SANTA CRUZ BIOTECHNOLOGY, INC.

EBP1 (P-19): sc-68478



BACKGROUND

EBP1 (ErbB3-binding protein 1), also known as PA2G4 (proliferation-associated 2G4), p38-2G4 or HG4-1, is a member of the peptidase M24C family and functions as an RNA-binding protein involved in cellular proliferation and differentiation processes. It is expressed in a variety of cell lines, including a wide range of tumor cell lines, and localizes to the cytoplasm. Upon treatment with Neuregulin-1 (heregulin), EBP1 translocates to the nucleus. EBP1 is a component of pre-ribosomal ribonucleoprotein complexes, participating in ribosome assembly and regulating the later steps of rRNA processing. In addition, EBP1 interacts with ErbB-3 and may function as a modulator of the ErbB-3-mediated signal transduction pathway by regulating the effects of Neuregulin-1 (heregulin). EBP1 also associates with histone deacetylases (HDACs), functioning as a transcriptional co-repressor of cell cycle regulatory genes.

REFERENCES

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- 3. Bose, S.K., et al. 2006. Identification of Ebp1 as a component of cytoplasmic bcl-2 mRNP (messenger ribonucleoprotein particle) complexes. Biochem. J. 396: 99-107.
- 4. Akinmade, D., et al. 2007. Ebp1-mediated inhibition of cell growth requires serine 363 phosphorylation. Int. J. Oncol. 31: 851-858.
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- Kowalinski, E., et al. 2007. The crystal structure of Ebp1 reveals a methionine aminopeptidase fold as binding platform for multiple interactions. FEBS Lett. 581: 4450-4454.
- 7. Honda, A., et al. 2007. Host factor Ebp1: selective inhibitor of influenza virus transcriptase. Genes Cells 12: 133-142.

CHROMOSOMAL LOCATION

Genetic locus: PA2G4 (human) mapping to 12q13.2; Pa2g4 (mouse) mapping to 10 D3.

SOURCE

EBP1 (P-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EBP1 of human origin.

PRODUCT

Each vial contains 200 μ g lgG 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-68478 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-68478 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EBP1 (P-19) is recommended for detection of EBP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

EBP1 (P-19) is also recommended for detection of EBP1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EBP1 siRNA (h): sc-77220, EBP1 siRNA (m): sc-77221, EBP1 shRNA Plasmid (h): sc-77220-SH, EBP1 shRNA Plasmid (m): sc-77221-SH, EBP1 shRNA (h) Lentiviral Particles: sc-77220-V and EBP1 shRNA (m) Lentiviral Particles: sc-77221-V.

EBP1 (P-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of EBP1: 47 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 Satisfation Guaranteed

Try **EBP1 (C-11)**: **sc-393114**, our highly recommended monoclonal alternative to EBP1 (P-19).