SANTA CRUZ BIOTECHNOLOGY, INC.

FBP1 (H-42): sc-48821

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Activation of FUSE, the far-upstream element, is required for the proper expression of the mammalian gene c-Myc in undifferentiated cells. The binding of FBP (FUSE-binding protein) to FUSE is necessary for c-Myc expression, indicating that FBP functions as a growth-dependent regulator of c-Myc expression. Isolated from proliferating HL60 cells, FBP, FBP2 and FBP3 comprise a family of single-stranded DNA-binding proteins that specifically bind to FUSE elements. The FBP transcription factors share a conserved central DNA-binding domain and show significant homology in their carboxyl-terminal activation domains. Expression of FBP is detected in undifferentiated cells and is substantially decreased following cellular differentiation.

CHROMOSOMAL LOCATION

Genetic locus: FUBP1 (human) mapping to 1p31.1; Fubp1 (mouse) mapping to 3 H3.

SOURCE

FBP1 (H-42) is a rabbit polyclonal antibody raised against amino acids 65-106 mapping near the N-terminus of FBP1 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48821 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

FBP1 (H-42) is recommended for detection of FBP1 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).

FBP1 (H-42) is also recommended for detection of FBP1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FBP1 siRNA (h): sc-43760, FBP1 siRNA (m): sc-44829, FBP1 shRNA Plasmid (h): sc-43760-SH, FBP1 shRNA Plasmid (m): sc-44829-SH, FBP1 shRNA (h) Lentiviral Particles: sc-43760-V and FBP1 shRNA (m) Lentiviral Particles: sc-44829-V.

FBP1 (H-42) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

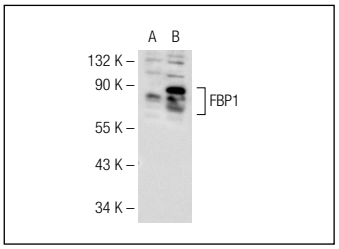
Molecular Weight of FBP1: 74 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, FBP1 (h2): 293T Lysate: sc-171763 or AML-193 whole cell lysate: sc-364182.

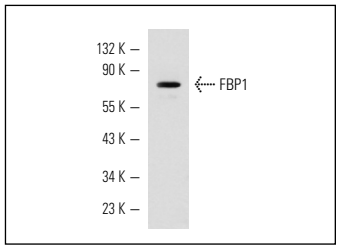
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FBP1 (H-42): sc-48821. Western blot analysis of FBP1 expression in non-transfected: sc-117752 (**A**) and human FBP1 transfected: sc-171763 (**B**) 293T whole cell lysates.



FBP1 (H-42): sc-48821. Western blot analysis of FBP1 expression in AML-193 whole cell lysate

SELECT PRODUCT CITATIONS

1. Singer, S., et al. 2009. Coordinated expression of stathmin family members by far upstream sequence element-binding protein-1 increases motility in non-small cell lung cancer. Cancer Res. 69: 2234-2243.
2. Atanassov, B.S., et al. 2011. USP22 regulates cell proliferation by deubiquitinating the transcriptional regulator FBP1. EMBO Rep. 12: 924-930.

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.