

#2843 Store at -20C

C/EBPalpha (p42) Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 45	Source/Isotype: Rabbit	UniProt ID: #P49715	Entrez-Gene Id: 1050
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Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

C/EBPalpha (p42) Antibody detects endogenous levels of total p42 C/EBPalpha protein but not p30 C/EBPalpha.

Species predicted to react based on 100% sequence homology

Mouse, Rat

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the amino-terminal sequence of human C/EBPalpha. Antibodies are purified by protein A and peptide affinity chromatography.

Background

CCAAT/enhancer-binding proteins (C/EBPs) are a family of transcription factors that are critical for cellular differentiation, terminal function, and inflammatory response (1). Six members of the family have been characterized (C/EBPα, β, δ, γ, ε, and ζ) and are distributed in a variety of tissues (1). Translation from alternative start codons results in two isoforms of C/EBPα (p42 and p30), which are both strong transcriptional activators (2). It has been reported that insulin and insulin-like growth factor-I stimulate the dephosphorylation of C/EBPα, which may play a key role in insulin-induced repression of GLUT4 transcription (3). Phosphorylation of C/EBPα at Thr222, Thr226, and Ser230 by GSK-3 seems to be required for adipogenesis (4).

Background References

1. Lekstrom-Hims, J. and Xanthopoulos, K.G. (1998) *J. Biol. Chem.* 273, 28545-28548.
2. Lin, F. et al. (1993) *Proc. Natl. Acad. Sci. USA* 90, 9606-9610.
3. Hemati, N. et al. (1997) *J. Biol. Chem.* 272, 25913-25919.
4. Ross, S.E. et al. (1999) *Mol. Cell. Biol.* 19, 8433-8441.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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