

## FBP2 (D-12): sc-33031

### 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 or Far upstream element 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.

### REFERENCES

1. Avigan, M.I., et al. 1990. A far upstream element stimulates c-Myc expression in undifferentiated leukemia cells. *J. Biol. Chem.* 265: 18538-18545.
2. Duncan, R.D., et al. 1994. A sequence-specific, single strand binding protein activates the far upstream of c-Myc and defines a new DNA binding motif. *Genes Dev.* 8: 465-480.
3. Bazar, L., et al. 1995. A transactivator of c-Myc is coordinately regulated with the proto-oncogene during cellular growth. *Oncogene* 10: 2229-2238.
4. Davis-Smyth, et al. 1996. The far upstream element-binding proteins comprise an ancient family of single-strand DNA-binding transactivators. *J. Biol. Chem.* 271: 31679-31687.

### CHROMOSOMAL LOCATION

Genetic locus: KHSRP (human) mapping to 19p13.3; Khsrp (mouse) mapping to 17 D.

### SOURCE

FBP2 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FBP2 of rat 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-33031 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-33031 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### 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.

### APPLICATIONS

FBP2 (D-12) is recommended for detection of FBP2 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).

FBP2 (D-12) is also recommended for detection of FBP2 in additional species, including porcine.

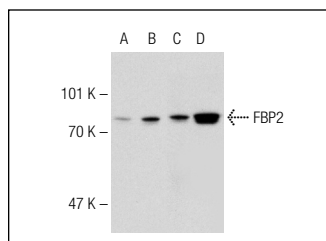
Suitable for use as control antibody for FBP2 siRNA (h): sc-44831, FBP2 siRNA (m): sc-44832, FBP2 shRNA Plasmid (h): sc-44831-SH, FBP2 shRNA Plasmid (m): sc-44832-SH, FBP2 shRNA (h) Lentiviral Particles: sc-44831-V and FBP2 shRNA (m) Lentiviral Particles: sc-44832-V.

FBP2 (D-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of FBP2: 74 kDa.

Positive Controls: FBP2 (m): 293T Lysate: sc-178603, HL-60 whole cell lysate: sc-2209 or A-673 cell lysate: sc-2414.

### DATA



FBP2 (D-12): sc-33031. Western blot analysis of FBP2 expression in non-transfected 293T: sc-117752 (A), mouse FBP2 transfected 293T: sc-178603 (B), HL-60 (C) and A-673 (D) whole cell lysates.

### SELECT PRODUCT CITATIONS

1. Lin, J.Y., et al. 2009. Far upstream element binding protein 2 interacts with enterovirus 71 internal ribosomal entry site and negatively regulates viral translation. *Nucleic Acids Res.* 37: 47-59.
2. Graham, J.R., et al. 2010. mRNA degradation plays a significant role in the program of gene expression regulated by phosphatidylinositol 3-kinase signaling. *Mol. Cell. Biol.* 30: 5295-5305.
3. Russo, A., et al. 2011. Autoregulatory circuit of human rpl3 expression requires hnRNP H1, NPM and KHSRP. *Nucleic Acids Res.* 39: 7576-7585.

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Try **FBP2 (4C10): sc-293476**, our highly recommended monoclonal alternative to FBP2 (D-12).