IRF-4 (M-17): sc-6059



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 (M-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IRF-4 of mouse origin.

PRODUCT

Each vial contains 100 μ g lgG 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-6059 X, 100 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-6059 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

IRF-4 (M-17) 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).

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 (M-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of IRF-4: 52 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, MM-142 cell lysate: sc-2246 or IRF-4 (h2): 293T Lysate: sc-176207.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

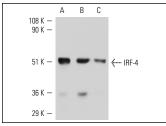
PROTOCOLS

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

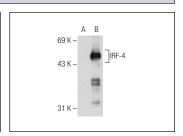
RESEARCH USE

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

DATA







IRF-4 (M-17): sc-6059. Western blot analysis of IRF-4 expression in non-transfected: sc-117752 (A) and human IRF-4 transfected: sc-176207 (B) 293T whole cell Ivsates.

SELECT PRODUCT CITATIONS

- Falini, B., et al. 2000. A monoclonal antibody (MUM1p) detects expression of the MUM1/IRF4 protein in a subset of germinal center B cells, plasma cells, and activated T cells. Blood 6: 2084-2092.
- Tsuboi, K., et al. 2000. MUM1/IRF4 expression as a frequent event in mature lymphoid malignancies. Leukemia 14: 449-456.
- 3. Anastasiadou, E., et al. 2009. Epstein-Barr virus infection leads to partial phenotypic reversion of terminally differentiated malignant B cells. Cancer Lett. 284: 165-174.
- 4. Wei, F., et al. 2009. PU.1 can recruit BCL6 to DNA to repress gene expression in germinal center B cells. Mol. Cell. Biol. 29: 4612-4622.
- 5. Montes-Moreno, S., et al. 2010. Aggressive large B cell lymphoma with plasma cell differentiation: immunohistochemical characterization of plasmablastic lymphoma and diffuse large B cell lymphoma with partial plasmablastic phenotype. Haematologica 95: 1342-1349.
- Perez-Galán, P., et al. 2011. Bortezomib resistance in mantle cell lymphoma is associated with plasmacytic differentiation. Blood 117: 542-552.
- Ochiai, K., et al. 2012. A self-reinforcing regulatory network triggered by limiting IL-7 activates pre-BCR signaling and differentiation. Nat. Immunol. 13: 300-307.
- 8. Li, P., et al. 2012. BATF-JUN is critical for IRF4-mediated transcription in T cells. Nature 490: 543-546.
- Lu, G., et al. 2015. Myeloid cell-derived inducible nitric oxide synthase suppresses M1 macrophage polarization. Nat. Commun. 6: 6676.

MONOS Satisfation Guaranteed Try IRF-4 (F-4): sc-48338 or IRF-4 (E-7): sc-377383, our highly recommended monoclonal alternatives to IRF-4 (M-17). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see IRF-4 (F-4): sc-48338.