

TRMT10C Rabbit pAb

CatalogNo: YN8427

| Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat

Applications

- WB

MW

- 44kD (Calculated)

Isotype

- IgG

| Recommended Dilution Ratios

WB 1:500-2000

| Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

| Basic Information

Clonality Polyclonal

| Immunogen Information

Immunogen Synthesized peptide derived from human TRMT10C

Specificity This antibody detects endogenous levels of TRMT10C at Human, Mouse, Rat

| Target Information

Gene name TRMT10C MRPP1 RG9MTD1

Protein Name Mitochondrial ribonuclease P protein 1 (Mitochondrial RNase P protein 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)

Organism	Gene ID	UniProt ID
Human	54931 ;	Q7L0Y3 ;
Mouse	52575 ;	Q3UFY8 ;
Rat	304012 ;	Q5U2R4 ;

Cellular Localization Mitochondrion matrix, mitochondrion nucleoid .

Function Mitochondrial tRNA N(1)-methyltransferase involved in mitochondrial tRNA maturation . Component of mitochondrial ribonuclease P, a complex composed of TRMT10C/MRPP1, HSD17B10/MRPP2 and PRORP/MRPP3, which cleaves tRNA molecules in their 5'-ends . 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 . 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 . 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 . 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 . Associates with mitochondrial DNA complexes at the nucleoids to initiate RNA processing and ribosome assembly.

Validation Data

Contact information

Orders: order@immunoway.com
Support: tech@immunoway.com
Telephone: 877-594-3616 (Toll Free), 408-747-0185
Website: <http://www.immunoway.com>
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:
TRMT10C Rabbit pAb