

FBP3 (I-20): sc-11103

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.

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, T., 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.
5. Michelotti, G.A., et al. 1996. Multiple single-stranded *cis* elements are associated with activated chromatin of the human c-Myc gene *in vivo*. *Mol. Cell. Biol.* 16: 2656-2669.

CHROMOSOMAL LOCATION

Genetic locus: FUBP3 (human) mapping to 9q34.11.

SOURCE

FBP3 (I-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FBP3 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.

Blocking peptide available for competition studies, sc-11103 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-11103 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

FBP3 (I-20) is recommended for detection of FBP3 of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FBP3 (I-20) is also recommended for detection of FBP3 in additional species, including equine, canine, bovine, porcine and avian.

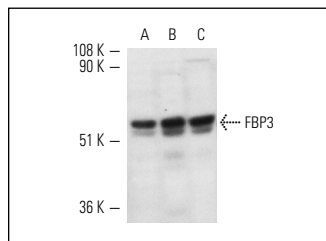
Suitable for use as control antibody for FBP3 siRNA (h): sc-106747, FBP3 shRNA Plasmid (h): sc-106747-SH and FBP3 shRNA (h) Lentiviral Particles: sc-106747-V.

FBP3 (I-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

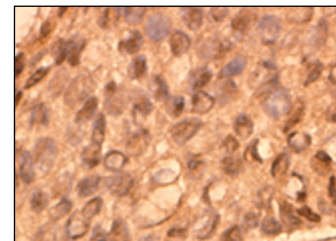
Molecular Weight of FBP3: 64 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, SK-BR-3 cell lysate: sc-2218 or U-87 MG cell lysate: sc-2411.

DATA



FBP3 (I-20): sc-11103. Western blot analysis of FBP3 expression in MCF7 (A), SK-BR-3 (B) and U-87 MG whole cell lysates.



FBP3 (I-20): sc-11103. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tumor showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Chung, H.J., et al. 2006. FBPs are calibrated molecular tools to adjust gene expression. *Mol. Cell. Biol.* 26: 6584-6597.
2. Gau, B.H., et al. 2011. FUBP3 interacts with FGF9 3' microsatellite and positively regulates FGF9 translation. *Nucleic Acids Res.* 39: 3582-3593.
3. Atanassov, B.S., et al. 2011. USP22 regulates cell proliferation by deubiquitinating the transcriptional regulator FBP1. *EMBO Rep.* 12: 924-930.

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Try **FBP3 (E-8): sc-398466**, our highly recommended monoclonal alternative to FBP3 (I-20).