

# ICSBP (m): 293T Lysate: sc-120937

## BACKGROUND

ICSBP (interferon (IFN) consensus sequence-binding protein, interferon regulatory factor 8; IRF-8) is a transcription factor that is important for IFN- $\gamma$ -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- $\gamma$  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- $\alpha$  and IFN- $\beta$ .

## 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<sup>Ink4b</sup> 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.
7. Mattei, F., et al. 2006. ICSBP/IRF-8 differentially regulates antigen uptake during dendritic cell development and affects antigen presentation to CD4<sup>+</sup> T cells. *Blood* 108: 609-617.
8. Zhao, J., et al. 2006. IRF-8/interferon (IFN) consensus sequence-binding protein is involved in Toll-like receptor (TLR) signaling and contributes to the cross-talk between TLR and IFN- $\gamma$  signaling pathways. *J. Biol. Chem.* 281: 10073-10080.
9. Dror, N., et al. 2007. Identification of IRF-8 and IRF-1 target genes in activated macrophages. *Mol. Immunol.* 44: 338-346.

## CHROMOSOMAL LOCATION

Genetic locus: *Irf8* (mouse) mapping to 8 E1.

## RESEARCH USE

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

## PRODUCT

ICSBP (m): 293T Lysate represents a lysate of mouse ICSBP transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

ICSBP (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ICSBP antibodies. Recommended use: 10-20  $\mu$ l per lane.

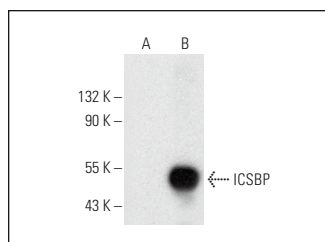
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ICSBP (B-4): sc-393676 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ICSBP expression in ICSBP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

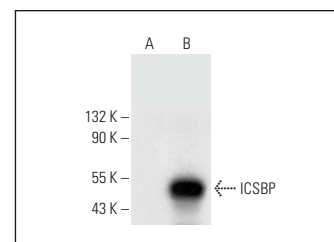
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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.

## DATA



ICSBP (B-4): sc-393676. Western blot analysis of ICSBP expression in non-transfected: sc-117752 (A) and mouse ICSBP transfected: sc-120937 (B) 293T whole cell lysates.



ICSBP (H-12): sc-393955. Western blot analysis of ICSBP expression in non-transfected: sc-117752 (A) and mouse ICSBP transfected: sc-120937 (B) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.