

# **Rkhd2 Antibody**

Catalog # ASC10788

# **Specification**

# **Rkhd2 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Application Notes

WB

<u> 05U5Q3</u>

NP\_057710, 148229134 Human, Mouse, Rat

Rabbit Polyclonal

IgG

Rkhd2 antibody can be used for detection of Rkhd2 by Western blot at 0.5 - 1 μg/mL.

# **Rkhd2 Antibody - Additional Information**

Gene ID **51320** 

Target/Specificity

MEX3C;

#### **Reconstitution & Storage**

Rkhd2 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**

Rkhd2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **Rkhd2 Antibody - Protein Information**

Name MEX3C

Synonyms RKHD2, RNF194

#### **Function**

E3 ubiquitin ligase responsible for the post-transcriptional regulation of common HLA-A allotypes. Binds to the 3' UTR of HLA-A2 mRNA, and regulates its levels by promoting mRNA decay. RNA binding is sufficient to prevent translation, but ubiquitin ligase activity is required for mRNA degradation.

## **Cellular Location**

Cytoplasm. Nucleus. Note=Predominantly expressed in the cytoplasm and shuttles between the cytoplasm and the nucleus through the CRM1 export pathway. May act as suppressor of replication stress and chromosome missegregation

#### **Tissue Location**

Highest levels found in fetal brain and testis. Also expressed in thymus, salivary gland and uterus.



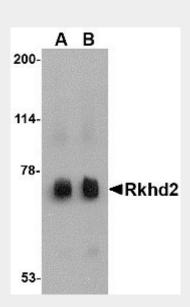
Highly expressed in cells of the innate immune system, in particular activated NK cells Week expression in the intestine.

# **Rkhd2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Rkhd2 Antibody - Images**



Western blot analysis of Rkhd2 in rat heart tissue lysate with Rkhd2 antibody at (A) 0.5  $\mu$ g/mL and (B) 1  $\mu$ g/mL.

# **Rkhd2 Antibody - Background**

Rkhd2 Antibody: Rkhd2, also known as MEX3C 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 Rkhd2, 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. It has been suggested that genetic variations in Rkhd2 may be associated with susceptibility to essential hypertension type 8. 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.

## **Rkhd2 Antibody - References**

Draper BW, Mello CC, Bowerman B, et al. MEX-3 is a KH domain protein that regulates blastomere





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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.