



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at -20C
#8178

C/EBP α (D56F10) XP[®] Rabbit mAb

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

Applications: W, IP, IHC-P, IF-IC, FC-FP	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 42, 28	Source/Isotype: Rabbit IgG	UniProt ID: #P49715	Entrez-Gene Id: 1050
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Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:50
1:200
1:100
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #46943.

Specificity/Sensitivity

C/EBP α (D56F10) XP[®] Rabbit mAb recognizes endogenous levels of total C/EBP α protein.

Species predicted to react based on 100% sequence homology

Rat

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala176 of human C/EBP α protein.

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/EBP α , 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/EBP α (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/EBP α , which may play a key role in insulin-induced repression of GLUT4 transcription (3). Phosphorylation of C/EBP α 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 **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human **M:** Mouse

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