SANTA CRUZ BIOTECHNOLOGY, INC.

ICSBP (E-9): sc-365042



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 (E-9) is a mouse monoclonal antibody raised against amino acids 357-426 of ICSBP of human origin.

PRODUCT

Each vial contains 200 μ g lgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-365042 X, 200 μ g/0.1 ml.

ICSBP (E-9) is available conjugated to agarose (sc-365042 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365042 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365042 PE), fluorescein (sc-365042 FITC), Alexa Fluor[®] 488 (sc-365042 AF488), Alexa Fluor[®] 546 (sc-365042 AF546), Alexa Fluor[®] 594 (sc-365042 AF594) or Alexa Fluor[®] 647 (sc-365042 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365042 AF680) or Alexa Fluor[®] 790 (sc-365042 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ICSBP (E-9) is recommended for detection of ICSBP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

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 (E-9) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

STORAGE

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

DATA



ICSBP (E-9) HRP: sc-365042 HRP. Direct western blot analysis of ICSBP expression in BJAB (**A**), NAMALWA (**B**), IB4 (**C**) and Raji (**D**) whole cell lysates.



ICSBP (E-9) Alexa Fluor[®] 488: sc-365042 AF488. Direct immunofluorescence staining of formalin-fixed SW480 cells showing nuclear localization. Blocked with UltraCruz[®] Blocking Reagent: sc-516214 (**A**). ICSBP (E-9): sc-365042. Immunoperoxidase staining of formalin fixed, parafin-embedded human tonsil tissue showing nuclear staining of cells in germinal center and cells in non-germinal center (**B**).

SELECT PRODUCT CITATIONS

- Bouamar, H., et al. 2013. A capture-sequencing strategy identifies IRF8, EBF1, and APRIL as novel IGH fusion partners in B-cell lymphoma. Blood 122: 726-733.
- Arifuzzaman, S., et al. 2017. Selective inhibition of EZH2 by a small molecule inhibitor regulates microglial gene expression essential for inflammation. Biochem. Pharmacol. 137: 61-80.
- Zhang, P., et al. 2019. Hyperglycemia-induced inflamm-aging accelerates gingival senescence via NLRC4 phosphorylation. J. Biol. Chem. 294: 18807-18819.
- Lin, S.Y., et al. 2020. Effects of β-adrenergic blockade on metabolic and inflammatory responses in a rat model of ischemic stroke. Cells 9: 1373.
- Yi, M.H., et al. 2021. Chemogenetic manipulation of microglia inhibits neuroinflammation and neuropathic pain in mice. Brain Behav. Immun. 92: 78-89.
- Sun, X., et al. 2021. Ferulic acid attenuates microglia-mediated neuroinflammation in retinal degeneration. BMC Ophthalmol. 21: 13.
- Bolognesi, M.M., et al. 2021. Antibodies validated for routinely processed tissues stain frozen sections unpredictably. Biotechniques 70: 137-148.
- Liss, F., et al. 2021. IRF8 is an AML-specific susceptibility factor that regulates signaling pathways and proliferation of AML cells. Cancers 13: 764.
- Gardner, A.I., et al. 2021. Interferon regulatory factor 8 regulates expression of acid ceramidase and infection susceptibility in cystic fibrosis. J. Biol. Chem. 296: 100650.

RESEARCH USE

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

Molecular Weight of ICSBP: 48 kDa.