

C/EBP δ (D-1): sc-515028

BACKGROUND

The transcription factor C/EBP α (CCAAT-enhancer binding protein) is a heat-stable, sequence-specific DNA-binding protein first purified from rat liver nuclei that binds avidly to several different *cis*-regulatory DNA sequences commonly associated with viral and cellular genes transcribed by RNA polymerase II. C/EBP α regulates gene expression in a variety of tissues including liver, adipose, lung and intestine. C/EBP α uses a bipartite structural motif to bind DNA. Two protein chains dimerize through a set of amphipathic α helices termed the leucine zipper. Highly basic polypeptide regions emerge from the zipper to form a linked set of DNA contact surfaces. C/EBP α appears to function exclusively in terminally differentiated, growth-arrested cells. Additional family members include C/EBP β , C/EBP γ , C/EBP δ and C/EBP ϵ , all of which exhibit similar DNA-binding specificities and affinities to C/EBP α . Furthermore, C/EBP β and C/EBP δ readily form heterodimers both with each other as well as with C/EBP α .

CHROMOSOMAL LOCATION

Genetic locus: CEBPD (human) mapping to 8q11.21; Cebpd (mouse) mapping to 16 A2.

SOURCE

C/EBP δ (D-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 252-269 at the C-terminus of C/EBP δ of human origin.

PRODUCT

Each vial contains 200 μ g IgG γ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-515028 X, 200 μ g/0.1 ml.

C/EBP δ (D-1) is available conjugated to agarose (sc-515028 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515028 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515028 PE), fluorescein (sc-515028 FITC), Alexa Fluor[®] 488 (sc-515028 AF488), Alexa Fluor[®] 546 (sc-515028 AF546), Alexa Fluor[®] 594 (sc-515028 AF594) or Alexa Fluor[®] 647 (sc-515028 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515028 AF680) or Alexa Fluor[®] 790 (sc-515028 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515028 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

C/EBP δ (D-1) is recommended for detection of C/EBP δ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for C/EBP δ siRNA (h): sc-37722, C/EBP δ siRNA (m): sc-37723, C/EBP δ shRNA Plasmid (h): sc-37722-SH, C/EBP δ shRNA Plasmid (m): sc-37723-SH, C/EBP δ shRNA (h) Lentiviral Particles: sc-37722-V and C/EBP δ shRNA (m) Lentiviral Particles: sc-37723-V.

C/EBP δ (D-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

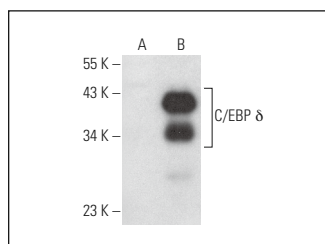
Molecular Weight of C/EBP δ : 28 kDa.

Positive Controls: C/EBP δ (h): 293T Lysate: sc-176938 or A549 cell lysate: sc-2413.

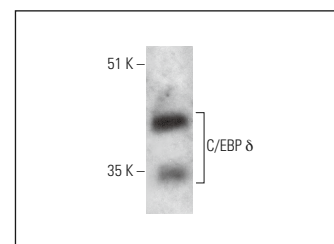
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



C/EBP δ (D-1): sc-515028. Western blot analysis of C/EBP δ expression in non-transfected: sc-117752 (A) and human C/EBP δ transfected: sc-176938 (B) 293T whole cell lysates.



C/EBP δ (D-1) HRP: sc-515028 HRP. Direct western blot analysis of C/EBP δ expression in A549 whole cell lysates.

SELECT PRODUCT CITATIONS

- Han, J.H., et al. 2022. *Garcinia cambogia* attenuates adipogenesis by affecting CEBPB and SQSTM1/p62-mediated selective autophagic degradation of KLF3 through RPS6KA1 and STAT3 suppression. *Autophagy* 18: 518-539.

RESEARCH USE

For research use only, not for use in diagnostic procedures.