

TRMT5 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP6746a

Specification

TRMT5 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

Q32P41

TRMT5 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 57570

Other Names

 $tRNA (guanine(37)-N1)-methyltransferase \\ \{ECO:0000255|HAMAP-Rule:MF_03152\}, 211228 \\ \{ECO:0000255|HAMAP-Rule:MF_03152\}, M1G-methyltransferase \\ \{ECO:0000255|HAMAP-Rule:MF_03152\}, tRNA [GM37] methyltransferase \\ \{ECO:0000255|HAMAP-Rule:MF_03152\}, tRNA methyltransferase 5 homolog \\ \{ECO:0000255|HAMAP-Rule:MF_03152\}, TRMT5 \\ \{ECO:0000255|HAMAP-Rule:MF_03152\} \\ (ECO:0000255|HAMAP-Rule:MF_03152) \\ (ECO:000255|HAMAP-Rule:MF_0$

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6746a was selected from the N-term region of human TRMT5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TRMT5 Antibody (N-term) Blocking Peptide - Protein Information

Name TRMT5 {ECO:0000255|HAMAP-Rule:MF 03152}

Function

Involved in mitochondrial tRNA methylation (PubMed:26189817). Specifically methylates the N1 position of guanosine-37 in various tRNAs. Methylation is not dependent on the nature of the nucleoside 5' of the target nucleoside. This is the first step in the biosynthesis of wybutosine (yW), a modified base adjacent to the anticodon of tRNAs and required for accurate decoding.

Cellular Location



Mitochondrion matrix {ECO:0000255|HAMAP-Rule:MF_03152, ECO:0000269|PubMed:26189817}. Nucleus {ECO:0000255|HAMAP-Rule:MF_03152}. Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03152}. Note=Predominantly in the mitochondria and in the nucleus. {ECO:0000255|HAMAP-Rule:MF_03152}

TRMT5 Antibody (N-term) Blocking Peptide - Protocols

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

• Blocking Peptides

TRMT5 Antibody (N-term) Blocking Peptide - Images

TRMT5 Antibody (N-term) Blocking Peptide - Background

tRNAs contain as many as 13 or 14 nucleotides that are modified posttranscriptionally by enzymes that are highly specific for particular nucleotides in the tRNA structure. TRMT5 methylates the N1 position of guanosine-37 (G37) in selected tRNAs using S-adenosyl methionine.

TRMT5 Antibody (N-term) Blocking Peptide - References

Brule, H., Biochemistry 43 (28), 9243-9255 (2004)