

CEBPA Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9477B

Specification

CEBPA Antibody (C-term) - Product Information

Application	WB, FC,E
Primary Accession	P49715
Other Accession	P05554 , P53566 , O02754
Reactivity	Human, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	37561
Antigen Region	304-330

CEBPA Antibody (C-term) - Additional Information

Gene ID 1050

Other Names

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

Target/Specificity

This CEBPA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 304-330 amino acids from the C-terminal region of human CEBPA.

Dilution

WB~~1:1000
FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

CEBPA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CEBPA Antibody (C-term) - 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:[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:[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

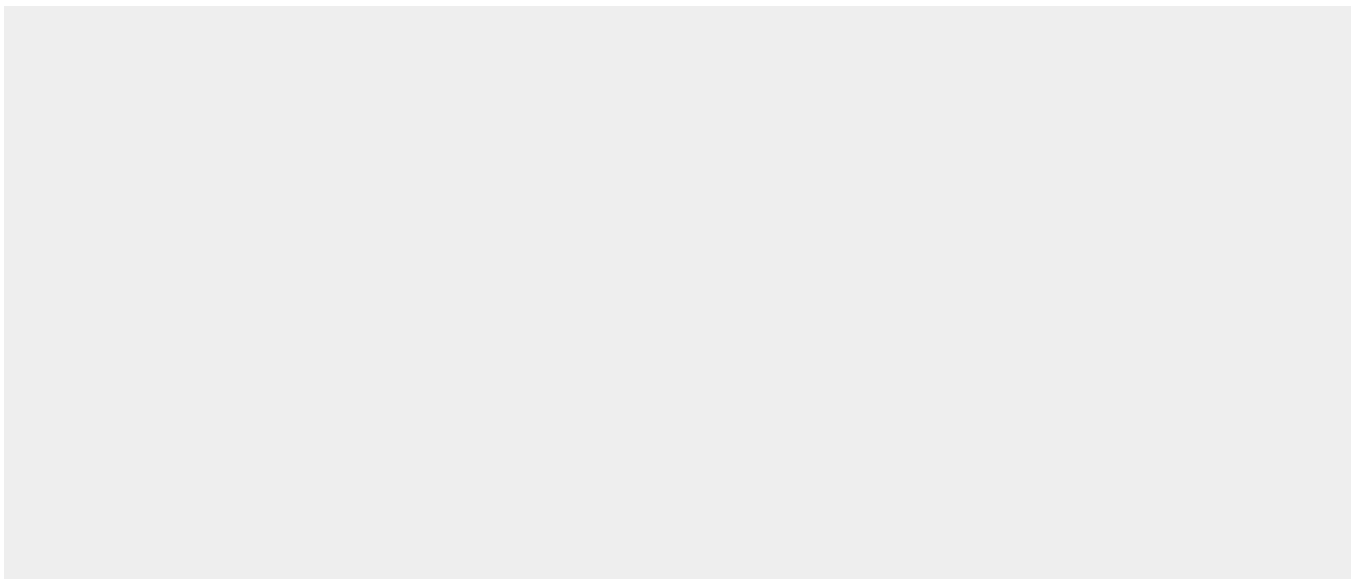
Nucleus.

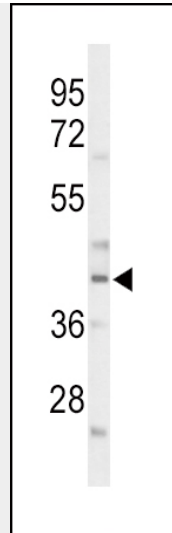
CEBPA Antibody (C-term) - Protocols

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

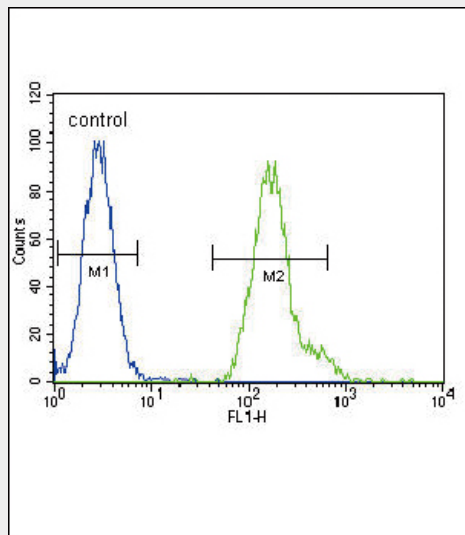
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CEBPA Antibody (C-term) - Images





Western blot analysis of CEBPA Antibody (C-term) (Cat. #AP9477b) in mouse liver tissue lysates (35ug/lane). CEBPA (arrow) was detected using the purified Pab.



CEBPA Antibody (C-term) (Cat. #AP9477b) flow cytometric analysis of HeLa cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CEBPA Antibody (C-term) - 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) - References

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