

ZBP-89 (m): 293T Lysate: sc-124700

BACKGROUND

ZBP-89, also known as BFCOL1, BERF1 and ZNF 148, is a zinc finger transcription factor that is universally expressed. ZBP-89, a Krüppel-like repressor protein, is the silencer element binding factor for Vimentin. ZBP-89 has been shown to bind to GC-rich DNA elements in promoters for gastrin, ornithine decarboxylase and the cyclin-dependent kinase inhibitor p21 (also designated Cip1 or WAF1). ZBP-89 expression is induced by *trans*-retinoic acid or butyrate, which also induces terminal differentiation of colon cancer cells. ZBP-89 cooperates with histone acetyltransferase coactivator p300 in the regulation of p21, a cyclin-dependent kinase inhibitor whose associated gene is a target gene of p53. ZBP-89 also regulates cell proliferation, in part, through its ability to directly bind the p53 protein and retard its nuclear export. Elevated levels of ZBP-89 induce growth arrest and apoptosis in human gastrointestinal cells.

REFERENCES

1. Taniuchi, T., Mortensen, E.R., Ferguson, A., Greenson, J. and Merchant, J.L. 1997. Overexpression of ZBP-89, a zinc finger DNA binding protein, in gastric cancer. *Biochem. Biophys. Res. Commun.* 233: 154-160.
2. Wiczorek, E., Lin, Z., Perkins, E.B., Law, D.J., Merchant, J.L. and Zehner, Z.E. 2000. The zinc finger repressor, ZBP-89, binds to the silencer element of the human Vimentin gene and complexes with the transcriptional activator, Sp1. *J. Biol. Chem.* 275: 12879-12888.
3. Bai, L. and Merchant, J. 2001. ZBP-89 promotes growth arrest through stabilization of p53. *Mol. Cell. Biol.* 21: 4670-4683.
4. Yamada, A., Takaki, S., Hayashi, F., Georgopoulos, K., Perlmutter, R.M. and Takatsu, K. 2001. Identification and characterization of a transcriptional regulator for the Lck proximal promoter. *J. Biol. Chem.* 276: 18082-18089.

CHROMOSOMAL LOCATION

Genetic locus: Zfp148 (mouse) mapping to 16 B3.

PRODUCT

ZBP-89 (m): 293T Lysate represents a lysate of mouse ZBP-89 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

ZBP-89 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ZBP-89 antibodies. Recommended use: 10-20 µl per lane.

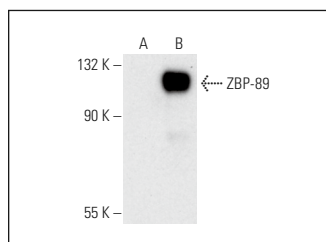
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ZBP-89 (E-6): sc-398148 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ZBP-89 expression in ZBP-89 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

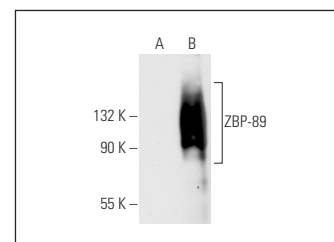
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



ZBP-89 (E-6): sc-398148. Western blot analysis of ZBP-89 expression in non-transfected: sc-117752 (A) and mouse ZBP-89 transfected: sc-124700 (B) 293T whole cell lysates.



ZBP-89 (H-7): sc-137171. Western blot analysis of ZBP-89 expression in non-transfected: sc-117752 (A) and mouse transfected: sc-124700 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.