

## IFI-16 (H-55): sc-50359

### BACKGROUND

Interferon-inducible proteins include IFI-202, IFI-203, IFI-204 and D3, and are encoded by six or more structurally related and IFN-inducible mouse genes mapping at the q21-q23 region of chromosome 1. The proteins encoded by these genes have homologous 200 amino acid segments. IFI-202 is a primarily nuclear phosphoprotein which inhibits cell growth, in part by modulating transcriptional activity of NFκB, E2F, AP-1 and p53. Two related human proteins, MNDA (myeloid cell nuclear differentiation antigen) and IFI-16, have also been described. Expression of MNDA has been observed specifically in cells of the granulocyte-macrophage lineage. IFI-16 is constitutively expressed in various T and B cell lines and can be induced by IFN-γ in HL-60 cells. At least four of the gene-200 cluster of IFN-inducible proteins, IFI-202, IFI-204, MNDA and IFI-16, are localized in the nucleus.

### REFERENCES

1. Tannenbaum, C.S., Major, J., Ohmori, Y. and Hamilton, T.A. 1993. A lipopolysaccharide-inducible macrophage gene (D3) is a new member of an interferon-inducible gene cluster and is selectively expressed in mononuclear phagocytes. *J. Leuk. Biol.* 53: 563-568.
2. Briggs, R.C., Briggs, J.A., Ozer, J., Sealy, L., Dworkin, L.L., Kingsmore, S.F., Seldin, M.F., Kaur, G.P., Athwal, R.S. and Dessypris, E.N. 1994. The human myeloid cell nuclear differentiation antigen gene is one of at least two related interferon-inducible genes located on chromosome 1q that are expressed specifically in hematopoietic cells. *Blood* 83: 2153-2162.
3. Dawson, M.J. and Trapani, J.A. 1995. IFI-16 gene encodes a nuclear protein whose expression is induced by interferons in human myeloid leukaemia cell lines. *J. Cell Biol.* 57: 39-51.
4. Lengyel, P., Choubey, D., Li, S.J. and Datta, B. 1995. The interferon-activatable gene 200 cluster: from structure toward function. *Semin. Virol.* 6: 203-213.
5. Choubey, D., Li, S.J., Datta, B., Gutterman, J.U. and Lengyel, P. 1996. Inhibition of E2F-mediated transcription by p202. *EMBO J.* 15: 5668-5678.

### CHROMOSOMAL LOCATION

Genetic locus: IFI16 (human) mapping to 1q23.1.

### SOURCE

IFI-16 (H-55) is a rabbit polyclonal antibody raised against amino acids 731-785 mapping at the C-terminus of IFI-16 of human origin.

### PRODUCT

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

### STORAGE

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

### APPLICATIONS

IFI-16 (H-55) is recommended for detection of IFI-16 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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-16 siRNA (h): sc-35633, IFI-16 shRNA Plasmid (h): sc-35633-SH and IFI-16 shRNA (h)

Lentiviral Particles: sc-35633-V.

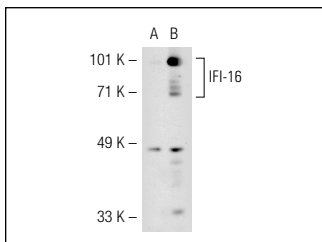
Molecular Weight of IFI-16: 85-95 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, BJAB whole cell lysate: sc-2207 or normal human tonsil.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### DATA



IFI-16 (H-55): sc-50359. Western blot analysis of IFI-16 expression in non-transfected: sc-110760 (A) and human IFI-16 transfected: sc-113241 (B) whole cell lysates.

### RESEARCH USE

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

**MONOS**  
Satisfaction  
Guaranteed

Try **IFI-16 (1G7): sc-8023** or **IFI-16 (G-4): sc-166472**, our highly recommended monoclonal alternatives to IFI-16 (H-55). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **IFI-16 (1G7): sc-8023**.