

Rkhd4 Antibody

Catalog # ASC10792

Product Information

Application WB, IF, E, IHC-P

Primary Accession <u>A1L020</u>

Other Accession A1L020, 134034168
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 54173
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

Application Notes Rkhd4 antibody can be used for detection of Rkhd4 by Western blot at 1

□g/mL. Antibody can also be used for immunohistochemistry starting at 2.5

□g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID 92312

Other Names RNA-binding protein MEX3A, RING finger and KH domain-containing protein

4, MEX3A, RKHD4

Target/Specificity MEX3A;

Reconstitution & Storage Rkhd4 antibody can be stored at 4°C for three months and -20°C, stable for

up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high

temperatures.

Precautions Rkhd4 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name MEX3A

Synonyms RKHD4

Function RNA binding protein, may be involved in post-transcriptional regulatory

mechanisms.

Cellular Location Cytoplasm. Nucleus. Cytoplasm, P-body. Note=Predominantly expressed in

the cytoplasm and shuttles between the cytoplasm and the nucleus through

the CRM1 export pathway

Highest levels found in fetal brain and testis. Detected also in thymus, salivary gland and uterus

Background

Rkhd4 Antibody: 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.

References

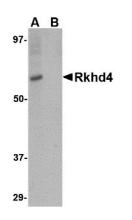
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Liu J, Valencia-Sanchez MA, Hannon GJ, et al. MicroRNA-dependent localization of targeted mRNAs to mammalian P-bodies. Nat. Cell Biol2005; 7:719-23.

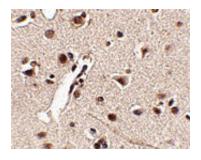
Guzman B, Cormand B, Ribases M, et al. Implication of chromosome 18 in hypertension by sibling pair and association analyses: putative involvement of the RKHD2 gene. Hypertension2006; 48:883-91.

Buchet-Poyau K, Courchet J, Le Hir H, et al. Identification and characterization of human Mex-3 proteins, a novel family of evolutionarily conserved RNA-binding proteins differentially localized to processing bodies. Nucleic Acids Res.2007; 35:1289-300.

Images

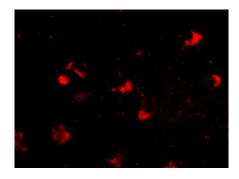


Western blot analysis of Rkhd4 in SK-N-SH cell lysate with Rkhd4 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of Rkhd4 in human brain tissue with Rkhd4 antibody at 2.5 μg/mL.

Immunofluorescence of rkhd4 in human brain tissue with rkhd4 antibody at 20 µg/mL.



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