

IFRD1 (D-7): sc-515012

BACKGROUND

Interferon-related developmental regulator-1 (IFRD1) gene is a human homolog of the rat PC4 gene initially isolated as a nerve growth factor-inducible sequence in PC12 cells. PC4 is present at high levels along the neural tube of early rat embryos. Expression of PC4 in the myoblast C2C12 cell line decreases within 6 hours from the onset of differentiation, attains a minimum after 12 hours, and returns to basal level within 36 hours; the transient downregulation of PC4 expression can be prevented by transforming growth factor β , a molecule which inhibits the differentiation of muscle.

REFERENCES

- Guardavaccaro, D., et al. 1995. Inhibition of differentiation in myoblasts deprived of the interferon-related protein PC4. *Cell Growth Differ.* 6: 159-169.
- Iacopetti, P., et al. 1996. Expression of the PC4 gene in the developing rat nervous system. *Brain Res.* 707: 293-297.
- Buane, P., et al. 1998. Cloning of the human interferon-related developmental regulator (IFRD1) gene coding for the PC4 protein, a member of a novel family of developmentally regulated genes. *Genomics* 51: 233-242.
- Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 603502. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- LocusLink Report (LocusID: 3475). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: IFRD1 (human) mapping to 7q31.1; IFRD1 (mouse) mapping to 12 B1.

SOURCE

IFRD1 (D-7) is a mouse monoclonal antibody raised against amino acids 161-249 mapping within an internal region of IFRD1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain 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-515012 X, 200 μ g/0.1 ml.

IFRD1 (D-7) is available conjugated to agarose (sc-515012 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515012 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515012 PE), fluorescein (sc-515012 FITC), Alexa Fluor® 488 (sc-515012 AF488), Alexa Fluor® 546 (sc-515012 AF546), Alexa Fluor® 594 (sc-515012 AF594) or Alexa Fluor® 647 (sc-515012 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515012 AF680) or Alexa Fluor® 790 (sc-515012 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

IFRD1 (D-7) is recommended for detection of IFRD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 IFRD1 siRNA (h): sc-38015, IFRD1 siRNA (m): sc-38016, IFRD1 shRNA Plasmid (h): sc-38015-SH, IFRD1 shRNA Plasmid (m): sc-38016-SH, IFRD1 shRNA (h) Lentiviral Particles: sc-38015-V and IFRD1 shRNA (m) Lentiviral Particles: sc-38016-V.

IFRD1 (D-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

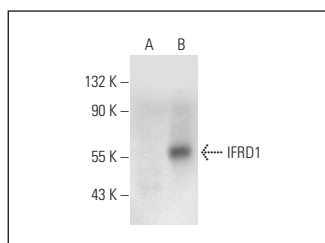
Molecular Weight of IFRD1: 53 kDa.

Positive Controls: IFRD1 (m): 293T Lysate: sc-120958.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



IFRD1 (D-7): sc-515012. Western blot analysis of IFRD1 expression in non-transfected: sc-117752 (A) and mouse IFRD1 transfected: sc-120958 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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