

RG9MTD1 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI11810**Specification****RG9MTD1 antibody - middle region - Product Information**

Application	WB
Primary Accession	O7L0Y3
Other Accession	NM_017819 , NP_060289
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Horse, Bovine, Dog
Predicted	Human, Rabbit, Zebrafish
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47 KDa

RG9MTD1 antibody - middle region - Additional Information**Gene ID** 54931**Alias Symbol** **FLJ20432, MRPP1, RG9MTD1****Other Names**

Mitochondrial ribonuclease P protein 1, Mitochondrial RNase P protein 1, 2.1.1.-, HBV pre-S2 trans-regulated protein 2, RNA (guanine-9-)-methyltransferase domain-containing protein 1, Renal carcinoma antigen NY-REN-49, tRNA methyltransferase 10 homolog C, TRMT10C, MRPP1, RG9MTD1

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-RG9MTD1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

RG9MTD1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

RG9MTD1 antibody - middle region - Protein Information**Name** TRMT10C ([HGNC:26022](#))**Function**

Mitochondrial tRNA N(1)-methyltransferase involved in mitochondrial tRNA maturation (PubMed:18984158, PubMed:21593607, PubMed:23042678, PubMed:27132592). Component

of mitochondrial ribonuclease P, a complex composed of TRMT10C/MRPP1, HSD17B10/MRPP2 and PRORP/MRPP3, which cleaves tRNA molecules in their 5'-ends (PubMed:18984158). Together with HSD17B10/MRPP2, forms a subcomplex of the mitochondrial ribonuclease P, named MRPP1-MRPP2 subcomplex, which displays functions that are independent of the ribonuclease P activity (PubMed:23042678, PubMed:29040705). The MRPP1-MRPP2 subcomplex catalyzes the formation of N(1)-methylguanine and N(1)-methyladenine at position 9 (m1G9 and m1A9, respectively) in tRNAs; TRMT10C/MRPP1 acting as the catalytic N(1)-methyltransferase subunit (PubMed:23042678). The MRPP1-MRPP2 subcomplex also acts as a tRNA maturation platform: following 5'-end cleavage by the mitochondrial ribonuclease P complex, the MRPP1-MRPP2 subcomplex enhances the efficiency of 3'-processing catalyzed by ELAC2, retains the tRNA product after ELAC2 processing and presents the nascent tRNA to the mitochondrial CCA tRNA nucleotidyltransferase TRNT1 enzyme (PubMed:29040705). In addition to tRNA N(1)-methyltransferase activity, TRMT10C/MRPP1 also acts as a mRNA N(1)-methyltransferase by mediating methylation of adenosine residues at the N(1) position of MT-ND5 mRNA (PubMed:29072297). Associates with mitochondrial DNA complexes at the nucleoids to initiate RNA processing and ribosome assembly.

Cellular Location

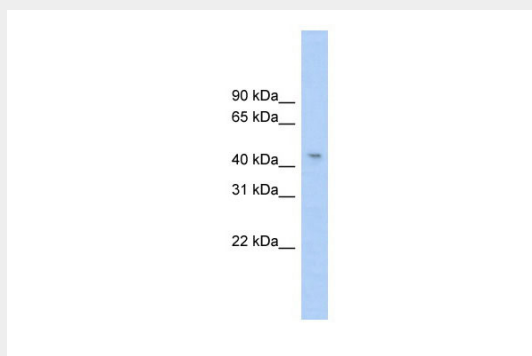
Mitochondrion matrix, mitochondrion nucleoid

RG9MTD1 antibody - middle region - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

RG9MTD1 antibody - middle region - Images



WB Suggested Anti-RG9MTD1 Antibody Titration: 0.2-1 µg/ml
Positive Control: HeLa cell lysate

