

IFRD1 (M-20): sc-25161

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 down-regulation of PC4 expression can be prevented by transforming growth factor β , a molecule which inhibits the differentiation of muscle.

REFERENCES

- Guardavaccaro, D., Ciotti, M.T., Schafer, B.W., Montagnoli, A. and Tirone, F. 1995. Inhibition of differentiation in myoblasts deprived of the interferon-related protein PC4. *Cell Growth Differ.* 6: 159-169.
- Iacopetti, P., Barsacchi, G., Tirone, F. and Cremisi, F. 1996. Expression of the PC4 gene in the developing rat nervous system. *Brain Res.* 707: 293-297.
- Buane, P., Incerti, B., Guardavaccaro, D., Avvantaggiato, V., Simeone, A. and Tirone, F. 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 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IFRD1 of mouse 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-25161 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-25161 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.

PROTOCOLS

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

APPLICATIONS

IFRD1 (M-20) is recommended for detection of IFRD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

IFRD1 (M-20) is also recommended for detection of IFRD1 in additional species, including equine, canine, bovine, porcine and avian.

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 (M-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of IFRD1: 53 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

RESEARCH USE

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



Try **IFRD1 (D-7): sc-515012**, our highly recommended monoclonal alternative to IFRD1 (M-20).