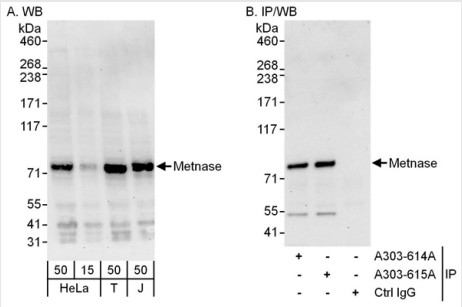
Metnase (SETMAR) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Metnase (SETMAR), Polyclonal Antibody
Full Product Name	Rabbit anti-Metnase Antibody, Affinity Purified
Product Gene Name	anti-SETMAR antibody
Product Synonym Names	histone-lysine N-methyltransferase SETMAR; SET domain and mariner transposase fusion protein; SET domain and mariner transposase fusion gene-containing protein; Mar1; Histone-lysine N-methyltransferase; METNASE; Histone-lysine N-methyltransferase SETMAR; SET domain and mariner transposase fusion gene
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid. Whole IgG. Tris-citrate/phosphate buffer, pH 7 to 8 containing 0.09% Sodium Azide
Purity/Purification	Antigen Affinity Purified
Concentration	1000ug/ml (lot specific)
Preparation and Storage	Store at 2-8 degree C Shelf Life: 1 year from date of receipt
Molecular Weight	62,124 Da
OMIM	609834
3D Structure	ModBase 3D Structure for Q53H47
Immunogen	Between 1 and 50
Conjugation	Unconjugated
Product Categories/Family for anti-SETMAR antibody	Primary Antibodies
Applications Tested/Suitable for anti-SETMAR antibody	Western Blot (WB), Immunoprecipitation (IP)
Application Notes for anti-SETMAR antibody	WB: 1:1000-1:5000 IP: 6ug/mg lysate
Related Product Information for anti-SETMAR antibody	Metnase is also known as Histone-lysine N-methyltransferase SETMAR. Metnase is a histone methyltransferase that methylates 'Lys-4' and 'Lys-36' of histone H3, 2 specific tags for epigenetic transcriptional activation. Metanase specifically mediates dimethylation of H3 'Lys-36', and has sequence-specific DNA-binding activity and recognizes the 19-mer core of the 5'-terminal inverted repeats (TIRs) of the Hsmar1 element. Metnase possessess DNA nicking activity and in vivo end joining activity, and it may mediate genomic integration of foreign DNA [taken from the Universal Protein Resource (UniProt) www.uniprot.org/uniprot/Q53H47].
Other Notes	Small volumes of anti-SETMAR antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for SETMAR purchase	MBS3903874 is an antibody targeting SETMAR. Also known as Rabbit anti-Metnase Antibody, Affinity Purified. Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-SETMAR antibody
Detection of human Metnase by western blot and immunoprecipitation. Samples: Whole cell lysate from HeLa (15 and 50 ug for WB; 1 mg for IP, 20% of IP loaded), HEK293T (T; 50 ug) and Jurkat (J; 50 ug) cells. Antibodies: Affinity purified rabbit anti-Metnase antibody MBS3903874 used for WB at 0.4 ug/ml (A) and 1 ug/ml (B) and used for IP at 6 ug/mg lysate. Metnase was also immunoprecipitated by rabbit anti-Metnase antibody MBS3903875, which recognizes a downstream epitope. Detection: Chemiluminescence with exposure times of 30 seconds (A and B).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SETMAR. It may not necessarily be applicable to this product.

NCBI GI #	194306650
NCBI GeneID	6419
NCBI Accession #	NP_006506.3
UniProt Primary Accession #	Q53H47
UniProt Secondary Accession #	Q13579; Q1G668; Q96F41; B4DY74; E7EN68
UniProt Related Accession #	Q53H47
GenBank Nucleotide #	NM_006515.3
NCBI Official Full Name	histone-lysine N-methyltransferase SETMAR isoform 1
NCBI Official Synonym Full Names	SET domain and mariner transposase fusion gene
NCBI Official Symbol	SETMAR
NCBI Official Synonym Symbols	Mar1; METNASE
UniProt Protein Name	Histone-lysine N-methyltransferase SETMAR
UniProt Synonym Protein Names	SET domain and mariner transposase fusion protein
Protein Family	Histone-lysine N-methyltransferase
UniProt Gene Name	SETMAR
UniProt Synonym Gene Names	Metnase
UniProt Entry Name	SETMR_HUMAN
NCBI Protein Information	histone-lysine N-methyltransferase SETMAR
NCBI Summary for SETMAR	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]

UniProt Comments for SETMAR	SETMAR: 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'. Has sequence-specific DNA-binding activity and recognizes the 19-mer core of the 5'-terminal inverted repeats (TIRs) of the Hsmar1 element. Has DNA nicking activity. Has in vivo end joining activity and may mediate genomic integration of foreign DNA. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Amino Acid Metabolism - lysine degradation; EC 2.1.1.43; Methyltransferase; Methyltransferase, protein lysine Chromosomal Location of Human Ortholog: 3p26.1 Cellular Component: condensed chromosome; nucleus Molecular Function: protein binding; structure-specific DNA binding; protein homodimerization activity; zinc ion binding; single-stranded DNA specific endodeoxyribonuclease activity; histone lysine N-methyltransferase activity (H3-K4 specific); endonuclease activity; double-stranded DNA binding; single-stranded DNA binding; transposase activity; histone lysine N-methyltransferase activity (H3-K36 specific) Biological Process: cell proliferation; DNA integration; histone H3-K4 methylation; DNA double-strand break processing; histone H3-K36 methylation; transposition, DNA-mediated; DNA catabolic process, endonucleolytic; double-strand break repair via nonhomologous end joining; replication fork processing
Research Articles on SETMAR	**1.** methylation of snRNP70 by SETMAR regulates constitutive and/or alternative splicing
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