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TRMT12 Rabbit pAb

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Catalog # AP56576

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q53H54
Reactivity	Rat, Mouse
Predicted	Pig, Dog, Human, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50236
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TRMT12
Epitope Specificity	231-330/448
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Transfer RNA (tRNA) modifications help regulate the efficiency of mRNA translation by maintaining the correct reading frames. TRM12 (tRNA methyltransferase 12 homolog (S. cerevisiae)), also known as TYW2 (tRNA-yW-synthesizing protein 2) or TRMT12, is a 448 amino acid protein that belongs to the RNA methyltransferase trmD family and TYW2 subfamily. TRM12 is the human homolog of a yeast gene that is essential for the synthesis of yW (wybutosine), a guanosine that stabilizes codon-anticodon associations near the anticodon of phenylalanine tRNA during ribosomal decoding. The gene encoding TRRM12 maps to human chromosome 8, which consists of nearly 146 million base pairs, encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

Additional Information

Gene ID	55039
Other Names	tRNA wybutosine-synthesizing protein 2 homolog, tRNA-yW-synthesizing protein 2, 2.5.1.114, tRNA(Phe) (4-demethylwyosine(37)-C(7)) aminocarboxypropyltransferase, TYW2 (HGNC:26091), TRM12, TRMT12
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name TYW2 (HGNC:26091)

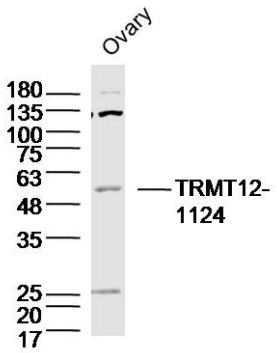
Synonyms TRM12, TRMT12

Function S-adenosyl-L-methionine-dependent transferase that acts as a component of the wybutosine biosynthesis pathway. Wybutosine is a hyper modified guanosine with a tricyclic base found at the 3'-position adjacent to the anticodon of eukaryotic phenylalanine tRNA. Catalyzes the transfer of the alpha-amino-alpha-carboxypropyl (acp) group from S- adenosyl-L-methionine to the C-7 position of 4-demethylwyosine (imG-14) to produce wybutosine-86.

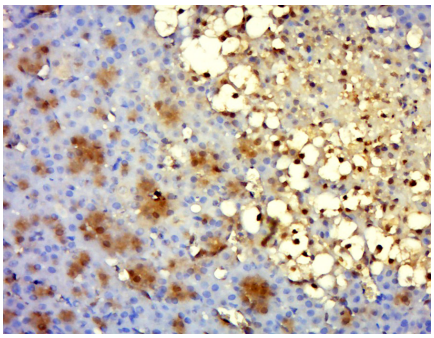
Background

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Images



Sample: Ovary (Mouse) Lysate at 40 ug
Primary: Anti- TRMT12-1124 (AP56576) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 50 kD
Observed band size: 50 kD



Paraformaldehyde-fixed, paraffin embedded (rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TRMT12) Polyclonal Antibody, Unconjugated (AP56576) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.