



## IRF-2BP2 (L-13): sc-136716

### BACKGROUND

Interferon regulatory factors-1 and -2 (IRF-1 and IRF-2) are DNA-binding proteins that function as regulators of both type I interferons (IFN- $\alpha$  and - $\beta$ ) and interferon-inducible genes. IRF-2BP2 (interferon regulatory factor 2 binding protein 2) is a 587 amino acid nuclear protein that belongs to the IRF-2BP family and exists as part of a corepressor complex with IRF-1 and IRF-2BP1. Interacting with the C-terminal domain of IRF-2, IRF-2BP2 functions to repress transcription in an IRF-2-dependent manner. IRF-2BP2 is expressed as three alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 1. Chromosome 1 is the largest human chromosome, spanning about 260 million base pairs and comprising 8% of the human genome. Several disorders, including Stickler syndrome, Parkinsons disease, Gaucher disease, malignant melanoma and Usher syndrome, are caused by defects chromosome 1-localized genes.

### REFERENCES

1. Koenig Merediz, S.A., Schmidt, M., Hoppe, G.J., Alfken, J., Meraro, D., Levi, B.Z., Neubauer, A. and Wittig, B. 2000. Cloning of an interferon regulatory factor 2 isoform with different regulatory ability. *Nucleic Acids Res.* 28: 4219-4224.
2. Childs, K.S. and Goodbourn, S. 2003. Identification of novel corepressor molecules for interferon regulatory factor-2. *Nucleic Acids Res.* 31: 3016-3026.
3. Beausoleil, S.A., Jedrychowski, M., Schwartz, D., Elias, J.E., Villén, J., Li, J., Cohn, M.A., Cantley, L.C. and Gygi, S.P. 2004. Large-scale characterization of HeLa cell nuclear phosphoproteins. *Proc. Natl. Acad. Sci. USA* 101: 12130-12135.
4. Peng, Y.B., Yerle, M. and Liu, B. 2006. Mapping of nine porcine interferon regulatory factor genes. *Anim. Genet.* 37: 600-601.
5. Han, K.J., Jiang, L. and Shu, H.B. 2008. Regulation of IRF-2 transcriptional activity by its sumoylation. *Biochem. Biophys. Res. Commun.* 372: 772-778.
6. Kimura, M. 2008. IRF-2-binding protein-1 is a JDP2 ubiquitin ligase and an inhibitor of ATF-2-dependent transcription. *FEBS Lett.* 582: 2833-2837.

### CHROMOSOMAL LOCATION

Genetic locus: IRF2BP2 (human) mapping to 1q42.3; Irf2bp2 (mouse) mapping to 8 E2.

### SOURCE

IRF-2BP2 (L-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of IRF-2BP2 of human origin.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

### PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136716 P, (100  $\mu$ 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-136716 X, 200  $\mu$ g/0.1 ml.

### APPLICATIONS

IRF-2BP2 (L-13) is recommended for detection of IRF-2BP2 isoforms 1-3 of mouse and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with IRF-2BP1 family member.

Suitable for use as control antibody for IRF-2BP2 siRNA (h): sc-88031, IRF-2BP2 siRNA (m): sc-146285, IRF-2BP2 shRNA Plasmid (h): sc-88031-SH, IRF-2BP2 shRNA Plasmid (m): sc-146285-SH, IRF-2BP2 shRNA (h) Lentiviral Particles: sc-88031-V and IRF-2BP2 shRNA (m) Lentiviral Particles: sc-146285-V.

IRF-2BP2 (L-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of IRF-2BP2: 61 kDa.

### 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) 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.

### RESEARCH USE

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