

IFIT5 (N-14): sc-104940

BACKGROUND

The tetratricopeptide repeat (TPR) motif is a degenerate, 34 amino acid sequence found in many proteins and acts to mediate protein-protein interactions in various pathways. At the sequence level, there can be up to 16 tandem TPR repeats, each of which has a helix-turn-helix shape that stacks on other TPR repeats to achieve ligand binding specificity. IFIT5 (interferon-induced protein with tetratricopeptide repeats 5), also known as RI58 (retinoic acid- and interferon-inducible 58 kDa protein), is a 482 amino acid protein that contains eight TPR repeats. IFIT5 expression is induced by retinoic acid and interferon stimulation. The gene encoding IFIT5 maps to human chromosome ten, which houses over 1,200 genes and comprises nearly 4.5% of the human genome.

REFERENCES

1. Wathélet, M.G., et al. 1988. Cloning and chromosomal location of human genes inducible by type I interferon. *Somat. Cell Mol. Genet.* 14: 415-426.
2. Niikura, T., et al. 1997. A novel interferon-inducible gene expressed during myeloid differentiation. *Blood Cells Mol. Dis.* 23: 337-349.
3. Zhu, H., et al. 1997. Use of differential display analysis to assess the effect of human cytomegalovirus infection on the accumulation of cellular RNAs: induction of interferon-responsive RNAs. *Proc. Natl. Acad. Sci. USA* 94: 13985-13990.
4. Young, J.C., et al. 1998. Specific binding of tetratricopeptide repeat proteins to the C-terminal 12-kDa domain of Hsp 90. *J. Biol. Chem.* 273: 18007-18010.
5. Cortajarena, A.L., et al. 2004. Protein design to understand peptide ligand recognition by tetratricopeptide repeat proteins. *Protein Eng. Des. Sel.* 17: 399-409.
6. Hogg, J.R. and Collins, K. 2007. Human Y5 RNA specializes a Ro ribonucleo-protein for 5S ribosomal RNA quality control. *Genes Dev.* 21: 3067-3072.
7. Ovstebø, R., et al. 2008. Identification of genes particularly sensitive to lipopolysaccharide (LPS) in human monocytes induced by wild-type versus LPS-deficient *Neisseria meningitidis* strains. *Infect. Immun.* 76: 2685-2695.

CHROMOSOMAL LOCATION

Genetic locus: IFIT5 (human) mapping to 10q23.31.

SOURCE

IFIT5 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IFIT5 of human origin.

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.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104940 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IFIT5 (N-14) is recommended for detection of IFIT5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

IFIT5 (N-14) is also recommended for detection of IFIT5 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for IFIT5 siRNA (h): sc-90427, IFIT5 shRNA Plasmid (h): sc-90427-SH and IFIT5 shRNA (h) Lentiviral Particles: sc-90427-V.

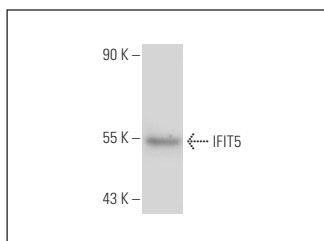
Molecular Weight of IFIT5: 58 kDa.

Positive Controls: T24 cell lysate: sc-2292.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



IFIT5 (N-14): sc-104940. Western blot analysis of IFIT5 expression in T24 whole cell lysate.

RESEARCH USE

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