

Product datasheet

Anti-Dhh antibody [EPR23386-212] ab270453

Recombinant RabMAb

4 Images

Overview

Product name	Anti-Dhh antibody [EPR23386-212]
Description	Rabbit monoclonal [EPR23386-212] to Dhh
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human testis and Human colon tissue lysates; Recombinant Human Desert Hedgehog/Dhh protein. IHC-P: Human testis tissue.
General notes	<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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23386-212

Isotype

IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab270453 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
WB		1/1000. Predicted molecular weight: 44 kDa.
IHC-P		1/500.

Application notes

Is unsuitable for Flow Cyt, ICC/IF or IP.

Target

Function

Intercellular signal essential for a variety of patterning events during development. May function as a spermatocyte survival factor in the testes. Essential for testes development.

Involvement in disease

Defects in DHH may be the cause of partial gonadal dysgenesis with minifascicular neuropathy 46,XY (PGD) [MIM:607080]. PGD is characterized by the presence of a testis on one side and a streak or an absent gonad at the other, persistence of Mullerian duct structures, and a variable degree of genital ambiguity.

Defects in DHH may be the cause of complete pure gonadal dysgenesis 46,XY type (GDXYM) [MIM:233420]; also known as male-limited gonadal dysgenesis 46,XY. GDXYM is a type of hypogonadism in which no functional gonads are present to induce puberty in an externally female person whose karyotype is then found to be XY. The gonads are found to be non-functional streaks.

Sequence similarities

Belongs to the hedgehog family.

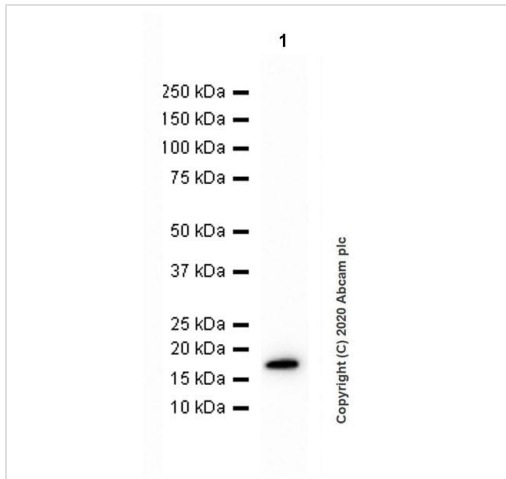
Post-translational modifications

The C-terminal domain displays an autoproteolysis activity and a cholesterol transferase activity. Both activities result in the cleavage of the full-length protein and covalent attachment of a cholesterol moiety to the C-terminal of the newly generated N-terminal fragment (N-product). This covalent modification appears to play an essential role in restricting the spatial distribution of the protein activity to the cell surface. The N-product is the active species in both local and long-range signaling, whereas the C-product has no signaling activity.

Cellular localization

Secreted > extracellular space. The C-terminal peptide diffuses from the cell and Cell membrane. The N-terminal peptide remains associated with the cell surface.

Images



Western blot - Anti-Dhh antibody [EPR23386-212] (ab270453)

Anti-Dhh antibody [EPR23386-212] (ab270453) at 1/1000 dilution + Recombinant Human Desert Hedgehog/Dhh protein (aa 23-198) 20ng

Secondary

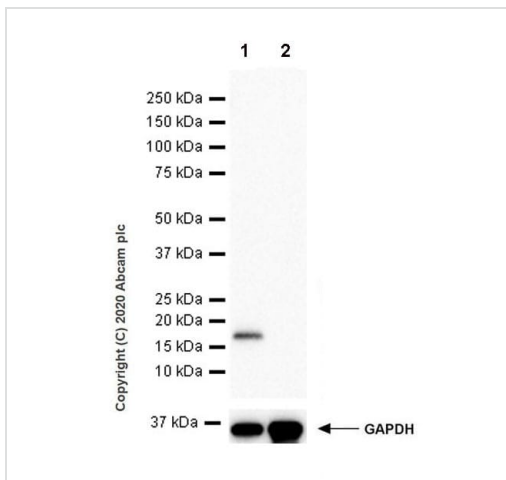
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 44 kDa

Observed band size: 19 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: 10 seconds



Western blot - Anti-Dhh antibody [EPR23386-212] (ab270453)

All lanes : Anti-Dhh antibody [EPR23386-212] (ab270453) at 1/1000 dilution

Lane 1 : Human testis tissue lysate

Lane 2 : Human colon tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Predicted band size: 44 kDa

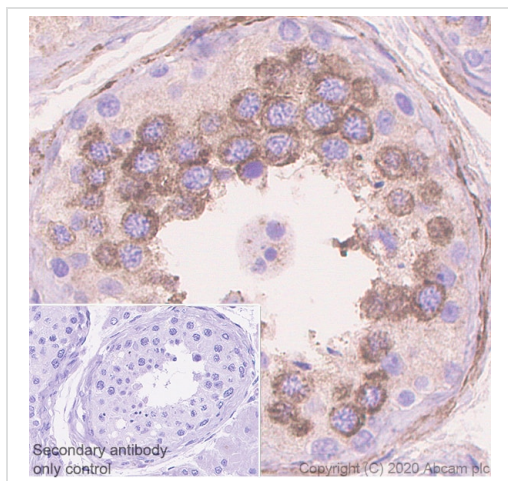
Observed band size: 19 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

The molecular weight observed is consistent with what has been described in the literature. Band at 19kDa could be DHH N-terminal fragment (PMID: 31018998).

The expression profile observed is consistent with what has been described in the literature(PMID:22132805).

Exposure time: 3 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dhh antibody [EPR23386-212] (ab270453)

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling Dhh with ab270453 at 1/500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in human testis (PMID: 22132805). The section was incubated with ab270453 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Dhh antibody [EPR23386-212] (ab270453)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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