

DNAAF2 Antibody / Protein kintoun Antibody (FY13647)

Catalog No.	Formulation	Size
FY13647	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	Q9NVR5
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml ELISA : 0.1-0.5 ug/ml
Limitations	This DNAAF2 Antibody / Protein kintoun Antibody is provided for laboratory research use only.

DNAAF2 Antibody by IHC in human thyroid cancer tissue. Immunohistochemistry of paraffin-embedded human thyroid cancer tissue using Protein kintoun Antibody. Brown DAB immunoreactivity is visible in tumor-associated cellular structures, with blue hematoxylin counterstaining. The section underwent heat-mediated antigen retrieval in EDTA buffer at pH 8.0 and blocking with 10% goat serum. Primary antibody was applied at 2 ug/ml overnight at 4°C, followed by peroxidase-conjugated goat anti-rabbit IgG.

DNAAF2 Antibody by IF in cultured human cells. Immunofluorescence using Protein kintoun Antibody shows green signal prominently within nuclei and a red alpha tubulin counterstain across the cytoplasm. The composite image includes blue nuclear staining. Fluorescent secondary antibodies distinguish the rabbit primary antibody from the mouse alpha tubulin antibody; the image demonstrates the distribution of immunoreactivity in the tested cells without establishing organelle identity.

DNAAF2 Antibody by WB in human, rat and mouse lysates. Western blot analysis using Protein kintoun Antibody with reducing lysates separated on a 10% SDS-PAGE gel. The five sample lanes are PC-3 human cells, RT4 human cells, rat ovary, rat testis and mouse testis, respectively. The dominant immunoreactive band migrates near 91 kDa across the samples, consistent with the predicted molecular weight of DNAAF2. Additional lower bands are visible in some lanes but are not assigned to a particular protein species. The blot was developed using an HRP-conjugated secondary antibody and chemiluminescent detection.

Description

DNAAF2 Antibody / Protein kintoun Antibody targets a protein with important roles in cellular biology. Dynein axonemal assembly factor 2 (DNAAF2), also called kintoun or KTU, participates in the cytoplasmic preparation of axonemal dynein motors before their incorporation into motile cilia and flagella. Axonemal dyneins are large ATP-driven complexes that generate sliding forces between microtubule doublets. Their coordinated activity produces the rhythmic bending movements needed for mucociliary clearance, fluid transport and other cilia-dependent physiological processes.

Assembly of dynein arms is unusually demanding because each motor contains multiple heavy chains and associated intermediate and light chains. DNAAF2 acts during a preassembly stage, helping establish properly assembled motor components before they enter the ciliary compartment. Studies of kintoun have linked it to molecular chaperone-associated pathways, consistent with the need to fold and stabilize large dynein subunits. Failure of this preparation can leave cilia structurally present but mechanically ineffective.

Pathogenic DNAAF2 variants are associated with primary ciliary dyskinesia, a disorder characterized by defective motile cilia. Consequences can include impaired airway mucus transport, recurrent respiratory disease, abnormal laterality determination and reduced fertility. The clinical diversity reflects the different developmental and physiological settings in which motile cilia operate. Ultrastructural studies of affected cilia have demonstrated defects in dynein arm assembly, connecting the molecular role of DNAAF2 with loss of coordinated beating.

NSJ Bioreagents offers this DNAAF2 Antibody to support investigation of the preassembly steps that enable axonemal dynein motors to function. Understanding how kintoun cooperates with other assembly factors can help explain why disruptions in cytoplasmic motor maturation produce widespread ciliary dysfunction.

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

Application Notes

Optimal working dilutions for the DNAAF2 Antibody / Protein kintoun Antibody should be established experimentally for each assay.

Immunogen

The DNAAF2 Antibody was generated using e. coli-derived human DNAAF2 recombinant protein (amino acids E252-N830).

Storage

Store the reconstituted DNAAF2 Antibody at 4oC for up to one month. For long-term storage, divide into aliquots and keep at -20oC for up to six months. Avoid repeated freeze-thaw cycles.

Alternate Names

DNAAF2 antibody, Protein kintoun antibody, dynein axonemal assembly factor 2 antibody, C14orf104 antibody, KTU antibody, Dynein assembly factor 2 antibody, axonemal antibody

