

IRF-2BP2 (G-13): sc-136715

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- α and - β) 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., et al. 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., et al. 2004. Large-scale characterization of HeLa cell nuclear phosphoproteins. *Proc. Natl. Acad. Sci. USA* 101: 12130-12135.
4. Peng, Y.B., et al. 2006. Mapping of nine porcine interferon regulatory factor genes. *Anim. Genet.* 37: 600-601.
5. Han, K.J., et al. 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.

SOURCE

IRF-2BP2 (G-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of IRF-2BP2 of human origin.

PRODUCT

Each vial contains 100 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-136715 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-136715 X, 200 μ g/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-2BP2 (G-13) is recommended for detection of IRF-2BP2 isoforms 1-3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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.

IRF-2BP2 (G-13) is also recommended for detection of IRF-2BP2 isoforms 1-3 in additional species, including equine, canine, bovine and porcine.

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

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

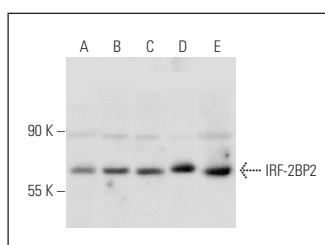
Molecular Weight of IRF-2BP2: 61 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HL-60 whole cell lysate: sc-2209 or HEK293 whole cell lysate: sc-45136.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



IRF-2BP2 (G-13): sc-136715. Western blot analysis of IRF-2BP2 expression in K-562 (A), HL-60 (B), HEK293 (C) and MDA-MB-231 (D) whole cell lysates and HeLa nuclear extract (E).

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.