

# RKHD3 Antibody

Catalog # ASC11422

## Specification

# **RKHD3 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IF, E <u>O6ZN04</u> NP\_780575, 47716512 Human, Mouse, Rat Rabbit Polyclonal IgG RKHD3 antibody can be used for detection of EPAC1 by Western blot at 1 μg/mL. Antibody can also be used for immunofluorescence starting at 20 μg/mL. For immunofluorescence start at 20 μg/mL.

## **RKHD3 Antibody - Additional Information**

Gene ID 84206 Target/Specificity MEX3B; This antibody is specific for RKHD3 and will not recognize the other RKHD3 family of proteins.

#### **Reconstitution & Storage**

RKHD3 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

RKHD3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **RKHD3 Antibody - Protein Information**

Name MEX3B

Synonyms KIAA2009, RKHD3, RNF195

**Function** RNA-binding protein. May be involved in post-transcriptional regulatory mechanisms.

**Cellular Location** 

Nucleus. Cytoplasm. Cytoplasm, P-body. Cytoplasmic granule. Note=Predominantly expressed in the cytoplasm and shuttles between the cytoplasm and the nucleus through the CRM1 export pathway. Localization to P-bodies is dependent on 14-3-3

**Tissue Location** 



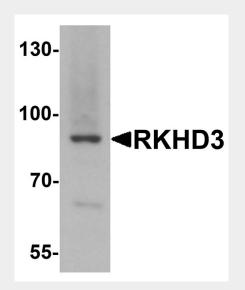
Highest levels found in fetal brain and testis. Detected in the adult intestinal epithelium, specifically in goblet cell at protein level.

## **RKHD3 Antibody - Protocols**

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

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

#### **RKHD3 Antibody - Images**



Western blot analysis of RKHD3 in mouse skeletal muscle tissue lysate with RKHD3 antibody at 1  $\mu$ g/mL.



Immunofluorescence of RKHD3 in mouse skeletal muscle cells with RKHD3 antibody at 20 µg/mL. RKHD3 Antibody - Background



RKHD3 Antibody: Rkhd3, also known as MEX3B 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 Rkhd3, 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. Rkhd3 is thought to act as a mechanism to fine-tune mRNA regulation in early Xenopus development, and with Rkhd4, but not Rkhd1, will co-localize with both the hDcp1a decapping factor and Argonaute (Ago) proteins in processing bodies (P bodies), recently characterized as centers of mRNA turnover.

## **RKHD3 Antibody - References**

Takada H, Kawana T, Ito Y, et al. The RNA-binding protein Mex3b has a fine-tuning system for mRNA regulation in early Xenopus development. Dev. 2009; 136:2413-22

Draper BW, Mello CC, Bowerman B, et al. MEX-3 is a KH domain protein that regulates blastomere identity in early C. elegans embryos. Cell 1996; 87:205-16.

Liu J, Valencia-Sanchez MA, Hannon GJ, et al. MicroRNA-dependent localization of targeted mRNAs to mammalian P-bodies. Nat. Cell Biol 2005; 7:719-23.

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.