

IFT20 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56041

Product Information

| | |
|--------------------------------|---|
| Application | WB, IHC-P, IHC-F, IF, ICC, E |
| Primary Accession | Q8IY31 |
| Reactivity | Rat, Pig, Bovine |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 15281 |
| Physical State | Liquid |
| Immunogen | KLH conjugated synthetic peptide derived from human IFT20 |
| Epitope Specificity | 1-100/132 |
| Isotype | IgG |
| Purity | affinity purified by Protein A |
| Buffer | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| SUBCELLULAR LOCATION | Golgi apparatus, cis-Golgi network (By similarity). Cytoplasm, cytoskeleton, centrosome, centriole (By similarity). Cytoplasm, cytoskeleton, cilium basal body (By similarity). 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 (By similarity). |
| SUBUNIT | Component of IFT complex B composed of IFT88, IFT57, TRAF3IP1, IFT52, IFT27, HSPB11 and IFT20. Interacts directly with IFT57 and KIF3B/Kinesin II subunit (By similarity). Interacts with CCDC41/CEP83. |
| Important Note | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| Background Descriptions | IFT20 is a gene encodes a intraflagellar transport protein important for intracellular transport. The encoded protein forms part of a complex involved in trafficking of proteins from the Golgi body, including recycling of immune signalling components (Finetti et al., PubMed: 19855387). This gene is part of a complex set of sense-antisense loci that may be co-regulated. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. A pseudogene of this gene is located on the long arm of chromosome 14. |

Additional Information

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|---------------------------|---|
| Gene ID | 90410 |
| Other Names | Intraflagellar transport protein 20 homolog, hIFT20, IFT20 |
| Target/Specificity | Expressed in almost all tissues. |
| Dilution | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50 |

0,Flow-Cyt=2ug/Test,ELISA=1:5000-10000

Format

0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

Images

Blank control:Mouse spleen.

Primary Antibody (green line): Rabbit Anti-IFT20 antibody (AP56041)

Dilution: 2 µg /10⁶ cells;

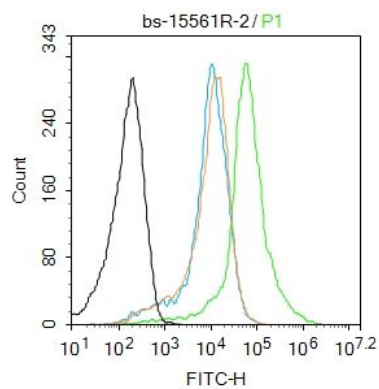
Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF488

Dilution: 1 µg /test.

Protocol

The cells were fixed with 70% ethanol (10min at room



temperature) and then were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.