

IFT172 (N-14): sc-138962

BACKGROUND

Intraflagellar transport is mediated by a variety of intraflagellar transport proteins (IFTs) that work in tandem to mediate ciliary and flagellar process assembly. Endogenous IFT proteins are most highly expressed within the inner segment, around the basal body, and within the outer segment. Additionally, IFT proteins are localized in discrete particles along the entire length of the axoneme. IFT proteins are divided into two subcomplexes, A and B, which contain at least 6 or 11 subunits, respectively. IFT-A proteins are associated with retrograde transport, whereas IFT-B proteins are thought to be involved in structure because, in their absence, cilia and flagella may be truncated, or completely absent. IFT172 (intraflagellar transport 172), also known as SLB, wim or osm-1, is a 1,749 amino acid protein that belongs to the IFT172 family and localizes to the cilium. Containing fourteen TPR repeats and nine WD repeats, IFT172 is required for the maintenance and formation of cilia. IFT172 plays an indirect role in Shh signaling, with cilia being required for all activity of the hedgehog pathway.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IFT172 (human) mapping to 2p23.3; Ift172 (mouse) mapping to 5 B1.

SOURCE

IFT172 (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of IFT172 of human origin.

RESEARCH USE

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

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-138962 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IFT172 (N-14) is recommended for detection of IFT172 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other IFT172 family members.

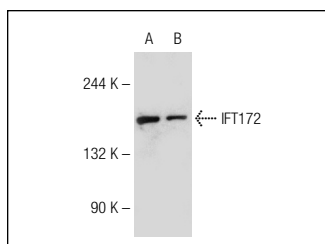
IFT172 (N-14) is also recommended for detection of IFT172 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for IFT172 siRNA (h): sc-94558, IFT172 siRNA (m): sc-146173, IFT172 shRNA Plasmid (h): sc-94558-SH, IFT172 shRNA Plasmid (m): sc-146173-SH, IFT172 shRNA (h) Lentiviral Particles: sc-94558-V and IFT172 shRNA (m) Lentiviral Particles: sc-146173-V.

Molecular Weight of IFT172: 197 kDa.

Positive Controls: A549 cell lysate: sc-2413 or NTERA-2 cl.D1 whole cell lysate.

DATA



IFT172 (N-14): sc-138962. Western blot analysis of IFT172 expression in A549 (A) and NTERA-2 cl.D1 (B) 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.

MONOS
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Try **IFT172 (A-11): sc-398393**, our highly recommended monoclonal alternative to IFT172 (N-14).