

SETD7 / SET7 Antibody (aa131-145)
Rabbit Polyclonal Antibody
Catalog # ALS14583**Specification****SETD7 / SET7 Antibody (aa131-145) - Product Information**

Application	WB, IHC-P
Primary Accession	Q8WTS6
Reactivity	Human, Mouse, Rat, Rabbit, Hamster, Monkey, Horse, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A

SETD7 / SET7 Antibody (aa131-145) - Additional Information**Gene ID** 80854**Other Names**

Histone-lysine N-methyltransferase SETD7, 2.1.1.43, Histone H3-K4 methyltransferase SETD7, H3-K4-HMTase SETD7, Lysine N-methyltransferase 7, SET domain-containing protein 7, SET7/9, SETD7, KIAA1717, KMT7, SET7, SET9

Target/Specificity

Two synthetic peptides corresponding to amino acids 131-145 (GEVNEDGEMTGEKIA) and 336-352 (GYDHSPPGKSGPEAPEW) of human Set7/9 were used as immunogen; GenBank Accession No. NP_085151.1. These sequences are 100% conserved between human, mouse and rat.

Reconstitution & Storage

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions

SETD7 / SET7 Antibody (aa131-145) is for research use only and not for use in diagnostic or therapeutic procedures.

SETD7 / SET7 Antibody (aa131-145) - Protein Information**Name** SETD7**Function**

Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3 (PubMed:11779497, PubMed:11850410, PubMed:12540855, PubMed:12588998, PubMed:16141209). H3 'Lys-4'

methylation represents a specific tag for epigenetic transcriptional activation (PubMed:12540855, PubMed:12588998, PubMed:16141209). Plays a central role in the transcriptional activation of genes such as collagenase or insulin (PubMed:12588998, PubMed:16141209). Recruited by IPF1/PDX-1 to the insulin promoter, leading to activate transcription (PubMed:16141209). Also has methyltransferase activity toward non- histone proteins such as CGAS, p53/TP53, TAF10, and possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins (PubMed:15099517, PubMed:15525938, PubMed:16415881, PubMed:35210392). Monomethylates 'Lys-189' of TAF10, leading to increase the affinity of TAF10 for RNA polymerase II (PubMed:15099517, PubMed:16415881). Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing p53/TP53-mediated transcriptional activation (PubMed:15525938, PubMed:16415881, PubMed:17108971). Monomethylates 'Lys-491' of CGAS, promoting interaction between SGF29 and CGAS (By similarity).

Cellular Location

Nucleus. Chromosome

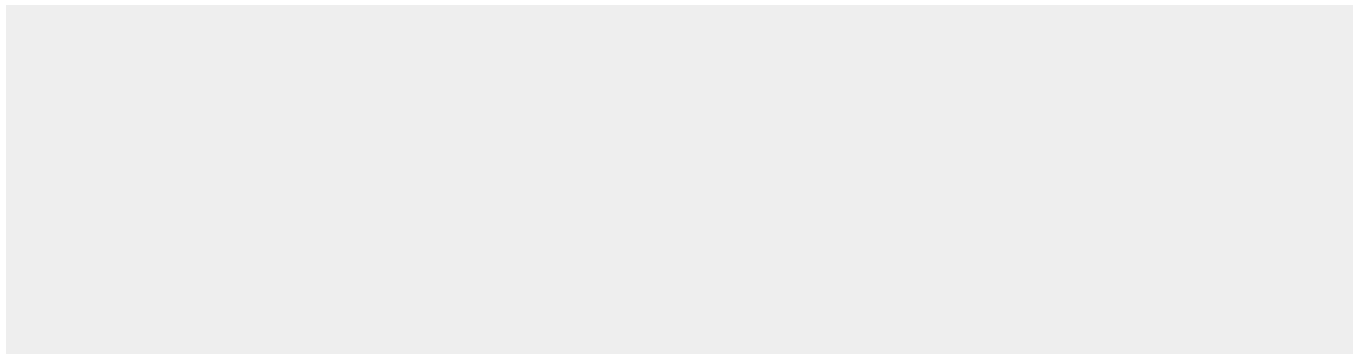
Tissue Location

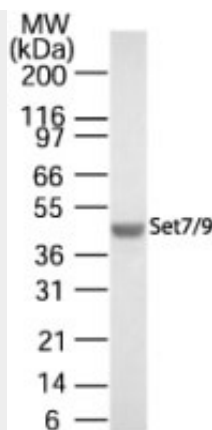
Widely expressed. Expressed in pancreatic islets.

SETD7 / SET7 Antibody (aa131-145) - Protocols

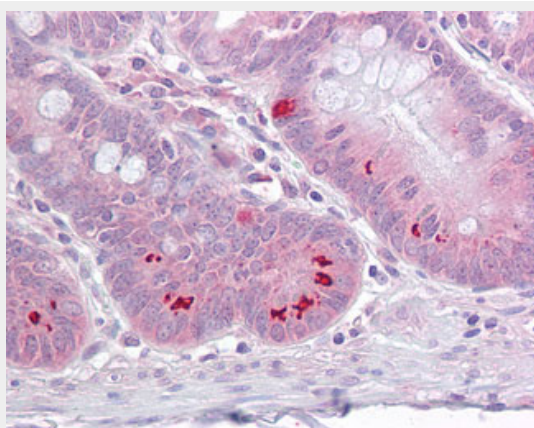
Provided below are standard protocols that you may find useful for product applications.

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

SETD7 / SET7 Antibody (aa131-145) - Images



Western blot analysis for Set7/9 using antibody at 1:500 on 20 ug of HeLa whole cell lysate.



Anti-SETD7 / SET7 antibody IHC of human small intestine.

SETD7 / SET7 Antibody (aa131-145) - Background

Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in the transcriptional activation of genes such as collagenase or insulin. Recruited by IPF1/PDX-1 to the insulin promoter, leading to activate transcription. Has also methyltransferase activity toward non-histone proteins such as p53/TP53, TAF10, and possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins. Monomethylates 'Lys-189' of TAF10, leading to increase the affinity of TAF10 for RNA polymerase II. Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing p53/TP53-mediated transcriptional activation.

SETD7 / SET7 Antibody (aa131-145) - References

- Wang H.,et al.Mol. Cell 8:1207-1217(2001).
- Nishioka K.,et al.Genes Dev. 16:479-489(2002).
- Hillier L.W.,et al.Nature 434:724-731(2005).
- Nagase T.,et al.DNA Res. 7:347-355(2000).
- Martens J.H.,et al.Mol. Cell. Biol. 23:1808-1816(2003).