

SETD7 Antibody

Rabbit mAb

Catalog # AP90135

Product Information

Application	WB, IP
Primary Accession	Q8WTS6
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Histone H3-K4 methyltransferase SETD7; Lysine N-methyltransferase 7; SET domain-containing protein 7; SET7;SET9;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	40721

Additional Information

Dilution	WB 1:500~1:2000 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SETD7
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

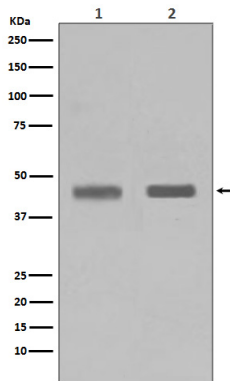
Cellular Location

Nucleus. Chromosome

Tissue Location

Widely expressed. Expressed in pancreatic islets.

Images



Western blot analysis of SETD7 in (1) Jurkat cell lysate; (2) HeLa cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.