'-T[[TG](#)]NNGNAA[[TG](#)]-3' acting as an activator on distinct target genes (PubMed: [http://www.uniprot.org/citations/11242107](#) target="_blank">11242107). During early embryogenesis, plays essential and redundant functions with CEBPB. Essential for the transition from common myeloid progenitors (CMP) to granulocyte/monocyte progenitors (GMP). Critical for the proper development of the liver and the lung (By similarity). Necessary for terminal adipocyte differentiation, is required for postnatal maintenance of systemic energy homeostasis and lipid storage (By similarity). To regulate these different processes at the proper moment and tissue, interplays with other transcription factors and modulators. Down-regulates the expression of genes that maintain cells in an undifferentiated and proliferative state through E2F1 repression, which is critical for its ability to induce adipocyte and granulocyte terminal differentiation. Reciprocally E2F1 blocks adipocyte differentiation by binding to specific promoters and repressing CEBPA binding to its target gene promoters. Proliferation arrest also depends on a functional binding to SWI/SNF complex (PubMed: [http://www.uniprot.org/citations/14660596](#) target="_blank">14660596). In liver, regulates gluconeogenesis and lipogenesis through different mechanisms. To regulate gluconeogenesis, functionally cooperates with FOXO1 binding to IRE-controlled promoters and regulating the expression of target genes such as PCK1 or G6PC1.

To modulate lipogenesis, interacts and transcriptionally synergizes with SREBF1 in promoter activation of specific lipogenic target genes such as ACAS2. In adipose tissue, seems to act as FOXO1 coactivator accessing to ADIPOQ promoter through FOXO1 binding sites (By similarity).

Cellular Location

Nucleus.

CEBPA Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CEBPA Antibody (C-term) Blocking Peptide - Images**CEBPA Antibody (C-term) Blocking Peptide - Background**

CEBPA is a bZIP transcription factor which can bind as a homodimer to certain promoters and enhancers. It can also form heterodimers with the related proteins CEBP-beta and CEBP-gamma. This protein has been shown to bind to the promoter and modulate the expression of the gene encoding leptin, a protein that plays an important role in body weight homeostasis. Also, the protein can interact with CDK2 and CDK4, thereby inhibiting these kinases and causing growth arrest in cultured cells.

CEBPA Antibody (C-term) Blocking Peptide - References

Wu, Y.C., et al. Blood 115(12):2491-2499(2010)
Anri, T., et al. Genes Chromosomes Cancer 49(3):237-241(2010)
Turnett, A.K., et al. Blood 115(5):948-956(2010)
Four, A., et al. J. Clin. Oncol. 28(4):570-577(2010)