


Product datasheet

Anti-DIAPH2/DIA antibody ab12319

★★★★★ [1 Abreviews](#) [2 Images](#)

Overview

Product name	Anti-DIAPH2/DIA antibody
Description	Rabbit polyclonal to DIAPH2/DIA
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Human Predicted to work with: Rabbit, Dog, Chimpanzee, Rhesus monkey, Gorilla, Orangutan, Elephant 
Immunogen	Synthetic peptide within Human DIAPH2/DIA aa 50-150. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. Database link: O60879
Positive control	WB: HEK-293T, HeLa and Jurkat whole cell lysates. IHC-P: Human testis tissue.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7 Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
Purity	Immunogen affinity purified
Purification notes	Purified using the peptide immobilized on solid support.
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab12319 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
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 132 kDa.

Target

Function

Could be involved in oogenesis. Involved in the regulation of endosome dynamics. Implicated in a novel signal transduction pathway, in which isoform 3 and CSK are sequentially activated by RHOD to regulate the motility of early endosomes through interactions with the actin cytoskeleton.

Tissue specificity

Expressed in testis, ovary, small intestine, prostate, lung, liver, kidney and leukocytes.

Involvement in disease

Defects in DIAPH2 are the cause of premature ovarian failure type 2A (POF2A) [MIM:300511]. An ovarian disorder defined as the cessation of ovarian function under the age of 40 years. It is characterized by oligomenorrhea or amenorrhea, in the presence of elevated levels of serum gonadotropins and low estradiol.

Sequence similarities

Belongs to the formin homology family. Diaphanous subfamily.
Contains 1 DAD (diaphanous autoregulatory) domain.
Contains 1 FH1 (formin homology 1) domain.
Contains 1 FH2 (formin homology 2) domain.
Contains 1 GBD/FH3 (Rho GTPase-binding/formin homology 3) domain.

Developmental stage

Expressed from E16 in ovary and testis and during P6-P16 during differentiation of ovarian follicles.

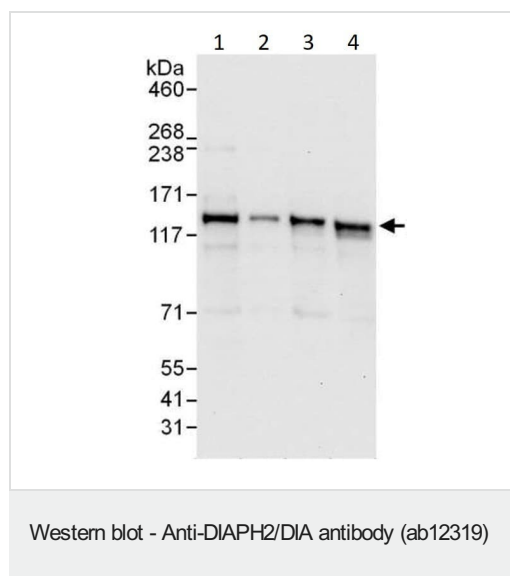
Domain

DRFs are regulated by intramolecular GBD-DAD binding where Rho-GTP activates the DRFs by disrupting the GBD-DAD interaction.

Cellular localization

Cytoplasm > cytosol. Early endosome. Isoform 3 is cytosolic but when coexpressed with RHOD, the 2 proteins colocalize to early endosomes.

Images



All lanes : Anti-DIAPH2/DIA antibody (ab12319) at 0.1 µg/ml

Lane 1 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 50 µg

Lane 2 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 15 µg

Lane 3 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 50 µg

Lane 4 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate at 50 µg

Predicted band size: 132 kDa

Exposure time: 10 seconds

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DIAPH2/DIA antibody (ab12319)

IHC image of ab12319 staining in human normal testis formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab12319, 1µg/ml, for 15 mins 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.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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