10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRMT12 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56576

Specification

TRMT12 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q53H54
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**50 KDa**
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.**
SIMILARITY	**Belongs to the RNA methyltransferase trmD family. TYW2 subfamily.**
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.

TRMT12 Polyclonal Antibody - 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, TRMT12, TRM12, TYW2

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

TRMT12 Polyclonal Antibody - Protein Information

Name TRMT12

Synonyms TRM12, TYW2

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.

TRMT12 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRMT12 Polyclonal Antibody - Images

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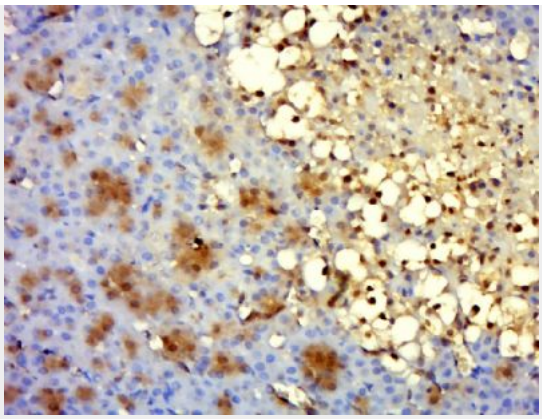
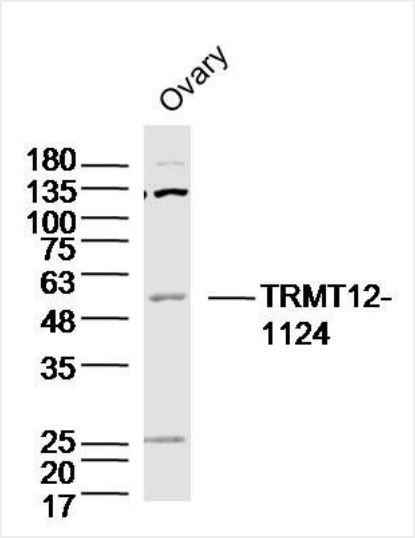


Paraformaldehyde-fixed, paraffin embedded (rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TRMT12) Polyclonal Antibody, Unconjugated (bs-17144R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Sample: Ovary (Mouse) Lysate at 40 ug
Primary: Anti- TRMT12-1124 (bs-17144R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 50 kD
Observed band size: 50 kD