SANTA CRUZ BIOTECHNOLOGY, INC.

ICSBP (C-19): sc-6058

BACKGROUND

ICSBP (Interferon (IFN) consensus sequence-binding protein, Interferon regulatory factor 8; IRF-8) is a transcription factor that is important for IFN-γ-mediated signaling during dendritic cell and macrophage differentiation. ICSBP physically interacts with TRAF6 (between amino acid residues 356 and 305), and this interaction of ICSBP with TRAF6 modulates TLR signaling and may contribute to the cross-talk between IFN-γ and TLR signal pathways. ICSBP antagonizes Bcr/Abl by downregulation of Bcl-2. ICSBP is known to interact with chromatin, and bind PU.1 in macrophages. ICSBP belongs to the IFN regulatory factor (IRF) family that also includes IRF-1, IRF-2 and ISGF-3. These proteins are composed of a conserved DNA-binding domain in the N-terminal region and a divergent C-terminal region that serves as the regulatory domain. The IRF family proteins bind to the IFN-stimulated response element (ISRE) and regulate expression of IFN-α and IFN-β.

CHROMOSOMAL LOCATION

Genetic locus: IRF8 (human) mapping to 16q24.1; Irf8 (mouse) mapping to 8 E1.

SOURCE

ICSBP (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ICSBP of mouse 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-6058 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-6058 X, 200 µg/0.1 ml.

APPLICATIONS

ICSBP (C-19) is recommended for detection of ICSBP 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).

ICSBP (C-19) is also recommended for detection of ICSBP in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ICSBP siRNA (h): sc-35630, ICSBP siRNA (m): sc-35631, ICSBP shRNA Plasmid (h): sc-35630-SH, ICSBP shRNA Plasmid (m): sc-35631-SH, ICSBP shRNA (h) Lentiviral Particles: sc-35630-V and ICSBP shRNA (m) Lentiviral Particles: sc-35631-V.

ICSBP (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

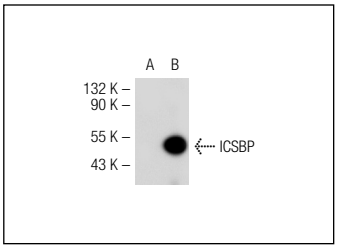
Molecular Weight of ICSBP: 48 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, Ramos cell lysate: sc-2216 or ICSBP (m): 293T Lysate: sc-120937.

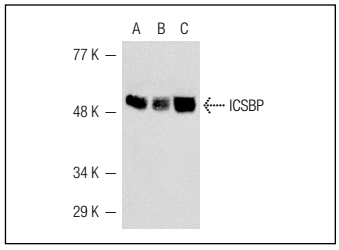
STORAGE

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

DATA



ICSBP (C-19): sc-6058. Western blot analysis of ICSBP expression in non-transfected: sc-117752 (**A**) and mouse ICSBP transfected: sc-120937 (**B**) 293T whole cell lysates.



ICSBP (C-19): sc-6058. Western blot analysis of IFN consensus sequence-binding proteins in BJAB (**A**), Ramos (**B**), NAMALWA (**C**) and Jurkat (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Li, W., et al. 1999. Intereferon consensus sequence-binding protein is constitutively expressed and differentially regulated in the ocular lens. J. Biol. Chem. 274: 9686-9691.
2. Mäkelä, S.M., et al. 2009. Multiple signaling pathways contribute to synergistic TLR ligand-dependent cytokine gene expression in human monocyte-derived macrophages and dendritic cells. J. Leukoc. Biol. 85: 664-672.
3. Wei, F., et al. 2009. PU.1 can recruit BCL6 to DNA to repress gene expression in germinal center B cells. Mol. Cell. Biol. 29: 4612-4622.
4. Dobbin, E., et al. 2010. Proteomic analysis reveals a novel mechanism induced by the leukemic oncogene Tel/PDGFRβ in stem cells: activation of the interferon response pathways. Stem Cell Res. 5: 226-243.
5. Hu, X., et al. 2011. IRF8 regulates acid ceramidase expression to mediate apoptosis and suppresses myelogeneous leukemia. Cancer Res. 71: 2882-2891.
6. Fragale, A., et al. 2011. Critical role of IRF-8 in negative regulation of TLR3 expression by Src homology 2 domain-containing protein tyrosine phosphatase-2 activity in human myeloid dendritic cells. J. Immunol. 186: 1951-1962.
7. Zimmerman, M.A., et al. 2012. Unphosphorylated STAT1 promotes sarcoma development through repressing expression of Fas and bad and conferring apoptotic resistance. Cancer Res. 72: 4724-4732.

RESEARCH USE

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