



SETMAR Polyclonal Antibody

Catalog No	YP-Ab-02007
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	SETMAR
Protein Name	Histone-lysine N-methyltransferase SETMAR
Immunogen	The antiserum was produced against synthesized peptide derived from human SETMAR. AA range:350-400
Specificity	SETMAR Polyclonal Antibody detects endogenous levels of SETMAR protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SETMAR; Histone-lysine N-methyltransferase SETMAR; SET domain and mariner transposase fusion gene-containing protein; HsMar1; Metnase
Observed Band	
Cell Pathway	Nucleus . Chromosome . Recruited on damaged DNA at sites of double-strand breaks. .
Tissue Specificity	Widely expressed, with highest expression in placenta and ovary and lowest expression in skeletal muscle.
Function	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.,similar



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],

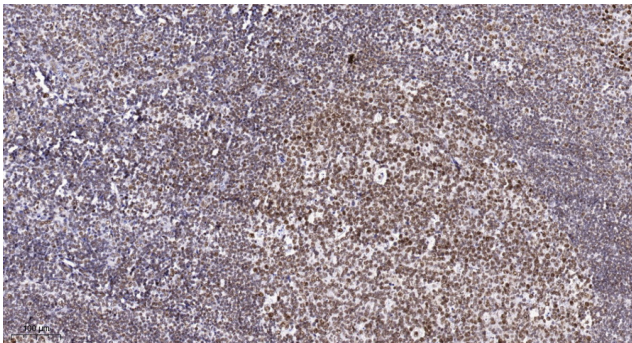
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



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).