

IFITM2 (m): 293T Lysate: sc-126995

BACKGROUND

Interferons (IFNs) are potential anti-tumor agents, as they exhibit anti-proliferative and differentiating properties, in addition to functioning in the defense against microbial infections. IFN exposure induces the regulation of expression levels of cellular proteins that mediate the pleiotropic effects of interferons. These effects may be mediated by soluble factors or by cell-cell interactions involving specific membrane proteins. The IFITM family of proteins are transmembrane proteins that are upregulated in human colorectal carcinomas. IFITM2 (interferon induced transmembrane protein 2), also known as 1-8D, is a 132 amino acid multi-pass membrane protein belonging to the CD225 family and is induced by IFN- α and IFN- γ .

REFERENCES

1. Reid, L.E., Brasnett, A.H., Gilbert, C.S., Porter, A.C., Gewert, D.R., Stark, G.R. and Kerr, I.M. 1989. A single DNA response element can confer inducibility by both α - and γ -interferons. *Proc. Natl. Acad. Sci. USA* 86: 840-844.
2. Deblandre, G.A., Marinx, O.P., Evans, S.S., Majaj, S., Leo, O., Caput, D., Huez, G.A. and Wathélet, M.G. 1995. Expression cloning of an interferon-inducible 17-kDa membrane protein implicated in the control of cell growth. *J. Biol. Chem.* 270: 23860-23866.
3. Perry, D.J., Austin, K.J. and Hansen, T.R. 1999. Cloning of interferon-stimulated gene 17: the promoter and nuclear proteins that regulate transcription. *Mol. Endocrinol.* 13: 1197-1206.
4. Saitou, M., Barton, S.C. and Surani, M.A. 2002. A molecular programme for the specification of germ cell fate in mice. *Nature* 418: 293-300.
5. Akyerli, C.B., Beksac, M., Holko, M., Frevel, M., Dalva, K., Ozbek, U., Soydan, E., Ozcan, M., Ozet, G., Ilhan, O., Gürman, G., Akan, H., Williams, B.R. and Özçelik, T. 2005. Expression of IFITM1 in chronic myeloid leukemia patients. *Leuk. Res.* 29: 283-286.
6. Wylie, C. 2005. IFITM1-mediated cell repulsion controls the initial steps of germ cell migration in the mouse. *Dev. Cell* 9: 723-724.
7. Tanaka, S.S., Yamaguchi, Y.L., Tsoi, B., Lickert, H. and Tam, P.P. 2005. IFITM/Mil/Fragilis family proteins IFITM1 and IFITM3 play distinct roles in mouse primordial germ cell homing and repulsion. *Dev. Cell* 9: 745-756.
8. Andreu, P., Colnot, S., Godard, C., Laurent-Puig, P., Lamarque, D., Kahn, A., Perret, C. and Romagnolo, B. 2006. Identification of the IFITM family as a new molecular marker in human colorectal tumors. *Cancer Res.* 66: 1949-1955.

CHROMOSOMAL LOCATION

Genetic locus: Ifitm2 (mouse) mapping to 7 F5.

PRODUCT

IFITM2 (m): 293T Lysate represents a lysate of mouse IFITM2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

IFITM2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive IFITM2 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

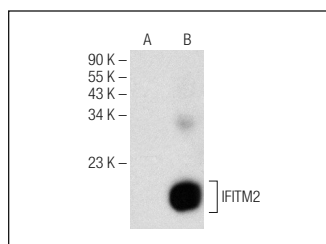
IFITM2 (A-6): sc-373676 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse IFITM2 expression in IFITM2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



IFITM2 (A-6): sc-373676. Western blot analysis of IFITM2 expression in non-transfected: sc-117752 (A) and mouse IFITM2 transfected: sc-126995 (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.