

SETD4 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18238a**Specification**

SETD4 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O9NVD3
Other Accession	NP_001007260.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	50416
Antigen Region	14-41

SETD4 Antibody (N-term) - Additional Information**Gene ID** 54093**Other Names**

SET domain-containing protein 4, 211-, SETD4, C21orf18, C21orf27

Target/Specificity

This SETD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 14-41 amino acids from the N-terminal region of human SETD4.

Dilution

WB~~1:1000

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

SETD4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SETD4 Antibody (N-term) - Protein Information**Name** SETD4 {ECO:0000303|PubMed:24738023, ECO:0000312|HGNC:HGNC:1258}**Function** Protein-lysine N-methyltransferase that methylates both histones and non-histone proteins (PubMed:[31308046](#), PubMed:[35545041](#), PubMed:[37926288](#)). Via its catalytic activity,

regulates many processes, including cell proliferation, cell differentiation, inflammatory response and apoptosis. Regulates the inflammatory response by mediating mono- and dimethylation of 'Lys-4' of histone H3 (H3K4me1 and H3K4me2, respectively), leading to activate the transcription of pro- inflammatory cytokines IL6 and TNF-alpha (By similarity). Through the catalysis of TBK1 monomethylation, may regulate virus-induced interferon signaling. TBK1 monomethylation enhances its interaction with MAVS, STING and IRF3, hence promoting antiviral interferon signaling (PubMed:[37926288](#)). Also involved in the regulation of stem cell quiescence by catalyzing the trimethylation of 'Lys-20' of histone H4 (H4K20me3), thereby promoting heterochromatin formation (PubMed:[31308046](#)). In the brain, epigenetically controls quiescence of neural stem cells for sustaining a protected neural stem cell population and maintaining a stem cell reservoir for neurogenesis (By similarity). Involved in proliferation, migration, paracrine and myogenic differentiation of bone marrow mesenchymal stem cells (BMSCs) (By similarity). Through the catalysis of XRCC5/Ku70 trimethylation, regulates BAX-mediated apoptosis. SETD4-catalyzed XRCC5 methylation results in XRCC5 translocation to the cytoplasm, where it interacts with BAX, sequestering it from the mitochondria, hence preventing BAX- mediated apoptosis (PubMed:[35545041](#)).

Cellular Location

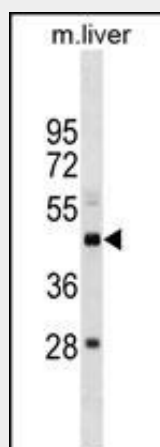
Cytoplasm, cytosol. Nucleus

SETD4 Antibody (N-term) - 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](#)

SETD4 Antibody (N-term) - Images



SETD4 Antibody (N-term) (Cat. #AP18238a) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the SETD4 antibody detected the SETD4 protein (arrow).

SETD4 Antibody (N-term) - Background

C21orf18 contains 1 SET domain. The exact function is not known.

SETD4 Antibody (N-term) - References

Hillman, R.T., et al. Genome Biol. 5 (2), R8 (2004) :
Reymond, A., et al. Genomics 78 (1-2), 46-54 (2001) :
Watanabe, K., et al. Genomics 52(1):95-100(1998)