

IRF-1 (H-205): sc-13041

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 (a component of the ISGF-3 complex) and IFN consensus sequence-binding protein (ICSBP).

CHROMOSOMAL LOCATION

Genetic locus: IRF1 (human) mapping to 5q31.1; Irf1 (mouse) mapping to 11 B1.3.

SOURCE

IRF-1 (H-205) is a rabbit polyclonal antibody raised against amino acids 121-325 of IRF-1 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-13041 X, 200 μ g/0.1 ml.

APPLICATIONS

IRF-1 (H-205) is recommended for detection of IRF-1 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). IRF-1 (H-205) is also recommended for detection of IRF-1 in additional species, including canine.

Suitable for use as control antibody for IRF-1 siRNA (h): sc-35706, IRF-1 siRNA (m): sc-35707, IRF-1 shRNA Plasmid (h): sc-35706-SH, IRF-1 shRNA Plasmid (m): sc-35707-SH, IRF-1 shRNA (h) Lentiviral Particles: sc-35706-V and IRF-1 shRNA (m) Lentiviral Particles: sc-35707-V.

IRF-1 (H-205) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of IRF-1: 48 kDa.

Positive Controls: IRF-1 (h2): 293T Lysate: sc-159114, Jurkat nuclear extract: sc-2132 or RAW 264.7 whole cell lysate: sc-2211.

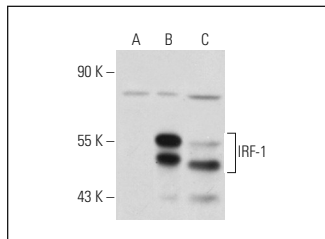
RESEARCH USE

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

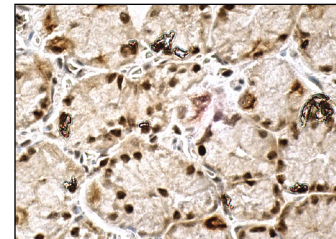
STORAGE

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

DATA



IRF-1 (H-205): sc-13041. Western blot analysis of IRF-1 expression in non-transfected 293T: sc-117752 (A), human IRF-1 transfected 293T: sc-159114 (B) and Jurkat (C) whole cell lysates.



IRF-1 (H-205): sc-13041. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing nuclear staining of glandular cells.

SELECT PRODUCT CITATIONS

- Sers, C., et al. 2002. The class II tumour suppressor gene H-REV107-1 is a target of interferon-regulatory factor-1 and is involved in IFN- γ -induced cell death in human ovarian carcinoma cells. *Oncogene* 21: 2829-2839.
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- Jain, N., et al. 2007. Tumor necrosis factor- α -induced caspase-1 gene expression. Role of p73. *FEBS J.* 274: 4396-4407.
- Lu, X., et al. 2011. Regulation of influenza A virus induced CXCL-10 gene expression requires PI3K/Akt pathway and IRF3 transcription factor. *Mol. Immunol.* 48: 1417-1423.
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- 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.
- Chen, Y.F., et al. 2014. Zhankuic acid A as a novel JAK2 inhibitor for the treatment of concanavalin A-induced hepatitis. *Biochem. Pharmacol.* 91: 217-230.
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Try **IRF-1 (E-4): sc-514544** or **IRF-1 (F-2): sc-514505**, our highly recommended monoclonal alternatives to IRF-1 (H-205). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **IRF-1 (E-4): sc-514544**.