

#### IFT20 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5133C

#### Specification

# IFT20 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P,E <u>O8IY31</u> <u>O61025</u>, <u>O58CS6</u> Human, Mouse Bovine Rabbit Polyclonal Rabbit IgG 44-71

## IFT20 Antibody (Center) - 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~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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.

## IFT20 Antibody (Center) - Protein Information

Name IFT20

Function Part of intraflagellar transport (IFT) particles involved in ciliary process assembly



(PubMed:<u>17604723</u>). May play a role in the trafficking of ciliary membrane proteins from the Golgi complex to the cilium (PubMed:<u>16775004</u>). 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:<u>29237719</u>). 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.

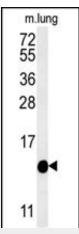
#### IFT20 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

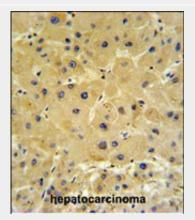
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

IFT20 Antibody (Center) - Images





Western blot analysis of IFT20 Antibody (Center) (Cat. #AP5133c) in mouse lung tissue lysates (35ug/lane).IFT20 (arrow) was detected using the purified Pab.



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.

## IFT20 Antibody (Center) - 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.

## IFT20 Antibody (Center) - 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)
IFT20 Antibody (Center) - Citations

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

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