

## IRF-7 (Y-19): sc-15993

### BACKGROUND

Interferon regulatory factor 7 (IRF-7) is a nuclear protein belonging to the IRF family of DNA-binding factors which regulate both interferon and interferon-inducible genes. Family members include IRF-1-7, ISGF-3 $\gamma$  p48 (the 48 kDa component of the ISGF-3 complex) and IFN consensus sequence-binding protein (ICSBP). IRF-7 binds to the IFN-stimulated response element (ISRE) and is capable of repressing transcriptional activation by interferon and IRF-1. IRF-7 is predominantly expressed in spleen, thymus and peripheral blood leukocytes, and is associated with Epstein Barr virus latency.

### REFERENCES

1. Darnell, J.E., Jr., Kerr, I.M. and Stark, G.R. 1994. Jak/STAT pathways and transcriptional activation in response to IFNs and other extracellular signaling proteins. *Science* 264: 1415-1421.
2. Mamane, Y., Heylbroeck, C., Genin, P., Algarte, M., Servant, M.J., LePage, C., DeLuca, C., Kwon, H., Lin, R. and Hiscott, J. 1999. Interferon regulatory factors: the next generation. *Gene* 237: 1-14.
3. Zhang, L. and Pagano, J.S. 1997. IRF-7, a new interferon regulatory factor associated with Epstein-Barr virus latency. *Mol. Cell. Biol.* 17: 5748-5757.
4. Ning, S., Hahn, A.M., Huye, L.E. and Pagano, J.S. 2003. Interferon regulatory factor 7 regulates expression of Epstein-Barr virus latent membrane protein 1: a regulatory circuit. *J. Virol.* 77: 9359-9368.
5. Prakash, A. and Levy, D.E. 2006. Regulation of IRF7 through cell type-specific protein stability. *Biochem. Biophys. Res. Commun.* 342: 50-56

### CHROMOSOMAL LOCATION

Genetic locus: IRF7 (human) mapping to 11p15.5; Irf7 (mouse) mapping to 7 F5.

### SOURCE

IRF-7 (Y-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IRF-7 of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-15993 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-15993 X, 200  $\mu$ g/0.1 ml.

### 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) or our catalog for detailed protocols and support products.

### APPLICATIONS

IRF-7 (Y-19) is recommended for detection of IRF-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-7 siRNA (h): sc-38011, IRF-7 siRNA (m): sc-38012, IRF-7 shRNA Plasmid (h): sc-38011-SH, IRF-7 shRNA Plasmid (m): sc-38012-SH, IRF-7 shRNA (h) Lentiviral Particles: sc-38011-V and IRF-7 shRNA (m) Lentiviral Particles: sc-38012-V.

IRF-7 (Y-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### SELECT PRODUCT CITATIONS

1. Saira, K., Zhou, Y. and Jones, C. 2007. The infected cell protein 0 encoded by bovine herpesvirus 1 (bICP0) induces degradation of interferon response factor 3 and, consequently, inhibits  $\beta$  interferon promoter activity. *J. Virol.* 81: 3077-3086.

### RESEARCH USE

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



Try **IRF-7 (G-8): sc-74472** or **IRF-7 (F-1): sc-74471**, our highly recommended monoclonal alternatives to IRF-7 (Y-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **IRF-7 (G-8): sc-74472**.