

IFI-202 (F-7): sc-166253



The Power to Question

BACKGROUND

Interferon-inducible proteins include IFI-202, IFI-203, IFI-204 and D3, which 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: Ifi202b (mouse) mapping to 1 H3.

SOURCE

IFI-202 (F-7) is a mouse monoclonal antibody raised against amino acids 316-385 mapping near the C-terminus of IFI-202 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IFI-202 (F-7) is available conjugated to agarose (sc-166253 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166253 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166253 PE), fluorescein (sc-166253 FITC), Alexa Fluor[®] 488 (sc-166253 AF488), Alexa Fluor[®] 546 (sc-166253 AF546), Alexa Fluor[®] 594 (sc-166253 AF594) or Alexa Fluor[®] 647 (sc-166253 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166253 AF680) or Alexa Fluor[®] 790 (sc-166253 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

IFI-202 (F-7) is recommended for detection of IFI-202a and IFI-202b of mouse 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-202 siRNA (m): sc-40698, IFI-202 shRNA Plasmid (m): sc-40698-SH and IFI-202 shRNA (m) Lentiviral Particles: sc-40698-V.

Molecular Weight of IFI-202: 52 kDa.

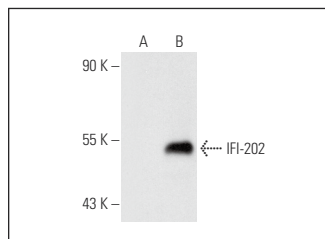
Positive Controls: RAW 264.7 whole cell lysate: sc-2211 or IFI-202 (m2): 293T Lysate: sc-120950.

RESEARCH USE

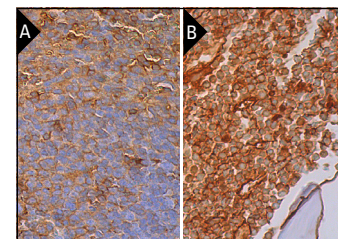
For research use only, not for use in diagnostic procedures.

STORAGE

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

DATA

IFI-202 (F-7): sc-166253. Western blot analysis of IFI-202 expression in non-transfected: sc-117752 (A) and mouse IFI-202 transfected: sc-120950 (B) 293T whole cell lysates.



IFI-202 (F-7): sc-166253. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse spleen tissue showing cytoplasmic staining of cells in white pulp and cells in red pulp (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse bone marrow tissue showing cytoplasmic staining of hematopoietic cells (B).

SELECT PRODUCT CITATIONS

- Panchanathan, R., et al. 2010. Aim2 deficiency stimulates the expression of IFN-inducible IFI-202, a lupus susceptibility murine gene within the Nba2 autoimmune susceptibility locus. *J. Immunol.* 185: 7385-7393.
- Panchanathan, R., et al. 2011. Aim2 deficiency in mice suppresses the expression of the inhibitory Fc γ receptor (Fc γ RIIB) through the induction of the IFN-inducible p202, a lupus susceptibility protein. *J. Immunol.* 186: 6762-6770.
- Panchanathan, R., et al. 2011. Cell type and gender-dependent differential regulation of the p202 and Aim2 proteins: implications for the regulation of innate immune responses in SLE. *Mol. Immunol.* 49: 273-280.
- Panchanathan, R., et al. 2012. Distinct regulation of murine lupus susceptibility genes by the IRF5/Blimp-1 axis. *J. Immunol.* 188: 270-278.
- Chung, H., et al. 2021. AIM2 suppresses inflammation and epithelial cell proliferation during glomerulonephritis. *J. Immunol.* 207: 2799-2812.
- Lim, G.Y., et al. 2023. IFI16/Ifi202 released from breast cancer induces secretion of inflammatory cytokines from macrophages and promotes tumor growth. *J. Cell. Physiol.* 238: 1507-1519.

PROTOCOLS

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

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