

Datasheet for 600-401-EA7**RKHD4 Antibody****Overview**

Description:	Anti-Rkhd4 (RABBIT) Antibody - 600-401-EA7
Item No.:	600-401-EA7
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background: Rkhd4, also known as MEX3A is a member of a novel family of four homologous human MEX3 proteins each containing two heterogeneous nuclear ribonucleoprotein K homology (KH) domains and one carboxy-terminal RING finger module. MEX3 proteins, including Rkhd4, are phosphoproteins that bind RNA through their KH domains and shuttle between the nucleus and the cytoplasm via the CRM1 export pathway. These proteins are a novel family of evolutionarily conserved RNA-binding proteins, differentially recruited to P bodies and potentially involved in post-transcriptional regulatory mechanisms. While Rkhd2 has been suggested to be associated with susceptibility to essential hypertension type 8, the function of Rkhd4 remains unknown. Rkhd3 and Rkhd4, but not Rkhd2, co-localize with both the hDcp1a decapping factor and Argonaute (Ago) proteins in processing bodies (P bodies), recently characterized as centers of mRNA turnover.

Synonyms:	Rkhd4 Antibody, RKHD4, MEX-3A, RKHD4, RNA-binding protein MEX3A, RING finger and KH domain-containing protein 4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MEX3A
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Rkhd4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide from near the C-terminus of human Rkhd4. The immunogen is located within amino acids 420-470 of RKHD4.
Purity/Specificity:	Anti-Rkhd4 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Rkhd4 from other sources has not been determined.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - A1L020• GeneID - 92312• NCBI - A1L020

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-RKHD4 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry-P, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 54 kDa in Western Blots of specific cell lysates and tissues. Positive control: mouse thymus tissue, rat thymus tissue.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	20 µg/mL
IHC:	1-2 µg/mL
WB:	1-4 µg/mL

Formulation

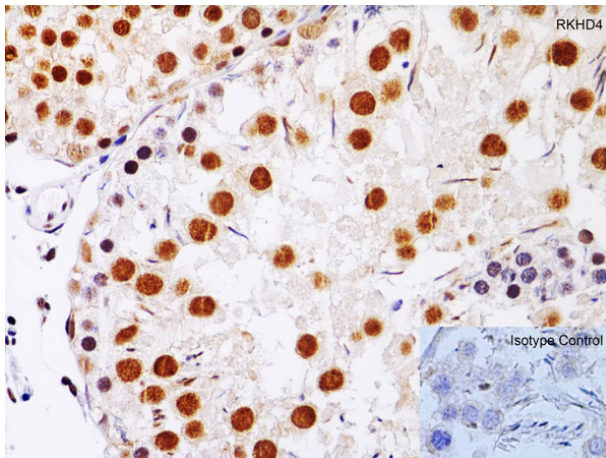
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry Validation of RKHD4.

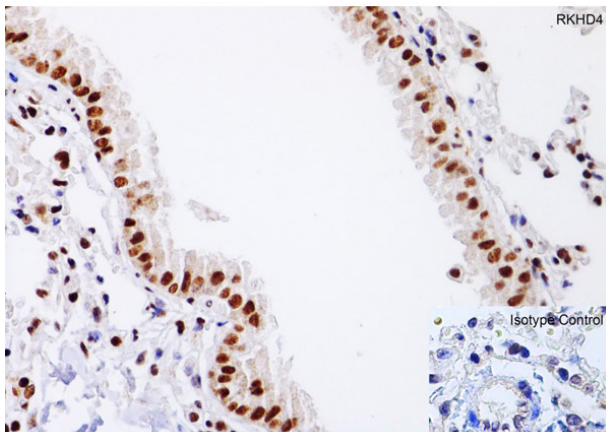
Tissue: Rat Testis.

Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-RKHD4 antibody at 1 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.



Immunohistochemistry

Immunohistochemistry Validation of RKHD4.

Tissue: Mouse lung tissue.

