SANTA CRUZ BIOTECHNOLOGY, INC.

IRF-4 (N-18): sc-11450

SANTA CRUZ BIOTECHNOLOGY

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-3γ 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 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IRF-4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-11450 P, (100 µg 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-11450 X, 200 µg/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.

APPLICATIONS

IRF-4 (N-18) 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), 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 (N-18) 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 (N-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

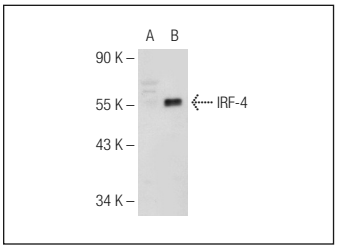
Molecular Weight of IRF-4: 52 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, Ramos cell lysate: sc-2216 or IRF-4 (h2): 293T Lysate: sc-176207.

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.

DATA



IRF-4 (N-18): sc-11450. Western blot analysis of IRF-4 expression in non-transfected: sc-117752 (**A**) and human IRF-4 transfected: sc-176207 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Green, M.R., et al. 2006. Epigenetic regulation during B cell differentiation controls CIITA promoter accessibility. J. Immunol. 177: 3865-3873.
2. Shimokawa, N., et al. 2010. Suppressive effects of transcription factor GATA-1 on cell type-specific gene expression in dendritic cells. Immunogenetics 62: 421-429.
3. Arima, K., et al. 2010. Distinct signal codes generate dendritic cell functional plasticity. Sci. Signal. 3: ra4.

RESEARCH USE

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

PROTOCOLS

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