

IRF-2BP1 (T-14): sc-161745

BACKGROUND

IRF-2 (interferon regulatory factor-2) has been identified as a novel DNA-binding factor that functions as a regulator of both type I interferon (interferon- α and β) and interferon-inducible genes. IRF-2 may act in a mutually antagonistic manner in regulating cell growth. IRF-2BP1 (interferon regulatory factor 2 binding protein 1) is a 584 amino acid nuclear protein belonging to the IRF-2BP family. IRF-2BP1 acts as a corepressor of IRF-2 that can inhibit both enhancer-activation and basal transcription in a manner that is not dependent upon histone deacetylation. IRF-2BP1 enhances the polyubiquitination of JDP2 (Jun-dimerization protein 2), a member of the c-Jun family of transcription factors. IRF-2BP1 contains a C-terminal RING-type zinc finger domain, which is necessary for interaction with BAP1 (BRCA1 associated protein 1). IRF-2BP1 is encoded by a gene located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

1. Harada, H., Fujita, T., Miyamoto, M., Kimura, Y., Maruyama, M., Furia, A., Miyata, T. and Taniguchi, T. 1989. Structurally similar but functionally distinct factors, IRF-1 and IRF-2, bind to the same regulatory elements of IFN and IFN-inducible genes. *Cell* 58: 729-739.
2. Tanaka, N., Kawakami, T. and Taniguchi, T. 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. Yamamoto, H., Lamphier, M.S., Fujita, T., Taniguchi, T. and Harada, H. 1994. The oncogenic transcription factor IRF-2 possesses a transcriptional repression and latent activation domain. *Oncogene* 9: 1423-1428.
4. Childs, K.S. and Goodbourn, S. 2003. Identification of novel corepressor molecules for interferon regulatory factor-2. *Nucleic Acids Res.* 31: 3016-3026.
5. Chae, M., Kim, K., Park, S.M., Jang, I.S., Seo, T., Kim, D.M., Kim, I.C., Lee, J.H. and Park, J. 2008. IRF-2 regulates NF κ B activity by modulating the subcellular localization of NF κ B. *Biochem. Biophys. Res. Commun.* 370: 519-524.
6. Kimura, M. 2008. IRF2-binding protein-1 is a JDP2 ubiquitin ligase and an inhibitor of ATF-2-dependent transcription. *FEBS Lett.* 582: 2833-2837.
7. Masumi, A., Hamaguchi, I., Kuramitsu, M., Mizukami, T., Takizawa, K., Momose, H., Naito, S. and Yamaguchi, K. 2009. Interferon regulatory factor-2 induces megakaryopoiesis in mouse bone marrow hematopoietic cells. *FEBS Lett.* 583: 3493-3500.

CHROMOSOMAL LOCATION

Genetic locus: IRF2BP1 (human) mapping to 19q13.32; Irf2bp1 (mouse) mapping to 7 A3.

SOURCE

IRF-2BP1 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IRF-2BP1 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.

Blocking peptide available for competition studies, sc-161745 P, (100 μ g 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-161745 X, 200 μ g/0.1 ml.

APPLICATIONS

IRF-2BP1 (T-14) is recommended for detection of IRF-2BP1 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); non cross-reactive with IRF-2BP2.

IRF-2BP1 (T-14) is also recommended for detection of IRF-2BP1 in additional species, including equine.

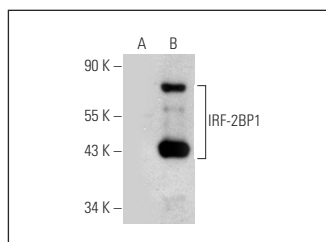
Suitable for use as control antibody for IRF-2BP1 siRNA (h): sc-97273, IRF-2BP1 siRNA (m): sc-146284, IRF-2BP1 shRNA Plasmid (h): sc-97273-SH, IRF-2BP1 shRNA Plasmid (m): sc-146284-SH, IRF-2BP1 shRNA (h) Lentiviral Particles: sc-97273-V and IRF-2BP1 shRNA (m) Lentiviral Particles: sc-146284-V.

IRF-2BP1 (T-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

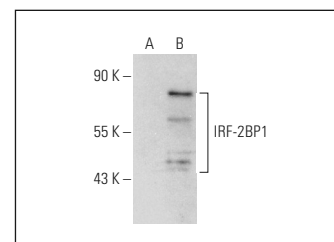
Molecular Weight of IRF-2BP1: 62 kDa.

Positive Controls: IRF-2BP1 (h): 293T Lysate: sc-111584 or HeLa whole cell lysate: sc-2200.

DATA



IRF-2BP1 (T-14): sc-161745. Western blot analysis of IRF-2BP1 expression in non-transfected: sc-117752 (A) and human IRF-2BP1 transfected: sc-111584 (B) 293T whole cell lysates.



IRF-2BP1 (T-14): sc-161745. Western blot analysis of IRF-2BP1 expression in non-transfected: sc-117752 (A) and human IRF-2BP1 transfected: sc-114866 (B) 293T whole cell lysates.

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.