



IFI-35 (D-13): sc-109290

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

1. Bange, F.C., et al. 1994. IFP-35 is an interferon-induced leucine zipper protein that under-goes interferon-regulated cellular redistribution. *J. Biol. Chem.* 269: 1091-1098.
2. 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.
3. Meyerdierts, 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.
5. 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 IFP 35. *J. Biol. Chem.* 275: 36278-36284.
6. Chen, J. and Naumovski, L. 2002. Intracellular redistribution of interferon-inducible 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 (mouse) mapping to 11 D.

SOURCE

IFI-35 (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IFI-35 of mouse origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109290 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IFI-35 (D-13) is recommended for detection of IFI-35 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 IFI-35 siRNA (m): sc-146151, IFI-35 shRNA Plasmid (m): sc-146151-SH and IFI-35 shRNA (m) Lentiviral Particles: sc-146151-V.

Molecular Weight of IFI-35: 35 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.