

## Anti-CEBP alpha Rabbit Monoclonal Antibody

Catalog # ABO14035

Specification

# **Anti-CEBP alpha Rabbit Monoclonal Antibody - Product Information**

Application WB, IP, FC **Primary Accession** P49715 Rabbit Host Isotype Reactivity Clonality Format Liquid Description Anti-CEBP alpha Rabbit Monoclonal Antibody . Tested in WB, IP, Flow Cytometry applications. This

Rabbit IgG Rat, Human, Mouse Monoclonal

antibody reacts with Human, Mouse, Rat.

### Anti-CEBP alpha Rabbit Monoclonal Antibody - Additional Information

Gene ID 1050

**Other Names** CCAAT/enhancer-binding protein alpha {ECO:0000312|HGNC:HGNC:1833}, C/EBP alpha {ECO:0000312|HGNC:HGNC:1833}, CEBPA (<a href="http://www.genenames.org/cgi-bin/gene symbol report?hgnc id=1833" target=" blank">HGNC:1833</a>)

**Calculated MW** 37561 MW KDa

**Application Details** WB 1:500-1:1000<br>IP 1:50<br>FC 1:50

Subcellular Localization Nucleus.

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human CEBP alpha

**Purification** Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.



# Anti-CEBP alpha Rabbit Monoclonal Antibody - Protein Information

#### Name CEBPA (<u>HGNC:1833</u>)

#### **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:<a href="http://www.uniprot.org/citations/11242107" target=" blank">11242107</a>). 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 adjpocyte 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 adjpocyte 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: <a href="http://www.uniprot.org/citations/14660596" target=" blank">14660596</a>). 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 adjpose tissue, seems to act as FOXO1 coactivator accessing to ADIPOQ promoter through FOXO1 binding sites (By similarity).

**Cellular Location** Nucleus.

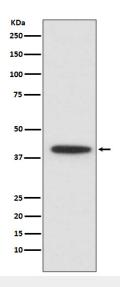
## Anti-CEBP alpha Rabbit Monoclonal Antibody - Protocols

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

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

Anti-CEBP alpha Rabbit Monoclonal Antibody - Images





Western blot analysis of CEBP alpha expression in U937 cell lysate.