

IRF-2 (G-20): sc-30894

BACKGROUND

Interferon regulatory factor-1 (IRF-1) and IRF-2 have been identified as novel DNA-binding factors that function as regulators of both type I interferon (interferon- α and β) and interferon-inducible genes. The two factors are structurally related, particularly in their N-terminal regions, which confer DNA binding specificity. In addition, both bind to the same sequence within the promoters of interferon- α and interferon- β genes. IRF-1 functions as an activator of interferon transcription, while IRF-2 binds to the same *cis* elements and represses IRF-1 action. IRF-1 and IRF-2 have been reported to act in a mutually antagonistic manner in regulating cell growth; overexpression of the repressor IRF-2 leads to cell transformation while concomitant overexpression of IRF-1 causes reversion. IRF-1 and IRF-2 are members of a larger family of DNA binding proteins that includes IRF-3, IRF-4, IRF-5, IRF-6, IRF-7, ISGF-3 γ p48 and IFN consensus sequence-binding protein (ICSBP).

REFERENCES

1. Fujita, T., et al. 1988. Evidence for a nuclear factor(s), IRF-1, mediating induction and silencing properties to human IFN- β gene regulatory elements. *EMBO J.* 7: 3397-3405.
2. Harada, H., et al. 1989. Structurally similar but functionally distinct factors, IRF-1 and IRF-2, bind to the same regulatory elements of IFN and IFN-inducible genes. *Cell* 58: 729-739.
3. Tanaka, N., et al. 1993. Recognition DNA sequence of interferon regulatory factor 1 (IRF-1) and IRF-2, regulators of cell growth and the interferon system. *Mol. Cell. Biol.* 13: 4531-4538.
4. Yamamoto, H., et al. 1994. The oncogenic transcription factor IRF-2 possesses a transcriptional repression and latent activation domain. *Oncogene* 9: 1423-1428.

CHROMOSOMAL LOCATION

Genetic locus: IRF2 (human) mapping to 4q35.1; Irf2 (mouse) mapping to 8 B1.1.

SOURCE

IRF-2 (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IRF-2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-30894 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

IRF-2 (G-20) is recommended for detection of IRF-2 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).

IRF-2 (G-20) is also recommended for detection of IRF-2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for IRF-2 siRNA (h): sc-35708, IRF-2 siRNA (m): sc-35709, IRF-2 siRNA (r): sc-270109, IRF-2 shRNA Plasmid (h): sc-35708-SH, IRF-2 shRNA Plasmid (m): sc-35709-SH, IRF-2 shRNA Plasmid (r): sc-270109-SH, IRF-2 shRNA (h) Lentiviral Particles: sc-35708-V, IRF-2 shRNA (m) Lentiviral Particles: sc-35709-V and IRF-2 shRNA (r) Lentiviral Particles: sc-270109-V.

Molecular Weight of IRF-2: 50 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or MM-142 cell lysate: sc-2246.

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.

PROTOCOLS

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


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Try **IRF-2 (G-10): sc-374327** or **IRF-2 (T0-5): sc-101069**, our highly recommended monoclonal alternatives to IRF-2 (G-20).