SANTA CRUZ BIOTECHNOLOGY, INC.

ZBP-89 (H-184): sc-48811



BACKGROUND

ZBP-89, also known as BFCOL1, BERF1 and ZNF 148, is a zinc finger transcription factor that is universally expressed. ZBP-89, a Kruppel-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.

CHROMOSOMAL LOCATION

Genetic locus: ZNF148 (human) mapping to 3q21.2; Zfp148 (mouse) mapping to 16 B3.

SOURCE

ZBP-89 (H-184) is a rabbit polyclonal antibody raised against amino acids 611-794 mapping at the C-terminus of ZBP-89 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-48811 X, 200 $\mu\text{g}/0.1$ ml.

APPLICATIONS

ZBP-89 (H-184) is recommended for detection of ZBP-89 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), 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).

ZBP-89 (H-184) is also recommended for detection of ZBP-89 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ZBP-89 siRNA (h): sc-38639, ZBP-89 siRNA (m): sc-38640, ZBP-89 shRNA Plasmid (h): sc-38639-SH, ZBP-89 shRNA Plasmid (m): sc-38640-SH, ZBP-89 shRNA (h) Lentiviral Particles: sc-38639-V and ZBP-89 shRNA (m) Lentiviral Particles: sc-38640-V.

ZBP-89 (H-184) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZBP-89: 115 kDa.

Positive Controls: ZBP-89 (m): 293T Lysate: sc-124700, HeLa whole cell lysate: sc-2200 or Jurkat nuclear extract: sc-2132.

STORAGE

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

DATA



ZBP-89 (H-184): sc-48811. Western blot analysis of ZBP-89 expression in non-transfected: sc-117752 (**A**) in and mouse ZBP-89 transfected: sc-124700 (**B**) 2931 whole cell lysates.



ZBP-89 (H-184): sc-48811. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing nuclear and cytoplasmic staining of urothelial cells (**B**).

SELECT PRODUCT CITATIONS

- Udelhoven, M., et al. 2010. Neuronal Insulin receptor substrate 2 (IRS2) expression is regulated by ZBP89 and SP1 binding to the IRS2 promoter. J. Endocrinol. 204: 199-208.
- Phillips, D., et al. 2010. Mice over-expressing the myocardial creatine transporter develop progressive heart failure and show decreased glycolytic capacity. J. Mol. Cell. Cardiol. 48: 582-590.
- Buira, S.P., et al. 2010. DNA methylation and Yin Yang-1 repress adenosine A_{2A} receptor levels in human brain. J. Neurochem. 115: 283-295.
- Zhang, C.Z., et al. 2012. Interaction between ZBP-89 and p53 mutants and its contribution to effects of HDACi on hepatocellular carcinoma. Cell Cycle 11: 322-334.

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.

MONOS Satisfation Guaranteed

Try ZBP-89 (H-7): sc-137171 or ZBP-89 (D-10): sc-137170, our highly recommended monoclonal alternatives to ZBP-89 (H-184).