**BACKGROUND**

C/EBP ζ (CCAAT/enhancer-binding protein ζ), also known as CBF, CBF2, NOC1 or HSP-CBF is a 1,054 amino acid nuclear protein belonging to the CBF/MAK21 family. C/EBP ζ stimulates transcription from the HSP70 and HSP40 promoters in an NF-Y dependent manner, requiring an intact NF-Y trimer which binds to the DNA. C/EBP ζ is thought to be a potential tumor suppressor gene, and aberrant methylation of the C/EBP ζ promoter may be involved with acute myeloid leukemia. The C/EBP ζ gene is conserved in a wide number of species including chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish and C. elegans and is located on human chromosome 2. Chromosome 2, the second largest human chromosome, consists of 237 million bases encoding over 1,400 genes, comprising approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CEBPZ (human) mapping to 2p22.2; Cebpz (mouse) mapping to 17 E3.

**SOURCE**

C/EBP ζ (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C/EBP ζ of human origin.

**PRODUCT**

Each vial contains 200 µg 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-132220 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-132220 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

C/EBP ζ (S-12) is recommended for detection of C/EBP ζ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); non cross-reactive with other C/EBP family members. C/EBP ζ (S-12) is also recommended for detection of C/EBP ζ in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for C/EBP ζ siRNA (h): sc-94538, C/EBP ζ siRNA (m): sc-141798, C/EBP ζ shRNA Plasmid (h): sc-94538-SH, C/EBP ζ shRNA Plasmid (m): sc-141798-SH, C/EBP ζ shRNA (h) Lentiviral Particles: sc-94538-V and C/EBP ζ shRNA (m) Lentiviral Particles: sc-141798-V.

C/EBP ζ (S-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of C/EBP ζ: 121 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

**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 ζ (S-12): sc-132220. Western blot analysis of C/EBP ζ expression in NIH/3T3 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.