



RPUSD4 mouse mAb

Catalog No	YP-mAb-18064
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	RPUSD4
Immunogen	Synthesized peptide derived from human RPUSD4
Specificity	This antibody detects endogenous levels of RPUSD4 at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RPUSD4;RNA pseudouridylate synthase domain-containing protein 4
Observed Band	39-42 kDa
Calculated Molecular Weight	41kD
Cell Pathway	Mitochondrion matrix . Nucleus . Cytoplasm . Mainly localizes to mitochondrion (PubMed:23435261, PubMed:27974379, PubMed:28082677). Localizes to mitochondrial RNA granules, platforms for post-transcriptional RNA modification and ribosome assembly (PubMed:27974379, PubMed:28082677). Also found in nucleus and cytoplasm (PubMed:23435261). .
Tissue Specificity	
Function	Catalyzes uridine to pseudouridine isomerization (pseudouridylation) of different mitochondrial RNA substrates . Acts on position 1397 in 16S mitochondrial ribosomal RNA (16S mt-rRNA) . This modification is required for the assembly of 16S mt-rRNA into a functional mitochondrial ribosome . As a component of a functional protein-RNA module, consisting of RCC1L, NGRN, RPUSD3, RPUSD4, TRUB2, FASTKD2 and 16S mt-rRNA, controls 16S mt-rRNA abundance and is required for intra-mitochondrial translation . Acts on position 39 in mitochondrial tRNA(Phe) . Also catalyzes pseudouridylation of mRNAs in nucleus: acts as a regulator of pre-mRNA splicing by mediating



pseudouridylation of pre-mRNAs at locations associated with alternatively spliced regions . Pseudouridylation of pre-mRNAs near splice sites directly regulates mRNA splicing and mRNA 3'-end processing .

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images