

# IFI-16 (H-8): sc-136976

## 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 NF $\kappa$ B, 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- $\gamma$  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., et al. 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. Leukoc. Biol.* 53: 563-568.
2. Briggs, R.C., et al. 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

IFI-16 (H-8) is a mouse monoclonal antibody raised against amino acids 731-785 mapping at the C-terminus of IFI-16 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

IFI-16 (H-8) is recommended for detection of IFI-16 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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.

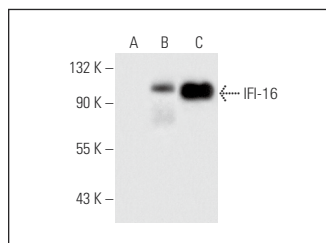
Molecular Weight of IFI-16: 85-95 kDa.

Positive Controls: IFI-16 (h): 293 Lysate: sc-113241, HuT 78 whole cell lysate: sc-2208 or Jurkat nuclear extract: sc-2132.

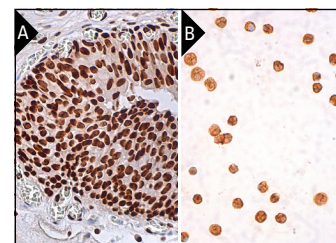
## RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohisto-mount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



IFI-16 (H-8): sc-136976. Western blot analysis of IFI-16 expression in non-transfected 293: sc-110760 (A), human IFI-16 transfected 293: sc-113241 (B) and HuT 78 (C) whole cell lysates.



IFI-16 (H-8): sc-136976. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing nuclear staining of urothelial cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human peripheral blood leukocytes showing nuclear and cytoplasmic staining of leukocytes. Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detected with m-IgG $\kappa$  BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216 (B).

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

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



See **IFI-16 (167): sc-8023** for IFI-16 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.