

ICSBP (F-9): sc-365041

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 .

REFERENCES

1. Burchert, A., et al. 2004. Interferon consensus sequence binding protein (ICSBP; IRF-8) antagonizes Bcr/Abl and downregulates Bcl-2. *Blood* 103: 3480-3489.
2. Schmidt, M., et al. 2004. The interferon regulatory factor ICSBP/IRF-8 in combination with PU.1 upregulates expression of tumor suppressor p15^{Ink4b} in murine myeloid cells. *Blood* 103: 4142-4149.
3. Laricchia-Robbio, L., et al. 2005. Partner-regulated interaction of IFN regulatory factor 8 with chromatin visualized in live macrophages. *Proc. Natl. Acad. Sci. USA* 102: 14368-14373.
4. Xiong, H., et al. 2005. Ubiquitin-dependent degradation of interferon regulatory factor-8 mediated by Cbl downregulates interleukin-12 expression. *J. Biol. Chem.* 280: 23531-23539.
5. Tamura, T., et al. 2005. IFN regulatory factor-4 and -8 govern dendritic cell subset development and their functional diversity. *J. Immunol.* 174: 2573-2581.
6. Nakano, N., et al. 2005. Analysis of PU.1/ICSBP (IRF-8) complex formation with various PU.1 mutants: molecular cloning of rat ICSBP (IRF-8) cDNA. *Immunogenetics* 56: 871-877.

CHROMOSOMAL LOCATION

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

SOURCE

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

PRODUCT

Each vial contains 200 μ g IgG_{2a} 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-365041 X, 200 μ g/0.1 ml.

RESEARCH USE

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

APPLICATIONS

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

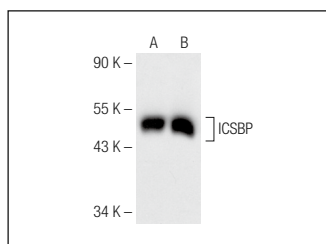
Molecular Weight of ICSBP: 48 kDa.

Positive Controls: IB4 whole cell lysate: sc-364780, NAMALWA cell lysate: sc-2234 or Hep G2 cell lysate: sc-2227.

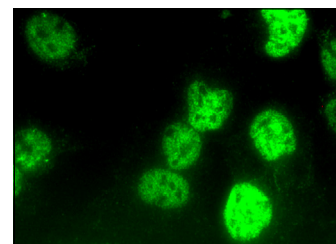
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ICSBP (F-9): sc-365041. Western blot analysis of ICSBP expression in IB4 (A) and NAMALWA (B) whole cell lysates.



ICSBP (F-9): sc-365041. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Fragale, A., et al. 2017. Antitumor effects of epidrug/IFN α combination driven by modulated gene signatures in both colorectal cancer and dendritic cells. *Cancer Immunol. Res.* 5: 604-616.

STORAGE

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