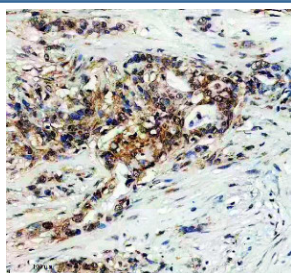


DNAAF4 Antibody / Dynein axonemal assembly factor 4 Antibody (FY13674)

Catalog No.	Formulation	Size
FY13674	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
UniProt	Q8WXU2
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml ELISA : 0.1-0.5 ug/ml
Limitations	This DNAAF4 Antibody / Dynein axonemal assembly factor 4 Antibody is supplied exclusively for research use.



DNAAF4 Antibody by IHC in Human Pancreatic Cancer Tissue. Immunohistochemistry analysis of DNAAF4 in a paraffin-embedded human pancreatic cancer section using DNAAF4 Antibody. Brown DAB immunoreactivity is visible in groups of tumor cells, with variable intensity across the field. Blue hematoxylin counterstaining outlines nuclei and highlights the surrounding fibrous stroma, which exhibits comparatively little brown labeling. Antigen retrieval was performed in EDTA buffer at pH 8.0, followed by 10% goat serum blocking and incubation with 2 ug/ml primary antibody overnight at 4°C. A peroxidase-conjugated secondary antibody and DAB chromogen were used for visualization. The Dynein axonemal assembly factor 4 Antibody detects staining in this tissue.

DNAAF4 Antibody by IHC in Rat Testis Tissue. Immunohistochemistry analysis of DNAAF4 in a paraffin-embedded rat testis section using DNAAF4 Antibody. The image shows seminiferous tubules containing densely packed germ cells with blue-purple hematoxylin-stained nuclei. Brown DAB staining is distributed unevenly among cells at the periphery and within portions of the tubules, while other areas show comparatively weak labeling. The image documents tissue immunoreactivity without assigning a specific germ-cell developmental stage. The Dynein axonemal assembly factor 4 Antibody is the alternative designation for the reagent used in this testis section.

DNAAF4 Antibody by IHC in Mouse Testis Tissue. Immunohistochemistry analysis of DNAAF4 expression in a paraffin-embedded mouse testis section using DNAAF4 Antibody. Brown DAB staining is visible in multiple seminiferous tubules, with variable signal among the germ-cell layers surrounding the luminal spaces. Hematoxylin counterstaining highlights the nuclei, permitting assessment of the staining distribution within the tubular architecture. No specific germ-cell stage is assigned solely from the image. This figure illustrates tissue immunoreactivity of the Dynein axonemal assembly factor 4 Antibody in mouse testis.

DNAAF4 Antibody by WB in Rodent Testis and Neuro-2a Lysates. Western blot analysis of DNAAF4 using DNAAF4 Antibody in three samples. Lane 1 contains rat testis lysate, lane 2 mouse testis lysate, and lane 3 mouse Neuro-2a whole-cell lysate. A band near 50 kDa is visible in all three lanes. Rat and mouse testis additionally show a strong lower band near 43-45 kDa, whose molecular identity is not established by this experiment. Molecular weight markers are shown at the left of the blot. The data demonstrate antibody-associated immunoreactivity near the indicated DNAAF4 band position in rodent samples. The Dynein axonemal assembly factor 4 Antibody is the secondary keyword for this reagent.

Description

DNAAF4 Antibody / Dynein axonemal assembly factor 4 Antibody targets DNAAF4, a protein involved in the assembly of motile ciliary dynein machinery. DNAAF4 is also known as DYX1C1, a name originating from earlier investigations into developmental and neurological traits. Its established role in motile cilia centers on the maturation of axonemal dynein complexes before they are incorporated into the ciliary axoneme. These complexes generate the forces required for coordinated ciliary beating.

Motile cilia contain a highly organized array of microtubules, radial spokes, and inner and outer dynein arms. Dynein motors are large multisubunit assemblies whose heavy chains must fold and associate with accessory proteins before they can function properly. Cytoplasmic assembly factors help coordinate this process, limiting the incorporation of incomplete or unstable motor complexes into the axoneme. DNAAF4 has been implicated in this dynein preassembly network, and its disruption can compromise the formation of functional axonemal dynein arms.

Impaired motile ciliary function affects physiological processes that depend on directed fluid movement. In the respiratory tract, coordinated beating supports mucociliary clearance; in embryonic development, motile nodal cilia contribute to left-right patterning. Defects in dynein arm assembly can therefore produce features associated with primary ciliary dyskinesia, including chronic respiratory disease and laterality abnormalities. DNAAF4-related disease illustrates how a defect in motor assembly can have consequences across anatomically distinct ciliated tissues.

NSJ Bioreagents offers this DNAAF4 Antibody to support investigation of dynein preassembly and the molecular mechanisms required for motile cilium formation. Characterizing DNAAF4-associated protein networks may help explain how complex motor assemblies are prepared in the cytoplasm before their delivery to the axoneme.

Explore related research targets in our [Cell Biology Antibodies](#) collection.

Application Notes

Users should optimize the working dilution of the DNAAF4 Antibody / Dynein axonemal assembly factor 4 Antibody for their specific experimental setup.

Immunogen

The DNAAF4 Antibody was generated using e. coli-derived human DYX1C1/DNAAF4 recombinant protein (amino acids P56-Q414).

Storage

Once reconstituted, refrigerate the DNAAF4 Antibody at 4°C for no longer than one month. For extended storage, freeze aliquots at -20°C for up to six months and avoid repeated freeze-thaw cycles.

Alternate Names

DNAAF4 antibody, Dynein axonemal assembly factor 4 antibody, DYX1 antibody, DYX1C1 antibody, DYXC1 antibody, EKN1 antibody, RD antibody