



# IFIT1 (h2): 293T Lysate: sc-171775

## BACKGROUND

Interferon-induced protein with tetratricopeptide repeats 1 (IFIT1), also known as glucocorticoid-attenuated response gene 16 protein (GARG-16), is a 463 amino acid protein belonging to the IFIT family. Studies have shown that IFIT1 plays a dominant role in the host response to different viruses in the central nervous system. Also, increased levels of IFIT1 in pregnancy have implicated a role in the endometrial pathways critical for uterine support of peri-implantation conceptus survival, growth and implantation. Containing 10 TPR repeats, the gene encoding human IFIT1 maps to chromosome 10q23.31. Chromosome 10 contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome.

## REFERENCES

1. Chebath, J., et al. 1983. Interferon-induced 56,000 M<sub>r</sub> protein and its mRNA in human cells: molecular cloning and partial sequence of the cDNA. *Nucleic Acids Res.* 11: 1213-1226.
2. Bluysen, H.A., et al. 1994. Structure, chromosome localization, and regulation of expression of the interferon-regulated mouse Ifi54/Ifi56 gene family. *Genomics* 24: 137-148.
3. Smith, J.B. and Herschman, H.R. 1996. The glucocorticoid attenuated response genes GARG-16, GARG-39, and GARG-49/IRG2 encode inducible proteins containing multiple tetratricopeptide repeat domains. *Arch. Biochem. Biophys.* 330: 290-300.
4. Kitamura, Y., et al. 2001. Lipopolysaccharide-induced switch between retinoid receptor (RXR)  $\alpha$  and glucocorticoid attenuated response gene (GARG)-16 messenger RNAs in cultured rat microglia. *J. Neurosci. Res.* 64: 553-563.
5. Hua, J., et al. 2006. Functional assay of type I interferon in systemic lupus erythematosus plasma and association with anti-RNA binding protein autoantibodies. *Arthritis Rheum.* 54: 1906-1916.
6. Gray, C.A., et al. 2006. Identification of endometrial genes regulated by early pregnancy, progesterone, and interferon Tau in the ovine uterus. *Biol. Reprod.* 74: 383-394.
7. Pellagatti, A., et al. 2006. Gene expression profiles of CD34<sup>+</sup> cells in myelodysplastic syndromes: involvement of interferon-stimulated genes and correlation to FAB subtype and karyotype. *Blood* 108: 337-345.
8. Zhang, Y.B., et al. 2007. The innate immune response to grass carp hemorrhagic virus (GCHV) in cultured *Carassius auratus* blastulae (CAB) cells. *Dev. Comp. Immunol.* 31: 232-243.
9. Wachter, C., et al. 2007. Coordinated regulation and widespread cellular expression of interferon-stimulated genes (ISG) ISG-49, ISG-54, and ISG-56 in the central nervous system after infection with distinct viruses. *J. Virol.* 81: 860-871.

## CHROMOSOMAL LOCATION

Genetic locus: IFIT1 (human) mapping to 10q23.31.

## RESEARCH USE

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

## PRODUCT

IFIT1 (h2): 293T Lysate represents a lysate of human IFIT1 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

IFIT1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive IFIT1 antibodies. Recommended use: 10-20  $\mu$ l per lane.

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

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.