

Product Name: SETMAR Rabbit Polyclonal Antibody**Catalog #: APRab17779**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	IHC, ICC/IF, ELISA
Reactivity	Human, Rat, Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio IHC 1:100-1:300, ICC/IF 1:50-1:200, ELISA 1:20000-1:40000

Molecular Weight

Antigen Information

Gene Name	SETMAR
Alternative Names	SETMAR; Histone-lysine N-methyltransferase SETMAR; SET domain and mariner transposase fusion gene-containing protein; HsMar1; Metnase
Gene ID	6419.0
SwissProt ID	Q53H47
Immunogen	The antiserum was produced against synthesized peptide derived from human SETMAR. AA range:350-400

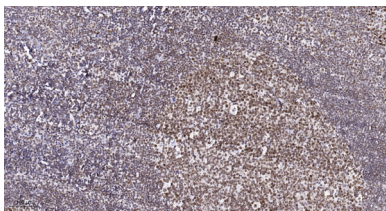
Background

This gene encodes a fusion protein that contains an N-terminal histone-lysine N-methyltransferase domain and a C-terminal mariner transposase domain. The encoded protein binds DNA and functions in DNA repair activities including non-homologous end joining and double strand break repair. The SET domain portion of this protein specifically methylates histone H3 lysines 4 and 36. This gene exists as a fusion gene only in anthropoid primates, other organisms lack mariner transposase domain. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2013],catalytic activity:S-adenosyl-L-methionine + histone L-lysine = S-adenosyl-L-homocysteine + histone N(6)-methyl-L-lysine.,domain:The mariner transposase Hsmar1 region mediates DNA-binding. It has no transposase activity because the active site contains an Asn in position 610 instead of a Asp residue.,function:Histone methyltransferase that methylates 'Lys-4' and 'Lys-36' of histone H3, 2 specific tags for epigenetic transcriptional activation. Specifically mediates dimethylation of H3 'Lys-36'. Binds DNA. May play a role in non-homologous end-joining repair.,miscellaneous:The mariner transposase region is only present in primates and appeared 40-58 million years ago, after the insertion of a transposon downstream of a preexisting SET gene, followed by the de novo exonization of previously non-coding sequence and the creation of a new intron.,similarity:Contains 1 post-SET domain.,similarity:Contains 1 pre-SET domain.,similarity:Contains 1 SET domain.,similarity:In the C-terminal section; belongs to the mariner transposase family.,similarity:In the N-terminal section; belongs to the histone-lysine methyltransferase family.,tissue specificity:Widely expressed, with highest expression in placenta and ovary and lowest expression in skeletal muscle.,

Research Area

Lysine degradation;

Image Data



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200 (4° overnight) . 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200 (room temperature, 45min) .