

# C/EBP Antibody Sampler Kit

Cat# AK0131

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

## PRODUCT DESCRIPTION

CCAAT/enhancer-binding proteins (C/EBPs) are transcription factors critical for cellular differentiation, terminal function, and inflammatory response. Six characterized family members (C/EBP  $\alpha$ ,  $\beta$ ,  $\delta$ ,  $\gamma$ ,  $\epsilon$ , and  $\zeta$ ) are distributed in a variety of tissues. Translation from alternative start codons results in two C/EBP  $\alpha$  isoforms (p42 and p30) that are strong transcriptional activators. Research studies indicate that insulin and insulin-like growth factor-I stimulate C/EBP  $\alpha$  dephosphorylation, which may play a key role in insulin-induced repression of GLUT4 transcription. Phosphorylation of C/EBP  $\alpha$  at Thr222, Thr226, and Ser230 by GSK-3 may be required for adipogenesis. The two forms of C/EBP  $\beta$ , 38 kDa liver activating protein (LAP) and the 20 kDa liver inhibitory protein (LIP), may result from alternative translation. The 38 kDa LAP protein is a transcriptional activator while LIP may inhibit C/EBP  $\beta$  transcriptional activity. Phosphorylation of C/EBP  $\beta$  at distinct sites stimulates its transcriptional activity. Phosphorylation at the rat-specific site Ser105 in C/EBP  $\beta$  appears essential for C/EBP  $\beta$  activation in rat. C/EBP  $\delta$  protein is highly expressed in adipose tissue, lung, and intestine. Increased expression of C/EBP  $\delta$  mRNA levels during adipogenesis suggests that C/EBP  $\delta$  plays an important role in positively regulating adipogenesis. C/EBP  $\delta$  is expressed in the mammalian nervous system and plays an important role in long-term memory. CHOP is a C/EBP-homologous protein that inhibits C/EBP and LAP in a dominant-negative manner. CHOP expression is induced by cellular stresses, including starvation; induced CHOP suppresses cell cycle progression from G1 to S phase. During ER stress, the level of CHOP expression is elevated and CHOP functions to mediate programmed cell death.

## PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340451	CEBP alpha Polyclonal Antibody	20 $\mu$ L	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340313	Phospho-CEBP alpha (Thr230) Polyclonal Antibody	20 $\mu$ L	WB, ELISA	Human, Mouse, Rat	Rabbit
A340332	Phospho-CEBP alpha (Ser21) Polyclonal Antibody	20 $\mu$ L	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340452	CEBP beta Polyclonal Antibody	20 $\mu$ L	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit

<b>A340200</b>	Phospho-CEBP beta (Thr235) Polyclonal Antibody	20µL	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit
<b>A340115</b>	CEBPD Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
<b>A340482</b>	CHOP Polyclonal Antibody	20µL	WB, IHC, IF, ELISA	Human, Mouse	Rabbit
<b>A1013s</b>	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120µL	WB, ELISA	Rabbit	Goat

## **PRODUCT USE LIMITATION**

These products are intended for research use only.