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# DNAH11 Rabbit pAb

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Catalog # AP55538

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | Q96DT5 |
| **Predicted** | Rat, Pig, Dog, Human, Mouse, Rabbit, Horse, Sheep |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 520369 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human DNAH11 |
| **Epitope Specificity** | 1701-1800/4523 |
| **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** | Cytoplasm; cytoskeleton; cilium axoneme. |
| **DISEASE** | Defects in DNAH11 are a cause of Kartagener syndrome (KTGS) [MIM:244400]. KTGS is an autosomal recessive disorder characterized by the association of primary ciliary dyskinesia with situs inversus. Clinical features include recurrent respiratory infections, bronchiectasis, infertility, and lateral transposition of the viscera of the thorax and abdomen. The situs inversus is most often total, although it can be partial in some cases (isolated dextrocardia or isolated transposition of abdominal viscera). Defects in DNAH11 are the cause of primary ciliary dyskinesia type 7 (CILD7) [MIM:611884]. CILD is an autosomal recessive disorder characterized by axonemal abnormalities of motile cilia. Respiratory infections leading to chronic inflammation and bronchiectasis are recurrent, due to defects in the respiratory cilia; reduced fertility is often observed in male patients due to abnormalities of sperm tails. Half of the patients exhibit situs inversus, due to dysfunction of monocilia at the embryonic node and randomization of left-right body asymmetry. Primary ciliary dyskinesia associated with situs inversus is referred to as Kartagener syndrome. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | This gene encodes a ciliary outer dynein arm protein and is a member of the dynein heavy chain family. It is a microtubule-dependent motor ATPase and has been reported to be involved in the movement of respiratory cilia. Mutations in this gene have been implicated in causing Kartagener Syndrome (a combination of situs inversus totalis and Primary Ciliary Dyskinesia (PCD), also called Immotile Cilia Syndrome 1 (ICS1)) and male sterility. [provided by RefSeq, Mar 2013] |

## Additional Information

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| **Gene ID** | 8701 |
| **Other Names** | Dynein axonemal heavy chain 11, Axonemal beta dynein heavy chain 11, Ciliary dynein heavy chain 11, DNAH11 (HGNC:2942) |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |
| **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

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| **Name** | DNAH11 ( HGNC:2942) |
| **Function** | Force generating protein required for cilia beating in respiratory epithelia (By similarity). Produces force towards the minus ends of microtubules (By similarity). Key component of dynein, a family of motor proteins essential for movement along microtubules (By similarity). Dynein has ATPase activity; the force-producing power stroke is thought to occur on release of ADP (By similarity). Required for structural and functional integrity of cilia (By similarity). |
| **Cellular Location** | Cytoplasm, cytoskeleton, cilium axoneme Note=Located in the proximal region of respiratory cilia |
| **Tissue Location** | Expressed in airway ciliated epithelial cells (at protein level) (PubMed:31178125, PubMed:33139725). Not detected in spermatozoa (at protein level) (PubMed:31178125) |

## Background

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