

Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] - BSA and Azide free ab249677

Recombinant RabMAb

7 Images

Overview

Product name	Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] - BSA and Azide free
Description	Rabbit monoclonal [EPR11244-61] to Dynein intermediate chain 1/DNAI1 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB Unsuitable for: IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Dynein intermediate chain 1/DNAI1 aa 1-200. The exact sequence is proprietary. Database link: Q9UI46
General notes	<p>ab249677 is the carrier-free version of ab171964.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR11244-61
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab249677 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

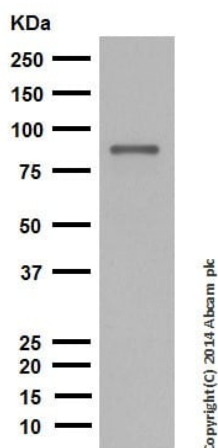
Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 79 kDa.

Application notes Is unsuitable for IHC-P.

Target

Function	Part of the dynein complex of respiratory cilia.
Involvement in disease	Defects in DNAI1 are the cause of primary ciliary dyskinesia type 1 (CILD1) [MIM:244400]. CILD1 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. Defects in DNAI1 are the 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).
Sequence similarities	Belongs to the dynein intermediate chain family. Contains 5 WD repeats.
Cellular localization	Cytoplasm > cytoskeleton > cilium axoneme.

Images



Western blot - Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] - BSA and Azide free (ab249677)

Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] ([ab171964](#)) at 1/5000 dilution (purified) + Human testis tissue lysate at 20 µg

Secondary

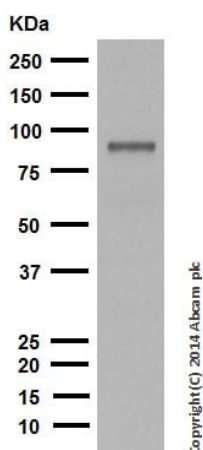
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 79 kDa

Observed band size: 79 kDa

This data was developed using [ab171964](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] - BSA and Azide free (ab249677)

Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] ([ab171964](#)) at 1/1000 dilution (purified) + Rat testis lysate at 20 µg

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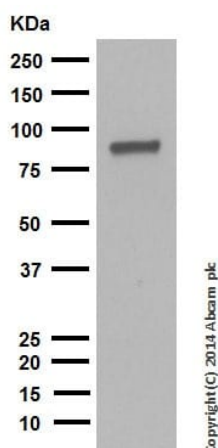
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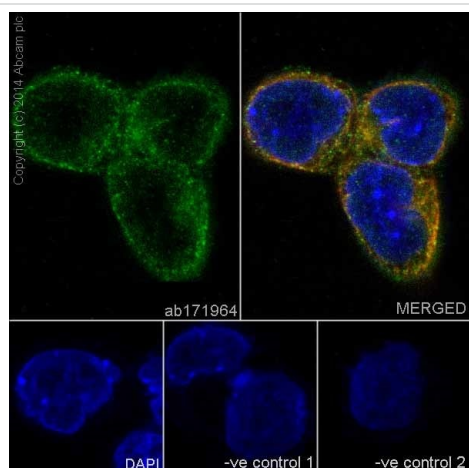
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Observed band size: 79 kDa

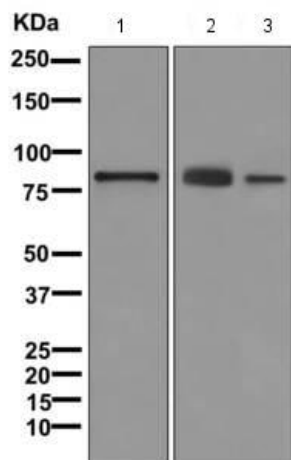
This data was developed using **ab171964**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] - BSA and Azide free (ab249677)

This data was developed using **ab171964**, the same antibody clone in a different buffer formulation. Immunofluorescence staining of F9 cells with purified **ab171964** at a working dilution of 1 in 250, counter-stained with DAPI and mouse monoclonal anti-tubulin (**ab7291**, 1/500). The secondary antibody was Alexa Fluor® 488 goat anti rabbit (**ab150077**), used at a dilution of 1 in 500. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom right hand and middle panels - for the negative control, purified **ab171964** was used at a dilution of 1/200 followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500.



Western blot - Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] - BSA and Azide free (ab249677)

All lanes : Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] ([ab171964](#)) at 1/1000 dilution (unpurified)

Lane 1 : Human testis tissue lysate

Lane 2 : Rat testis tissue lysate

Lane 3 : Mouse testis tissue lysate

Lysates/proteins at 10 µg per lane.

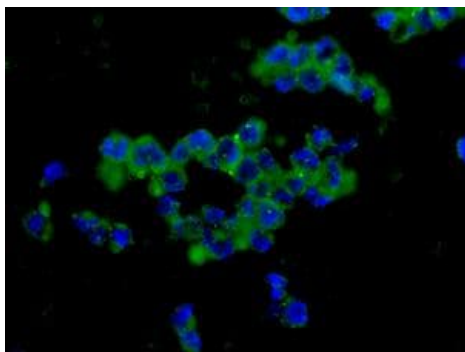
Secondary

All lanes : Goat anti-rabbit HRP conjugated at 1/2000 dilution

Developed using the ECL technique.

Predicted band size: 79 kDa

This data was developed using [ab171964](#), the same antibody clone in a different buffer formulation.



Immunocytochemistry/ Immunofluorescence - Anti-Dynein intermediate chain 1/DNAI1 antibody [EPR11244-61] - BSA and Azide free (ab249677)

This data was developed using [ab171964](#), the same antibody clone in a different buffer formulation. Immunofluorescence analysis of Jurkat cells, labeling Dynein intermediate chain 1/DNAI1 using unpurified [ab171964](#) at a 1/50 dilution (green) and DAPI nuclear staining (blue).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Dynein intermediate chain 1/DNAI1 antibody
[EPR11244-61] - BSA and Azide free (ab249677)

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