# EBP1 (N-18): sc-68477



The Power to Question

#### **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.

# **CHROMOSOMAL LOCATION**

Genetic locus: PA2G4 (human) mapping to 12q13.2; Pa2g4 (mouse) mapping to 10  $\Omega$ 3

#### **SOURCE**

EBP1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of EBP1 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu$ 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-68477 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-68477 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

EBP1 (N-18) 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), 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).

EBP1 (N-18) is also recommended for detection of EBP1 in additional species, including porcine.

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 (N-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

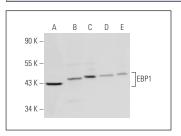
Molecular Weight of EBP1: 47 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, PANC-1 whole cell lysate: sc-364380 or A2058 whole cell lysate: sc-364178.

#### **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**



EBP1 (N-18): sc-68477. Western blot analysis of EBP1 expression in Jurkat (**A**), PANC-1 (**B**), A2058 (**C**), HEK293 (**D**) and A375 (**E**) whole cell lysates.

#### **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.



Try **EBP1 (C-11):** sc-393114, our highly recommended monoclonal alternative to EBP1 (N-18).

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