

C/EBP ϵ (S-16): sc-31931

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: CEBPE (human) mapping to 14q11.2; Cebpe (mouse) mapping to 14 C3.

SOURCE

C/EBP ϵ (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C/EBP ϵ of human origin.

PRODUCT

Each vial contains 200 μ g IgG 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-31931 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-31931 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C/EBP ϵ (S-16) is recommended for detection of C/EBP ϵ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

C/EBP ϵ (S-16) is also recommended for detection of C/EBP ϵ in additional species, including equine, canine and bovine.

Suitable for use as control antibody for C/EBP ϵ siRNA (h): sc-37724, C/EBP ϵ siRNA (m): sc-37725, C/EBP ϵ shRNA Plasmid (h): sc-37724-SH, C/EBP ϵ shRNA Plasmid (m): sc-37725-SH, C/EBP ϵ shRNA (h) Lentiviral Particles: sc-37724-V and C/EBP ϵ shRNA (m) Lentiviral Particles: sc-37725-V.

C/EBP ϵ (S-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

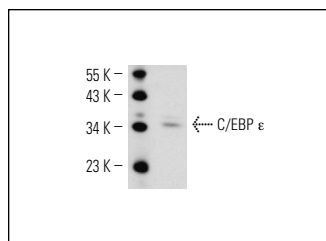
Molecular Weight of C/EBP ϵ isoforms: 32/30/27/14 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



C/EBP ϵ (S-16): sc-31931. Western blot analysis of C/EBP ϵ expression in K-562 whole cell lysate.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **C/EBP ϵ (C-10): sc-515192** or **C/EBP ϵ (2154C4a): sc-130029**, our highly recommended monoclonal alternatives to C/EBP ϵ (S-16).