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IFT20 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5133C

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8IY31
Other Accession	Q61025, Q58CS6
Reactivity	Human, Rat, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	15281
Antigen Region	44-71

Additional Information

Gene ID	90410
Other Names	Intraflagellar transport protein 20 homolog, hIFT20, IFT20
Target/Specificity	This IFT20 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 44-71 amino acids from the Central region of human IFT20.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	IFT20 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IFT20
Function	Part of intraflagellar transport (IFT) particles involved in ciliary process assembly (PubMed:17604723). May play a role in the trafficking of ciliary membrane proteins from the Golgi complex to the cilium (PubMed:16775004). Regulates the platelet-derived growth factor

receptor-alpha (PDGFRA) signaling pathway. Required for protein stability of E3 ubiquitin ligases CBL and CBLB that mediate ubiquitination and internalization of PDGFRA for proper feedback inhibition of PDGFRA signaling (PubMed:29237719). Essential for male fertility. Plays an important role in spermatogenesis, particularly spermiogenesis, when germ cells form flagella. May play a role in the transport of flagellar proteins ODF2 and SPAG16 to build sperm flagella and in the removal of redundant sperm cytoplasm (By similarity). Also involved in autophagy since it is required for trafficking of ATG16L and the expansion of the autophagic compartment (By similarity).

Cellular Location

Golgi apparatus, cis-Golgi network {ECO:0000250|UniProtKB:Q61025}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole {ECO:0000250|UniProtKB:Q61025}. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250|UniProtKB:Q61025}. Cell projection, cilium {ECO:0000250|UniProtKB:Q61025}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q61025}. Golgi apparatus {ECO:0000250|UniProtKB:Q61025}. Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:Q61025}. Cytoplasm {ECO:0000250|UniProtKB:Q61025}. Note=Present at the centrosomes during the cell cycle and associated with the proximal portion of the mother centriole and the lateral aspect of the daughter centriole. Associated with basal body at the base of primary cilia. Detected in the Golgi apparatus of round spermatids and late spermatocytes. Also detected in the manchette of step 10-12 spermatids. In step 14 spermatids, found in the basal body of the sperm tail. Localization in the manchette of elongating spermatids is dependent on SPAG17 {ECO:0000250|UniProtKB:Q61025}

Tissue Location

Expressed in almost all tissues.

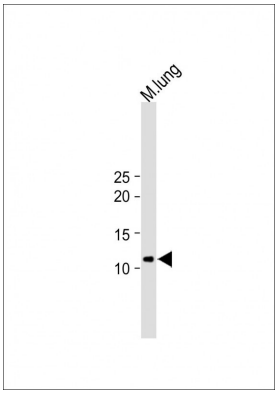
Background

IFT20 is part of intraflagellar transport (IFT) particles involved in ciliary process assembly. IFT20 may play a role in the trafficking of ciliary membrane proteins from the Golgi complex to the cilium.

References

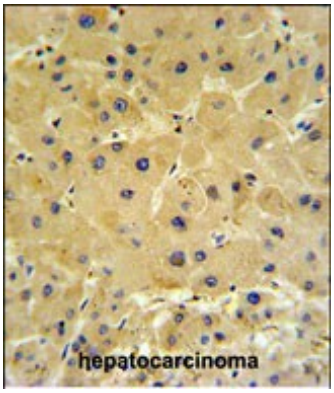
Follit, J.A., et al. Mol. Biol. Cell 17(9):3781-3792(2006)
Jurczyk, A., et al. J. Cell Biol. 166(5):637-643(2004)
Yin, G., et al. Mol. Biol. Rep. 30(4):255-260(2003)

Images



All lanes : Anti-IFT20 Antibody (Center) at 1:1000 dilution Lane 1: Mouse lung whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 12kDa Blocking/Dilution buffer: 5% NFDM/TBST.

IFT20 Antibody (Center) (Cat. #AP5133c) IHC analysis in



formalin fixed and paraffin embedded hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the IFT20 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Novel Variants Induce Super-Length Mitochondrial Sheath and Asthenoteratozoospermia in Humans