

SETD1A Antibody(Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19714c**Specification**

SETD1A Antibody(Center) - Product Information

Application	WB,E
Primary Accession	O15047
Other Accession	NP_055527.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	927-956

SETD1A Antibody(Center) - Additional Information**Gene ID** 9739**Other Names**

Histone-lysine N-methyltransferase SETD1A, Lysine N-methyltransferase 2F, SET domain-containing protein 1A, hSET1A, Set1/Ash2 histone methyltransferase complex subunit SET1, SETD1A

Target/Specificity

This SETD1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 927-956 amino acids from the Central region of human SETD1A.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SETD1A Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SETD1A Antibody(Center) - 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

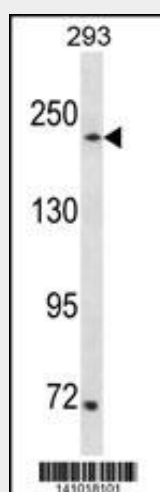
Nucleus speckle. Chromosome Cytoplasm. Note=Localizes to a largely non-overlapping set of euchromatic nuclear speckles with SETD1B, suggesting that SETD1A and SETD1B each bind to a unique set of target genes (PubMed:17355966). Predominantly nuclear (PubMed:38003223)

SETD1A Antibody(Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SETD1A Antibody(Center) - Images



SETD1A Antibody (Center) (Cat. #AP19714c) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the SETD1A antibody detected the SETD1A protein (arrow).

SETD1A Antibody(Center) - Background

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).

SETD1A Antibody(Center) - References

Wu, M., et al. Mol. Cell. Biol. 28(24):7337-7344(2008)
Nguyen, P., et al. Mol. Cell. Biol. 28(21):6720-6729(2008)
Ansari, K.I., et al. Biochim. Biophys. Acta 1779(1):66-73(2008)
Lee, J.H., et al. Mol. Cell. Biol. 28(2):609-618(2008)
Cho, Y.W., et al. J. Biol. Chem. 282(28):20395-20406(2007)