abcam

Product datasheet

Anti-DDX4 / MVH antibody [EPR21789] ab235442

Recombinant RabMAb

6 Images

Overview

Product name	Anti-DDX4 / MVH antibody [EPR21789]
Description	Rabbit monoclonal [EPR21789] to DDX4 / MVH
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP, IHC-P
Species reactivity	**Reacts with:** Rat, Human
Immunogen	Recombinant fragment within Human DDX4/ MVH aa 1 to the C-terminus. The exact sequence is proprietary. Database link: Q9NQI0
Positive control	WB: Human and rat testis lysates. IHC-P: Human testis and ovary tissues, and Rat testis tissue. IP: Human testis lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

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	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21789

Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab235442** in the following tested applications.

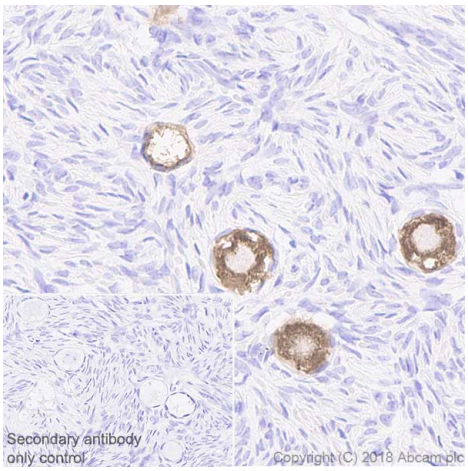
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 79 kDa (predicted molecular weight: 79 kDa).
IP		1/30.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function	Probable ATP-dependent RNA helicase required during spermatogenesis (PubMed:10920202, PubMed:21034600). Required to repress transposable elements and preventing their mobilization, which is essential for the germline integrity. Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons. Involved in the secondary piRNAs metabolic process, the production of piRNAs in fetal male germ cells through a ping-pong amplification cycle.
Tissue specificity	Expressed only in ovary and testis. Expressed in migratory primordial germ cells in the region of the gonadal ridge in both sexes.
Sequence similarities	Belongs to the DEAD box helicase family. DDX4/VASA subfamily. Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain.
Cellular localization	Cytoplasm. Cytoplasm, perinuclear region. Component of the meiotic nuage, also named P granule, a germ-cell-specific organelle required to repress transposon activity during meiosis.

Images

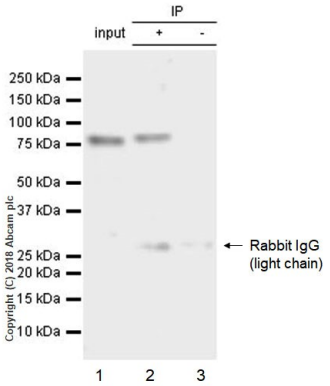


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DDX4 / MVH antibody [EPR21789] (ab235442)

Immunohistochemical analysis of paraffin-embedded human ovary tissue labeling DDX4 / MVH with ab235442 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in oocytes of human ovary (PMID:10920202; PMID:26444630). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-DDX4 / MVH antibody [EPR21789] (ab235442)

DDX4 / MVH was immunoprecipitated from 0.35 mg of human testis lysate with ab235442 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab235442 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

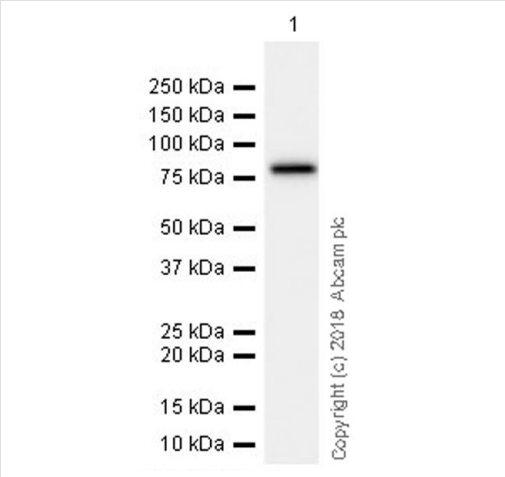
Lane 1: Human testis lysate 10 µg (Input).

Lane 2: ab235442 IP in human testis lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab235442 in human testis lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.



Western blot - Anti-DDX4 / MVH antibody [EPR21789] (ab235442)

Anti-DDX4 / MVH antibody [EPR21789] (ab235442) at 1/1000 dilution + Rat testis at 20 µg with 5% NFDM/TBST

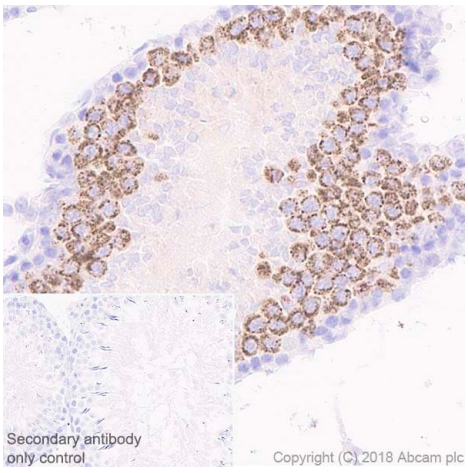
Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 79 kDa

Observed band size: 79 kDa

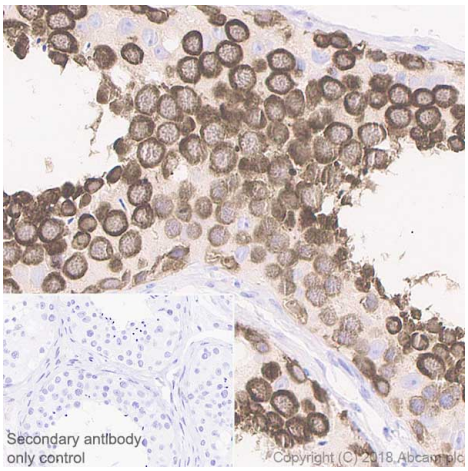
Exposure time: 6 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DDX4 / MVH antibody [EPR21789] (ab235442)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) of Rat testis staining DDX4 / MVH with ab235442 at 1/2000 dilution (0.23 µg/ml). Antigen retrieval was heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Hematoxylin was used as a counter stain.

Positive staining in germ cells of rat testis (PMID:10920202; PMID:26444630).

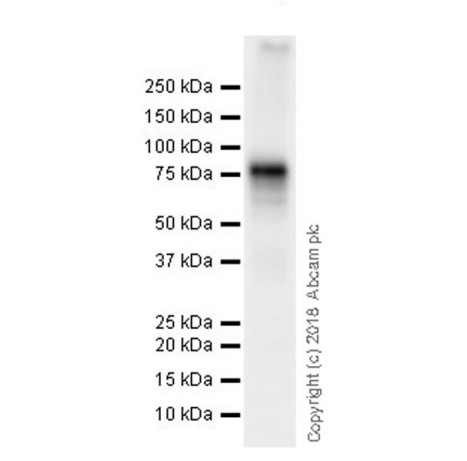


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DDX4 / MVH antibody [EPR21789] (ab235442)

Immunohistochemical analysis of paraffin-embedded human testis tissue labeling DDX4 / MVH with ab235442 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in germ cells of human testis (PMID:10920202; PMID:26444630). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-DDX4 / MVH antibody [EPR21789] (ab235442)

Anti-DDX4 / MVH antibody [EPR21789] (ab235442) at 1/1000 dilution + Human testis lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 79 kDa

Observed band size: 79 kDa

Exposure time: 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular mass observed is consistent with what has been described in the literature (PMID: 26482643).

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