

IFI-35 (B-1): sc-393513

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 undergoes 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.

CHROMOSOMAL LOCATION

Genetic locus: IFI35 (human) mapping to 17q21.31; Ifi35 (mouse) mapping to 11 D.

SOURCE

IFI-35 (B-1) is a mouse monoclonal antibody raised against amino acids 1-286 representing full length IFI-35 of mouse origin.

PRODUCT

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

IFI-35 (B-1) is available conjugated to agarose (sc-393513 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393513 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393513 PE), fluorescein (sc-393513 FITC), Alexa Fluor[®] 488 (sc-393513 AF488), Alexa Fluor[®] 546 (sc-393513 AF546), Alexa Fluor[®] 594 (sc-393513 AF594) or Alexa Fluor[®] 647 (sc-393513 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393513 AF680) or Alexa Fluor[®] 790 (sc-393513 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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

STORAGE

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

APPLICATIONS

IFI-35 (B-1) is recommended for detection of IFI-35 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 IFI-35 siRNA (h): sc-93718, IFI-35 siRNA (m): sc-146151, IFI-35 shRNA Plasmid (h): sc-93718-SH, IFI-35 shRNA Plasmid (m): sc-146151-SH, IFI-35 shRNA (h) Lentiviral Particles: sc-93718-V and IFI-35 shRNA (m) Lentiviral Particles: sc-146151-V.

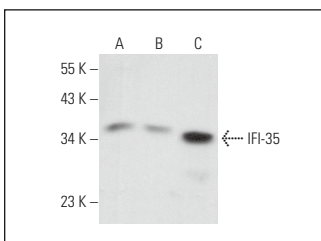
Molecular Weight of IFI-35: 35 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, SP2/O whole cell lysate: sc-364795 or A-431 nuclear extract: sc-2122.

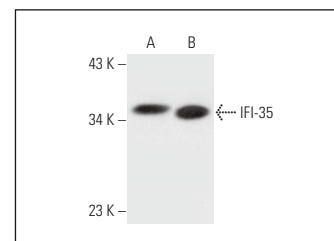
RECOMMENDED SUPPORT REAGENTS

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



IFI-35 (B-1): sc-393513. Western blot analysis of IFI-35 expression in A-431 (A), HUV-EC-C (B) and SP2/O (C) whole cell lysates.



IFI-35 (B-1): sc-393513. Western blot analysis of IFI-35 expression in A-431 whole cell lysate (A) and A-431 nuclear extract (B).

SELECT PRODUCT CITATIONS

1. Chai, D., et al. 2022. IFI35 promotes renal cancer progression by inhibiting pSTAT1/pSTAT6-dependent autophagy. *Cancers* 14: 2861.
2. Xu, B., et al. 2024. IFI35 limits antitumor immunity in triple-negative breast cancer via CCL2 secretion. *Oncogene* 43: 693-702.

RESEARCH USE

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