

Anti-DNAL1 Antibody

Catalog # AP51167

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q4LDG9
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21533

Additional Information

Gene ID	83544
Other Names	C14orf168; Dynein light chain 1, axonemal
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human DNAL1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

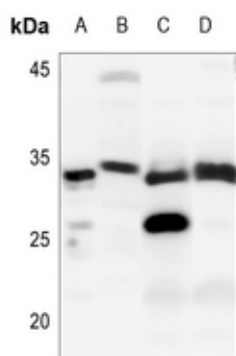
Protein Information

Name	DNAL1 (HGNC:23247)
Synonyms	C14orf168
Function	Part of the multisubunit axonemal ATPase complexes that generate the force for cilia motility and govern beat frequency (By similarity). Component of the outer arm dynein (ODA). May be involved in a mechanosensory feedback mechanism controlling ODA activity based on external conformational cues by tethering the outer arm dynein heavy chain (DNAH5) to the microtubule within the axoneme (By similarity). Important for ciliary function in the airways and for the function of the cilia that produce the nodal flow essential for the determination of the left-right asymmetry (PubMed: 21496787).
Cellular Location	Cytoplasm, cytoskeleton, cilium axoneme
Tissue Location	Expressed in tissues carrying motile cilia such as respiratory epithelia, ependyma and testis

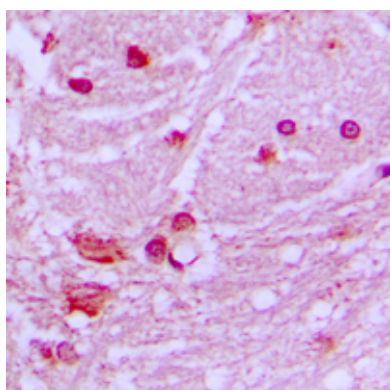
References

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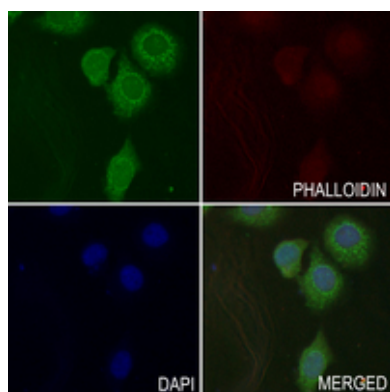
Images



Western blot analysis of DNAL1 expression in MCF7 (A), U2OS (B), mouse testis (C), rat testis (D) whole cell lysates. (Predicted band size: 21 kDa; Observed band size: 32 kDa)



Immunohistochemical analysis of DNAL1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of DNAL1 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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