SANTA CRUZ BIOTECHNOLOGY, INC.

IFRD2 (DD-Z): sc-101071

BACKGROUND

IFRD2 (Interferon-related developmental regulator 2), also known as SKMC15, is a 442 amino acid soluble nuclear protein. IFRD2 is ubiquitously expressed and contains a β-catenin-like repeat, which may indicate an involvement in APC signaling. With 75% homology to IFRD1, IFRD2 may also regulate expression of surface adhesion molecules involved in differentiation and fusion of myogenic satellite cells. Although the gene encoding IFRD2 undergoes overlapping homozygous deletions in many lung cancer cell lines, IFRD2 exhibits no loss-of-function mutations in cancer cells, suggesting a possible role in tumor progression.

REFERENCES

1. Latif, F., Duh, F.M., Bader, S., Sekido, Y., Li, H., Geil, L., Zbar, B., Minna, J.D. and Lerman, M.I. 1997. The human homolog of the rodent immediate early response genes, PC4 and TIS7, resides in the lung cancer tumor suppressor gene region on chromosome 3p21. Hum. Genet. 99: 334-341.
2. Buanne, 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.
3. Lerman, M.I. and Minna, J.D. 2000. The 630-kb lung cancer homozygous deletion region on human chromosome 3p21.3: identification and evaluation of the resident candidate tumor suppressor genes. The international lung cancer chromosome 3p21.3 tumor suppressor gene consortium. Cancer Res. 60: 6116-6133.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602725. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Vadivelu, S.K., Kurzbauer, R., Dieplinger, B., Zweyer, M., Schafer, R., Wernig, A., Vietor, I. and Huber, L.A. 2004. Muscle regeneration and myogenic differentiation defects in mice lacking TIS7. Mol. Cell. Biol. 24: 3514-3525.

CHROMOSOMAL LOCATION

Genetic locus: IFRD2 (human) mapping to 3p21.31.

SOURCE

IFRD2 (DD-Z) is a mouse monoclonal antibody raised against recombinant IFRD2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

IFRD2 (DD-Z) is recommended for detection of IFRD2 of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:2500) and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:100-1:5000).

Suitable for use as control antibody for IFRD2 siRNA (h): sc-78013, IFRD2 shRNA Plasmid (h): sc-78013-SH and IFRD2 shRNA (h) Lentiviral Particles: sc-78013-V.

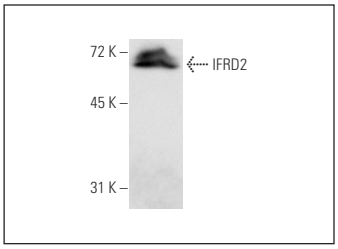
Molecular Weight of IFRD2: 48 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

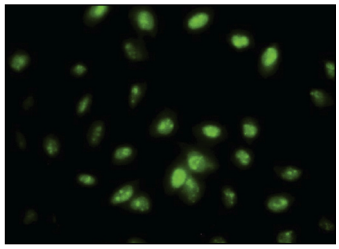
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



IFRD2 (DD-Z): sc-101071. Western blot analysis of IFRD2 expression in HeLa whole cell lysate.



IFRD2 (DD-Z): sc-101071. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization.

PROTOCOLS

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