SANTA CRUZ BIOTECHNOLOGY, INC.

IRF-4 (MUM1p): sc-56713

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.

REFERENCES

1. Fujita, T., et al. 1988. Evidence for a nuclear factor(s), IRF-1, mediating induction and silencing properties to human IFN-β gene regulatory elements. EMBO J. 7: 3397-3405.
2. Tanaka, N., et al. 1993. Recognition DNA sequence of interferon regulatory factor 1 (IRF-1) and IRF-2, regulators of cell growth and the interferon system. Mol. Cell. Biol. 13: 4531-4538.
3. Darnell, J.E., Jr., et al. 1994. JAK/Stat pathways and transcriptional activation in response to IFNs and other extracellular signaling proteins. Science 264: 1415-1421.

CHROMOSOMAL LOCATION

Genetic locus: IRF4 (human) mapping to 6p25.3.

SOURCE

IRF-4 (MUM1p) is a mouse monoclonal antibody raised against recombinant IRF-4 of human origin.

PRODUCT

Each vial contains 250 µl culture supernatant containing IgG_1 with < 0.1% sodium azide.

APPLICATIONS

IRF-4 (MUM1p) is recommended for detection of IRF-4 of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:200), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200).

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

Molecular Weight of IRF-4: 52 kDa.

Positive Controls: IRF-4 (h2): 293T Lysate: sc-176207, Ramos cell lysate: sc-2216 or NAMALWA cell lysate: sc-2234.

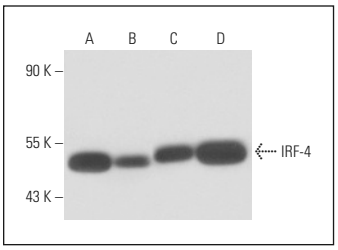
RESEARCH USE

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

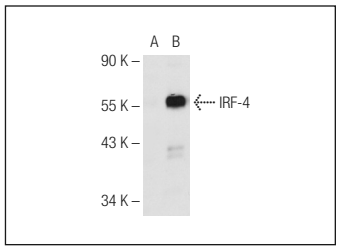
STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

DATA



IRF-4 (MUM1p): sc-56713. Western blot analysis of IRF-4 expression in Ramos (**A**), NAMALWA (**B**), SR (**C**) and GA-10 (**D**) whole cell lysates.



IRF-4 (MUM1p): sc-56713. 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. Zettl, A., et al. 2005. Composite marginal zone B-cell lymphoma and classical Hodgkin's lymphoma: a clinicopathological study of 12 cases. Histopathology 46: 217-228.
2. Kikuchi, A., et al. 2008. Characterization of *de novo* diffuse large B-cell lymphoma with a translocation of c-Myc and immunoglobulin genes. Leuk. Res. 32: 1176-1182.
3. Stacchini, A., et al. 2012. Flow cytometric detection and quantification of CD56 (neural cell adhesion molecule, NCAM) expression in diffuse large B cell lymphomas and review of the literature. Histopathology 60: 452-459.
4. Jin, H.Y., et al. 2013. MicroRNA-17-92 plays a causative role in lymphomagenesis by coordinating multiple oncogenic pathways. EMBO J. 32: 2377-2391.
5. Desantis, A., et al. 2015. Che-1-induced inhibition of mTOR pathway enables stress-induced autophagy. EMBO J. 34: 1214-1230.
6. Wang, L., et al. 2018. LIMD1 is induced by and required for LMP1 signaling, and protects EBV-transformed cells from DNA damage-induced cell death. Oncotarget 9: 6282-6297.
7. Ma, X.B., et al. 2018. Coexpression of CD5 and CD43 predicts worse prognosis in diffuse large B-cell lymphoma. Cancer Med. 7: 4284-4295.
8. Li, C., et al. 2020. EBNA2-deleted Epstein-Barr virus (EBV) isolate, P3HR1, causes Hodgkin-like lymphomas and diffuse large B cell lymphomas with type II and Wp-restricted latency types in humanized mice. PLoS Pathog. 16: e1008590.

CONJUGATES

See **IRF-4 (F-4): sc-48338** for IRF-4 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.