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

SET1A Rabbit pAb

Catalog # AP96905

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O15047
Other Accession	O15047
Predicted	Rat, Pig, Chimpanzee, Gorilla, Human, Mouse, Dog, Horse, Sheep
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 S. cerevisiae 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; Nsccn1; 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'.