

IFT88 (N-17): sc-84318

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. IFT88 (intraflagellar transport protein 88), also known as TG737 or TTC10 (TPR repeat protein 10), is an 833 amino acid protein that contains 12 TPR repeats and belongs to the TPR family. Expressed in lung, heart, liver, brain, pancreas, kidney and skeletal muscle, IFT88 is thought to interact with other intraflagellar transport proteins and may play a role in the assembly and maintenance of the vertebrate outer segment. Additionally, IFT88 is thought to function as a centrosomal protein that may regulate the G₁ to S phase cell cycle transition in non-ciliated cells. Defects in the gene encoding IFT88 may be associated with the pathogenesis of polycystic kidney disease, a genetic disorder that is characterized by the presence of cysts within the kidneys. IFT88 expression is downregulated in hepatocellular carcinomas, suggesting a role for IFT88 in tumor suppression. Multiple isoforms of IFT88 exist due to alternative splicing events.

REFERENCES

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- Isfort, R.J., et al. 1997. The tetratricopeptide repeat containing TG737 gene is a liver neoplasia tumor suppressor gene. *Oncogene* 15: 1797-1803.
- Bonura, C., et al. 1999. Structure and expression of TG737, a putative tumor suppressor gene, in human hepatocellular carcinomas. *Hepatology* 30: 677-681.
- Murcia, N.S., et al. 1999. New insights into the molecular pathophysiology of polycystic kidney disease. *Kidney Int.* 55: 1187-1197.
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- Lehner, B., et al. 2004. Analysis of a high-throughput yeast two-hybrid system and its use to predict the function of intracellular proteins encoded within the human MHC class III region. *Genomics* 83: 153-167.

CHROMOSOMAL LOCATION

Genetic locus: IFT88 (human) mapping to 13q12.11; Ift88 (mouse) mapping to 14 C3.

SOURCE

IFT88 (N-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of IFT88 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84318 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IFT88 (N-17) is recommended for detection of IFT88 of mouse, rat and 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); non cross-reactive with other IFT family members.

IFT88 (N-17) is also recommended for detection of IFT88 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for IFT88 siRNA (h): sc-75329, IFT88 siRNA (m): sc-146178, IFT88 shRNA Plasmid (h): sc-75329-SH, IFT88 shRNA Plasmid (m): sc-146178-SH, IFT88 shRNA (h) Lentiviral Particles: sc-75329-V and IFT88 shRNA (m) Lentiviral Particles: sc-146178-V.

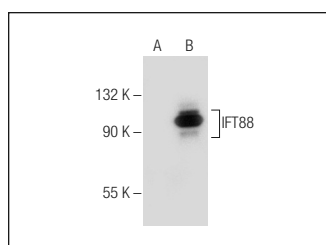
Molecular Weight of IFT88: 94 kDa.

Positive Controls: IFT88 (m): 293T Lysate: sc-120963.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IFT88 (N-17): sc-84318. Western blot analysis of IFT88 expression in non-transfected: sc-117752 (A) and mouse IFT88 transfected: sc-120963 (B) 293T whole cell lysates.

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.