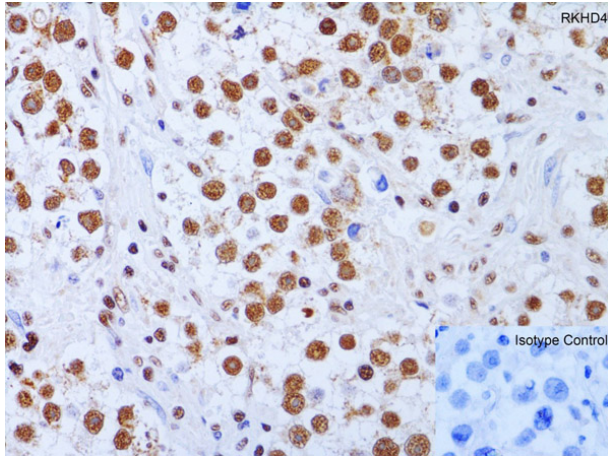
Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.

mouse lung tissue using

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Immunohistochemistry

Immunohistochemistry Validation of RKHD4.

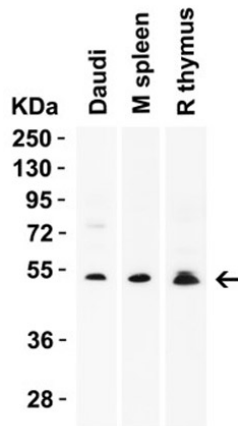
Tissue: Human Testis.

Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-RKHD4 antibody at 1 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.



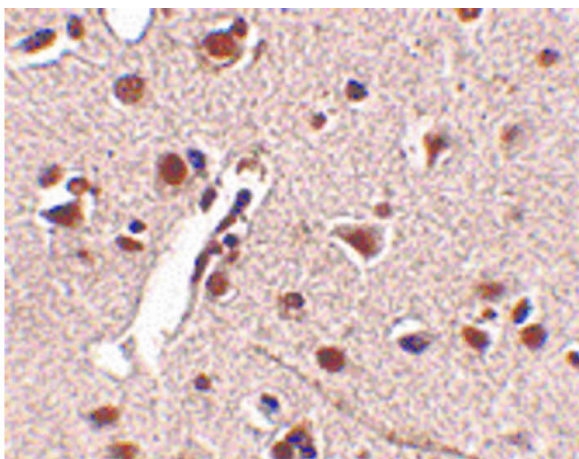
Western Blot

Western blot Validation of RKHD4.

Load: 15 µg of human Daudi, Mouse spleen, or Rat Thymus lysate.

Primary: antibody: RKHD4 at 2 µg/mL for 1 h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.

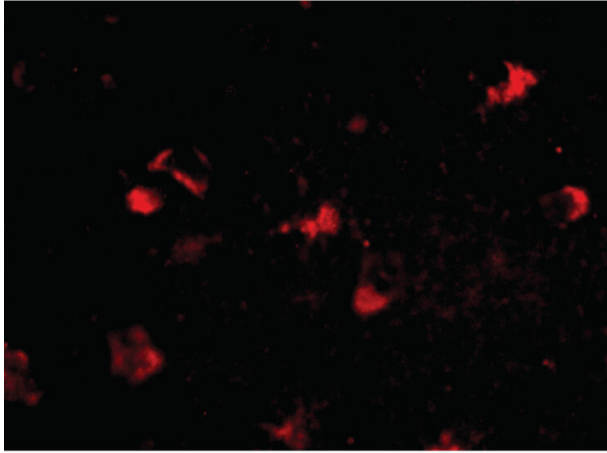


Immunohistochemistry

Immunohistochemistry of Rkhd4 antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded.

Antigen retrieval: not required. Primary antibody: Rkhd4 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody:

Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Rkhd4 is nuclear and occasionally cytoplasmic. Staining: Rkhd4 as a precipitated red signal with hematoxylin purple nuclear counterstain.

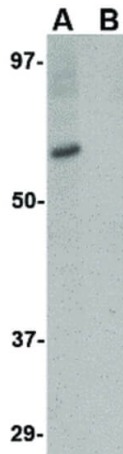


Immunofluorescence Microscopy

Immunofluorescence Microscopy of Rkhd4 antibody.

Tissue: Human brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Rkhd4 antibody at 20 $\mu\text{g}/\text{mL}$ for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT.

Staining: Rkhd4 as a red fluorescent signal.



Western Blot

Western Blot of Rkhd4 antibody. Lane A: SK-N-SH cell lysate at 1 $\mu\text{g}/\text{mL}$ in the absence of blocking peptide. Lane B: SK-N-SH cell lysate at 1 $\mu\text{g}/\text{mL}$ in the presence of blocking peptide. Load: 35 μg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.

Predicted/Observed size: 54.1 kDa, ~60 kDa for Rkhd4.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.