IFI-16 (D-1): sc-166504



The Power to Question

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 κ 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- 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.

CHROMOSOMAL LOCATION

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

SOURCE

IFI-16 (D-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 702-729 at the C-terminus of IFI-16 of human origin.

PRODUCT

Each vial contains 200 μg lgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-166504 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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.

APPLICATIONS

IFI-16 (D-1) 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 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), 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.

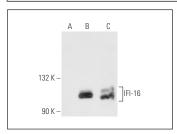
Molecular Weight of IFI-16: 85-95 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, BJAB whole cell lysate: sc-2207 or IFI-16 (h): 293 Lysate: sc-113241.

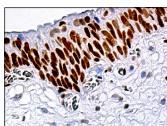
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG κ BP-FITC: sc-516140 or m-lgG 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. 4) Immunohistochemistry: use m-lgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA







IFI-16 (D-1): sc-166504. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing nuclear staining of urothelial rells

SELECT PRODUCT CITATIONS

- 1. Tong, C.W., et al. 2015. Phosphoregulation of cardiac Inotropy via myosin binding protein-C during increased pacing frequency or β 1-adrenergic stimulation. Circ. Heart Fail. 8: 595-604.
- Yu, L., et al. 2016. Functional roles of pattern recognition receptors that recognize virus nucleic acids in human adipose-derived mesenchymal stem cells. Biomed Res. Int. 2016: 9872138.

PROTOCOLS

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

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