

SET1A Rabbit pAb

Catalog # AP96905

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q15047
Other Accession	Q15047
Host	Rabbit
Clonality	Polyclonal
Calculated MW	186034
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SET1A
Epitope Specificity	21-120/1707
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 post-SET domain. Contains 1 RRM (RNA recognition motif) domain. Contains 1 SET domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SET1A is a component of a histone methyltransferase (HMT) complex that produces mono-, di-, and trimethylated histone H3 at Lys4. The complex is the analog of the <i>S. cerevisiae</i> Set1/COMPASS complex (Lee and Skalnik, 2005 [PubMed 16253997]). Also see SET1B (MIM 611055).[supplied by OMIM, Mar 2008]

Additional Information

Gene ID	9739
Other Names	EPEDD; EPEO2; KMT2F; NEDSID; Set1; Set1A; Nscn1; mKIAA0339; mNSC1; SET1A_HUMAN; SETD1A; Lysine N-methyltransferase 2F; SET domain-containing protein 1A (hSET1A); Set1/Ash2 histone methyltransferase complex subunit SET1; 2.1.1.364; KIAA0339; SET domain containing 1A, histone lysine methyltransferase; SET domain containing 1A
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	SETD1A
Function	Histone methyltransferase that catalyzes methyl group transfer from S-adenosyl-L-methionine to the epsilon-amino group of 'Lys-4' of histone H3 (H3K4) via a non-processive mechanism (PubMed:12670868, PubMed:25561738). Part of chromatin remodeling machinery, forms H3K4me1, H3K4me2 and H3K4me3 methylation marks at active chromatin sites where transcription and DNA repair take place (PubMed:29937342, PubMed:31197650, PubMed:32346159). Responsible for H3K4me3 enriched promoters and transcriptional programming of inner mass stem cells and neuron progenitors during embryogenesis (By similarity) (PubMed:31197650). Required for H3K4me1 mark at stalled replication forks. Mediates FANCD2-dependent nucleosome remodeling and RAD51 nucleofilaments stabilization at reversed forks, protecting them from nucleolytic degradation (PubMed:29937342, PubMed:32346159). Does not methylate 'Lys-4' of histone H3 if the neighboring 'Lys-9' residue is already methylated (PubMed:12670868). Binds RNAs involved in RNA processing and the DNA damage response (PubMed:38003223).
Cellular Location	Nucleus speckle. Chromosome Cytoplasm. Note=Localizes to a largely non-overlapping set of euchromatic nuclear speckles with SETD1B, suggesting that SETD1A and SETD1B each bind to a unique set of target genes (PubMed:17355966). Predominantly nuclear (PubMed:38003223)

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