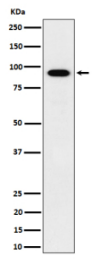
IFT88 Antibody / Intraflagellar transport protein 88 [clone 29I92] (FY12875)

Catalog No.	Formulation	Size
FY12875	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	29I92
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q13099
Applications	Western Blot : 1:500-1:2000
Limitations	This IFT88 antibody is available for research use only.



Western blot analysis of IFT88 expression in human HepG2 cell lysate using IFT88 antibody. Predicted molecular weight ~94 kDa.

Description

IFT88 antibody recognizes Intraflagellar transport protein 88, encoded by the IFT88 gene. This protein is a core component of the intraflagellar transport complex B, which is essential for the formation and maintenance of cilia and flagella. Intraflagellar transport is a bidirectional process that moves molecular cargo along the axoneme, enabling ciliary assembly, signaling, and sensory functions. IFT88 antibody provides researchers with a powerful reagent to study ciliogenesis and cilia mediated signaling pathways in both development and disease.

Mutations in IFT88 cause defects in cilia formation and are associated with a spectrum of ciliopathies, including polycystic kidney disease, retinal degeneration, and skeletal abnormalities. Detection with IFT88 antibody is commonly used in model systems to evaluate cilia integrity and to dissect the molecular mechanisms of ciliary dysfunction. In mice, loss of Ift88 leads to abnormal embryonic development, kidney cysts, and lethality, underscoring the essential nature of this protein for vertebrate survival. In humans, IFT88 mutations have been linked to conditions such as short rib thoracic dysplasia and other syndromes characterized by impaired skeletal growth and organ development.

IFT88 plays a role in Hedgehog signaling, a developmental pathway that depends on intact primary cilia. Studies using IFT88 antibody have revealed its contribution to regulating signal transduction, cell differentiation, and tissue patterning. Aberrant Hedgehog activity linked to ciliary defects highlights the importance of IFT88 in development and disease. This protein is also connected to Wnt signaling and planar cell polarity pathways, expanding its relevance in understanding developmental disorders and congenital anomalies.

IFT88 antibody is useful in western blotting, immunofluorescence, and immunohistochemistry. Immunofluorescence staining of IFT88 localizes the protein to basal bodies and ciliary axonemes, providing spatial resolution of its function. Western blotting identifies protein levels in experimental systems ranging from cultured cells to tissues with high ciliary content. Immunohistochemistry further allows visualization of cilia associated expression in organ samples, including kidney, brain, and respiratory epithelium, making it a valuable tool for diverse biological studies.

Research on ciliopathies, kidney disease, developmental signaling, and structural cell biology relies on validated reagents such as IFT88 antibody. NSJ Bioreagents supports these efforts by supplying antibodies that detect Intraflagellar transport protein 88 with high specificity and reliability, allowing researchers to generate meaningful insights into the biology of cilia and their role in human health and disease.

Application Notes

Optimal dilution of the IFT88 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human IFT88 was used as the immunogen for the IFT88 antibody.

Storage

Store the IFT88 antibody at -20oC.