IFI-35 (h): 293T Lysate: sc-175914



The Power to Question

BACKGROUND

The interferon family of proteins are able to alter the expression of a variety of target genes, thereby controlling various events within the cell. IFI-35 (interferon-induced 35 kDa protein), also known as IFP35, is a 286 amino acid interferon-induced protein. Localized to the nucleus and expressed in macrophages, fibroblasts and epithelial cells, IFI-35 is a leucine zipper protein that can form homodimers but, unlike most leucine zipper proteins, cannot bind DNA. Upon induction by IFN- α , IFI-35 associates with Nmi (N-Myc-interacting protein), resulting in the formation of a high molecular weight complex that is thought to play a role in IFN- α signaling and cellular responses. Once complexed with Nmi, IFI-35 is unable to be degraded by the proteasome, suggesting that IFI-35 is protected from degradation only when needed by IFN- α . Two isoforms of IFI-35 exist due to alternative splicing events.

REFERENCES

- Bange, F.C., et al. 1994. IFP-35 is an interferon-induced leucine zipper protein that undergoes interferon-regulated cellular redistribution. J. Biol. Chem. 269: 1091-1098.
- Wang, X., et al. 1996. IFP-35 forms complexes with B-ATF, a member of the AP1 family of transcription factors. Biochem. Biophys. Res. Commun. 229: 316-322.
- Meyerdierks, A., et al. 1999. A cytoplasmic structure resembling large protein aggregates induced by interferons. J. Histochem. Cytochem. 47: 169-182
- 4. Zhou, X., et al. 2000. Interferon- α induces Nmi-IFP35 heterodimeric complex formation that is affected by the phosphorylation of IFP35. J. Biol. Chem. 275: 21364-21371.
- Chen, J., et al. 2000. Interferon-inducible Myc/Stat-interacting protein Nmi associates with IFP35 into a high molecular mass complex and inhibits proteasome-mediated degradation of IFP35. J. Biol. Chem. 275: 36278-36284.
- 6. Chen, J. and Naumovski, L. 2002. Intracellular redistribution of interferoninducible proteins Nmi and IFP35 in apoptotic cells. J. Interferon Cytokine Res. 22: 237-243.
- 7. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 600735. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 8. Zhang, L., et al. 2007. The PH domain containing protein CKIP-1 binds to IFP35 and Nmi and is involved in cytokine signaling. Cell. Signal. 19: 932-944.

CHROMOSOMAL LOCATION

Genetic locus: IFI35 (human) mapping to 17q21.31.

PRODUCT

IFI-35 (h): 293T Lysate represents a lysate of human IFI-35 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

IFI-35 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive IFI-35 antibodies.

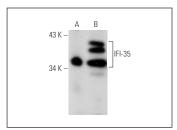
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

IFI-35 (39.287): sc-100769 is recommended as a positive control antibody for Western Blot analysis of enhanced human IFI-35 expression in IFI-35 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-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



IFI-35 (39.287): sc-100769. Western blot analysis of IFI-35 expression in non-transfected: sc-117752 (**A**) and human IFI-35 transfected: sc-175914 (**B**) 293T whole cell Ivsates.

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 for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**