

# IRF-5 (D-10): sc-390365



The Power to Question

## BACKGROUND

Interferon regulatory factor 5 (IRF-5), belongs to the IRF family of DNA-binding factors, which includes IRF-1, IRF-2, IRF-3, IRF-4, IRF-6, IRF-7, ISGF-3 $\gamma$  p48 and IFN consensus sequence-binding protein (ICSBP). The IRF family regulate both interferon and interferon-inducible genes. IRF-5, like IRF-3 and IRF-7, is a direct transducer of virus-mediated signaling and plays a role in the expression of multiple cytokines/chemokines. Although IRF-5 is a direct target of p53, its cell cycle regulatory and proapoptotic effects are p53 independent.

## REFERENCES

1. Darnell, J.E., Jr., et al. 1994. JAK/Stat pathways and transcriptional activation in response to IFNs and other extracellular signaling proteins. *Science* 264: 1415-1421.
2. Mamane, Y., et al. 1999. Interferon regulatory factors: the next generation. *Gene* 237: 1-14.
3. Barnes, B.J., et al. 2001. Virus-specific activation of a novel interferon regulatory factor, IRF-5, results in the induction of distinct interferon  $\alpha$  genes. *J. Biol. Chem.* 276: 23382-23390.
4. Mori, T., et al. 2002. Identification of the interferon regulatory factor 5 gene (IRF-5) as a direct target for p53. *Oncogene* 21: 2914-2918.
5. Barnes, B.J., et al. 2002. Multiple regulatory domains of IRF-5 control activation, cellular localization, and induction of chemokines that mediate recruitment of T lymphocytes. *Mol. Cell. Biol.* 22: 5721-5740.
6. Barnes, B.J., et al. 2003. Virus-induced heterodimer formation between IRF-5 and IRF-7 modulates assembly of the IFNA enhanceosome *in vivo* and transcriptional activity of IFNA genes. *J. Biol. Chem.* 278: 16630-16641.
7. Barnes, B.J., et al. 2003. Interferon regulatory factor 5, a novel mediator of cell cycle arrest and cell death. *Cancer Res.* 63: 6424-6431.

## CHROMOSOMAL LOCATION

Genetic locus: IRF5 (human) mapping to 7q32.1.

## SOURCE

IRF-5 (D-10) is a mouse monoclonal antibody raised against amino acids 443-498 mapping at the C-terminus of IRF-5 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain 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.

## PROTOCOLS

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

## APPLICATIONS

IRF-5 (D-10) is recommended for detection of IRF-5 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IRF-5 siRNA (h): sc-72044, IRF-5 shRNA Plasmid (h): sc-72044-SH and IRF-5 shRNA (h) Lentiviral Particles: sc-72044-V.

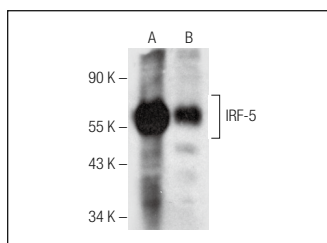
Molecular Weight of IRF-5: 60 kDa.

Positive Controls: Ramos cell lysate: sc-2216, HeLa whole cell lysate: sc-2200 or SR whole cell lysate.

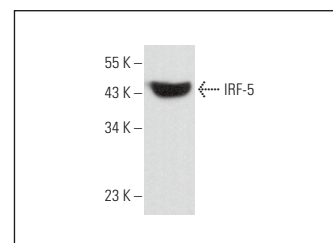
## RECOMMENDED SUPPORT REAGENTS

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 A/G PLUS-Agarose: sc-2003 (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.

## DATA



IRF-5 (D-10): sc-390365. Western blot analysis of IRF-5 expression in SR (A) and Ramos (B) whole cell lysates.



IRF-5 (D-10): sc-390365. Western blot analysis of IRF-5 expression in HeLa whole cell lysate.

## RESEARCH USE

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