

SETD8 polyclonal antibody
Rabbit Polyclonal Antibody
Catalog # ABV11379**Specification**

SETD8 polyclonal antibody - Product Information

Application	WB
Primary Accession	O9NQR1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	42890

SETD8 polyclonal antibody - Additional Information**Gene ID** 387893Positive Control
Application & Usage**Western blot: HeLa cells**
Western Blot: 1:1000.**Other Names**

SET07, SET8, PR/SET07, KMT5A, PR-Set7

Target/Specificity

SETD8

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

In PBS with 0.05% sodium azide and 0.05% ProClin 300.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

SETD8 polyclonal antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SETD8 polyclonal antibody - Protein Information

Name KMT5A ([HGNC:29489](#))

Function

Protein-lysine N-methyltransferase that monomethylates both histones and non-histone proteins (PubMed:[12086618](#), PubMed:[12121615](#), PubMed:[15964846](#), PubMed:[17707234](#), PubMed:[27338793](#)). Specifically monomethylates 'Lys-20' of histone H4 (H4K20me1) (PubMed:[12086618](#), PubMed:[12121615](#), PubMed:[15964846](#), PubMed:[27338793](#), PubMed:[15200950](#), PubMed:[15933069](#), PubMed:[15933070](#), PubMed:[16517599](#)). H4K20me1 is enriched during mitosis and represents a specific tag for epigenetic transcriptional repression (PubMed:[12086618](#), PubMed:[12121615](#), PubMed:[15964846](#), PubMed:[15200950](#), PubMed:[15933069](#), PubMed:[15933070](#), PubMed:[16517599](#)). Mainly functions in euchromatin regions, thereby playing a central role in the silencing of euchromatic genes (PubMed:[12086618](#), PubMed:[12121615](#), PubMed:[15964846](#), PubMed:[15200950](#), PubMed:[15933069](#), PubMed:[15933070](#), PubMed:[16517599](#)). Required for cell proliferation, probably by contributing to the maintenance of proper higher-order structure of DNA during mitosis (PubMed:[12086618](#), PubMed:[12121615](#), PubMed:[15964846](#), PubMed:[15200950](#), PubMed:[15933069](#), PubMed:[15933070](#), PubMed:[16517599](#)). Involved in chromosome condensation and proper cytokinesis (PubMed:[12086618](#), PubMed:[12121615](#), PubMed:[15964846](#), PubMed:[15200950](#), PubMed:[15933069](#), PubMed:[15933070](#), PubMed:[16517599](#)). Nucleosomes are preferred as substrate compared to free histones (PubMed:[12086618](#), PubMed:[12121615](#), PubMed:[15964846](#), PubMed:[15200950](#), PubMed:[15933069](#), PubMed:[15933070](#), PubMed:[16517599](#)).

href="http://www.uniprot.org/citations/15933069" target="_blank">15933069, PubMed:15933070, PubMed:16517599). Mediates monomethylation of p53/TP53 at 'Lys-382', leading to repress p53/TP53-target genes (PubMed:17707234). Plays a negative role in TGF- β response regulation and a positive role in cell migration (PubMed:23478445).

Cellular Location

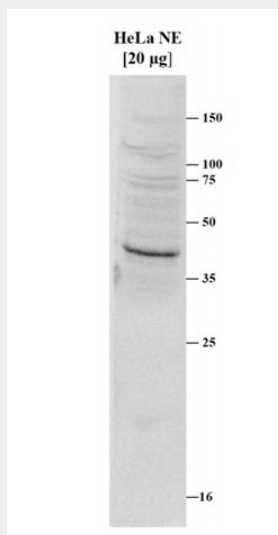
Nucleus. Chromosome. Note=Specifically localizes to mitotic chromosomes (PubMed:12208845). Colocalized with SIRT2 at mitotic foci (PubMed:23468428). Associates with chromosomes during mitosis; association is increased in a H₂O₂-induced oxidative stress- dependent manner (PubMed:23468428). Associates with silent chromatin on euchromatic arms (PubMed:12086618). Not associated with constitutive heterochromatin (PubMed:12086618).

SETD8 polyclonal antibody - 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](#)

SETD8 polyclonal antibody - Images



Western blot was performed on nuclear extracts from HeLa cells (HeLa NE, 20 µg) using the antibody diluted 1:1000 in TBS-Tween containing 5% skimmed milk. The molecular weight marker (in kDa) is shown on the right; the location of the protein of interest is indicated by an arrow.

SETD8 polyclonal antibody - Background

SETD8 is a histone methyl transferase that specifically monomethylates 'Lys-20' of histone H4. This

histone modification represents a specific tag for epigenetic transcriptional repression is enriched during mitosis. SETD8 may also play a role in maintaining silent chromatin by preventing the acetylation of the H4 tail.