IRF-4 (H-140): sc-28696



The Power to Question

BACKGROUND

Interferon regulatory factor-4 (IRF-4) belongs to the IRF family of DNA-binding factors which regulate both interferon and interferon-inducible genes. Family members include IRF-1-7, ISGF-3 γ p48 and IFN consensus sequence-binding protein (ICSBP). IRF-4 is also known as lymphocyte specific interferon regulatory factor (LSIRF), multiple myeloma oncogene 1 and PU.1 interaction partner (Pip). A nuclear protein specific to lymphoid cells, IRF-4 is a transcriptional activator that binds to the interferon-stimulated response element (ISRE) of the MHC class I promoter.

CHROMOSOMAL LOCATION

Genetic locus: IRF4 (human) mapping to 6p25.3; Irf4 (mouse) mapping to 13 A3.2.

SOURCE

IRF-4 (H-140) is a rabbit polyclonal antibody raised against amino acids 128-267 mapping within an internal region of IRF-4 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-28696 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.

RESEARCH USE

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

APPLICATIONS

IRF-4 (H-140) is recommended for detection of IRF-4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IRF-4 (H-140) is also recommended for detection of IRF-4 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for IRF-4 siRNA (h): sc-35712, IRF-4 siRNA (m): sc-35713, IRF-4 shRNA Plasmid (h): sc-35712-SH, IRF-4 shRNA Plasmid (m): sc-35713-SH, IRF-4 shRNA (h) Lentiviral Particles: sc-35712-V and IRF-4 shRNA (m) Lentiviral Particles: sc-35713-V.

IRF-4 (H-140) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

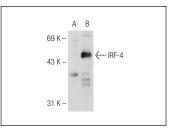
Molecular Weight of IRF-4: 52 kDa.

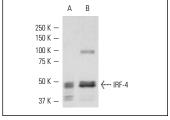
Positive Controls: IRF-4 (h2): 293T Lysate: sc-176207, Ramos cell lysate: sc-2216 or MM-142 cell lysate: sc-2246.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA





IRF-4 (H-140): sc-28696. Western blot analysis of IRF-4 expression in non-transfected: sc-117752 (**A**) and human IRF-4 transfected: sc-176207 (**B**) 293T whole

IRF-4 (H-140): sc-28696. Western blot analysis of IRF-4 expression in MM-142 (**A**) and Ramos (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

- Mäkelä, S.M., et al. 2009. Multiple signaling pathways contribute to synergistic TLR ligand-dependent cytokine gene expression in human monocytederived macrophages and dendritic cells. J. Leukoc. Biol. 85: 664-672.
- 2. Krausgruber, T., et al. 2011. IRF5 promotes inflammatory macrophage polarization and TH1-TH17 responses. Nat. Immunol. 12: 231-238.
- 3. Farrow, M.A., et al. 2011. NFAT and IRF proteins regulate transcription of the anti-HIV gene, APOBEC3G. J. Biol. Chem. 286: 2567-2577.
- Wang, L., et al. 2013. Interferon regulatory factor 4 is activated through c-Src-mediated tyrosine phosphorylation in virus-transformed cells. J. Virol. 87: 9672-9679.

PROTOCOLS

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



Try IRF-4 (F-4): sc-48338 or IRF-4 (E-7): sc-377383, our highly recommended monoclonal alternatives to IRF-4 (H-140). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see IRF-4 (F-4): sc-48338.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com