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Rkhd2 Antibody

Catalog # ASC10788

Product Information

Application	WB, E
Primary Accession	Q5U5Q3
Other Accession	NP_057710, 148229134
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	69366
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Rkhd2 antibody can be used for detection of Rkhd2 by Western blot at 0.5 - 1 g/mL.

Additional Information

Gene ID	51320
Other Names	RNA-binding E3 ubiquitin-protein ligase MEX3C, 6.3.2.-, RING finger and KH domain-containing protein 2, RING finger protein 194, MEX3C, RKHD2, RNF194
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.

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.

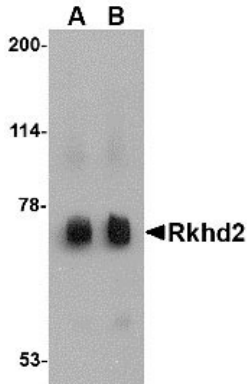
Background

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.

References

Draper BW, Mello CC, Bowerman B, et al. MEX-3 is a KH domain protein that regulates blastomere identity in early C. elegansembryos. Cell1996; 87:205-16.
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 Rkhd2 in rat heart tissue lysate with Rkhd2 antibody at (A) 0.5 µg/mL and (B) 1 µg/mL.