



[Go to Product page](#)

Datasheet for ABIN6256190
anti-CEBPA antibody (pSer21)

4 Images

Overview

Quantity:	100 µL
Target:	CEBPA
Binding Specificity:	pSer21
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CEBPA antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human C/EBP- alpha around the phosphorylation site of Ser21.
Isotype:	IgG
Specificity:	Phospho-C/EBP alpha (Ser21) Antibody detects endogenous levels of C/EBP alpha only when phosphorylated at Serine 21.
Predicted Reactivity:	Pig,Bovine
Purification:	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

Target Details

Target: CEBPA

Alternative Name: CEBPA ([CEBPA Products](#))

Background: Description: 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. Downregulates 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 G6PC. 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).

Gene: CEBPA

Molecular Weight: 45kDa

Gene ID: 1050

UniProt: [P49715](#)

Pathways: [Brown Fat Cell Differentiation](#), [Positive Regulation of fat Cell Differentiation](#)

Application Details

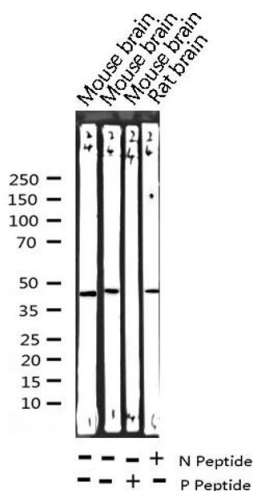
Application Notes: WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

Handling

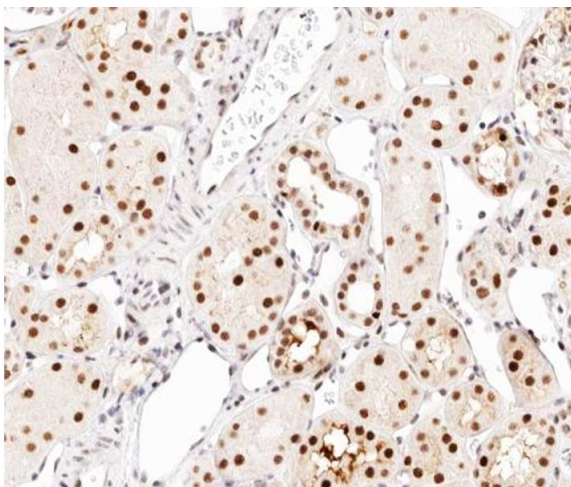
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



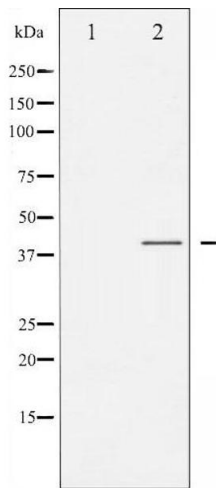
Western Blotting

Image 1. Western blot analysis of Phospho-C/EBP alpha (Ser21) expression in various lysates



Immunohistochemistry

Image 2. ABIN6267542 at 1/200 staining human kidney carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22° C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



Western Blotting

Image 3. Western blot analysis of C/EBP- alpha phosphorylation expression in EGF treated HepG2 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6256190.