SANTA CRUZ BIOTECHNOLOGY, INC.

ZBP-89 (S-15): sc-19408

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

ZBP-89 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near 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.

Blocking peptide available for competition studies, sc-19408 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-19408 X, 200 µg/0.1 ml.

APPLICATIONS

ZBP-89 (S-15) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ZBP-89 (S-15) is also recommended for detection of ZBP-89 in additional species, including equine, canine, bovine and porcine.

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 (S-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

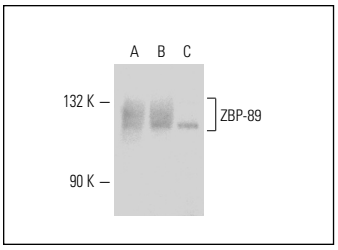
Molecular Weight of ZBP-89: 115 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

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 (S-15): sc-19408. Western blot analysis of ZBP-89 expression in HeLa whole cell lysate (**A**) and HeLa (**B**) and Jurkat (**C**) nuclear extracts.

SELECT PRODUCT CITATIONS

1. Li, X., et al. 2006. The transcription factor ZBP-89 controls generation of the hematopoietic lineage in zebrafish and mouse embryonic stem cells. Development 133: 3641-3650.
2. Petrovic, I., et al. 2009. ZBP-89 and Sp3 down-regulate while NF-Y up-regulates Sox-18 promoter activity in HeLa cells. Mol. Biol. Rep. 36: 993-1000.
3. Feng, Y., et al. 2009. The transcription factor ZBP-89 suppresses p16 expression through a histone modification mechanism to affect cell senescence. FEBS J. 276: 4197-4206.
4. Barrasa, J.I., et al. 2012. Histone deacetylase inhibitors upregulate MMP11 gene expression through Sp1/Smad complexes in human colon adenocarcinoma cells. Biochim. Biophys. Acta 1823: 570-581.

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.