

IRF-2 (H-229): sc-13042

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).

CHROMOSOMAL LOCATION

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

SOURCE

IRF-2 (H-229) is a rabbit polyclonal antibody raised against amino acids 121-349 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.

Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13042 X, 200 μ g/0.1 ml.

APPLICATIONS

IRF-2 (H-229) 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), 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 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.

IRF-2 (H-229) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of IRF-2: 50 kDa.

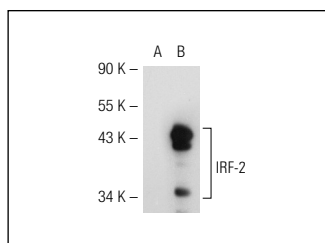
STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

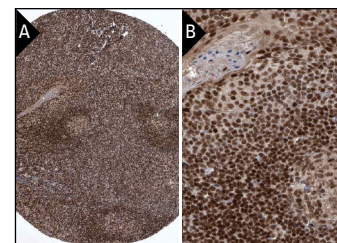
RESEARCH USE

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

DATA



IRF-2 (H-229): sc-13042. Western blot analysis of IRF-2 expression in non-transfected: sc-117752 (A) and mouse IRF-2 transfected: sc-121108 (B) 293T whole cell lysates.



IRF-2 (H-229): sc-13042. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing nuclear staining of lymphoid and epithelial cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Oshima, S., et al. 2004. Interferon regulatory factor 1 (IRF-1) and IRF-2 distinctively up-regulate gene expression and production of interleukin-7 in human intestinal epithelial cells. *Mol. Cell. Biol.* 24: 6298-6310.
- Choo, A., et al. 2008. siRNA targeting the IRF2 transcription factor inhibits leukaemic cell growth. *Int. J. Oncol.* 33: 175-183.
- Prakash, K. and Rath, P.C. 2010. Replacement of the C-terminal tetrapeptide (314 PAPV 317 to 314 SSSM 317) in interferon regulatory factor-2 alters its N-terminal DNA-binding activity. *J. Biosci.* 35: 547-556.
- Karczewski, K.J., et al. 2011. Cooperative transcription factor associations discovered using regulatory variation. *Proc. Natl. Acad. Sci. USA* 108: 13353-13358.
- Cai, Y.J., et al. 2013. Up-regulation of intestinal epithelial cell derived IL-7 expression by keratinocyte growth factor through STAT1/IRF-1, IRF-2 pathway. *PLoS ONE* 8: e58647.

PROTOCOLS

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



Try **IRF-2 (G-10): sc-374327** or **IRF-2 (TQ-5): sc-101069**, our highly recommended monoclonal alternatives to IRF-2 (H-229).