

Anti-SETD7 Antibody

Catalog # AP96048

Product Information

Application	WB, FC
Primary Accession	Q8WTS6
Reactivity	Human, Rat, Mk
Host	Mouse
Clonality	Monoclonal
Calculated MW	40721

Additional Information

Gene ID	80854
Other Names	KIAA1717; KMT7; SET7; SET9; Histone-lysine N-methyltransferase SETD7; Histone H3-K4 methyltransferase SETD7; H3-K4-HMTase SETD7; Lysine N-methyltransferase 7; SET domain-containing protein 7; SET7/9
Target/Specificity	Recombinant fusion protein of human SETD7 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200)
Format	Mouse IgG2a. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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, GLI3, p53/TP53, TAF10, and possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins (PubMed:15099517, PubMed:15525938, PubMed:16415881, PubMed:27146893, 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). Acts as a positive regulator of smoothened signaling by mediating methylation of full-length GLI3, increasing GLI3 ability to bind DNA (PubMed:[27146893](#)).

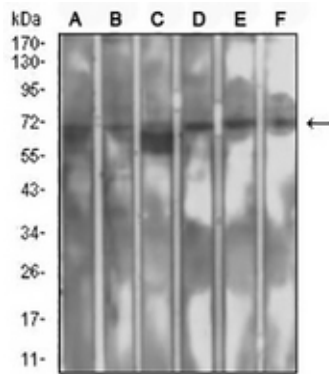
Cellular Location

Nucleus. Chromosome

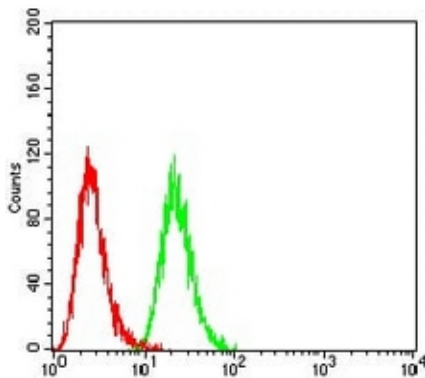
Tissue Location

Widely expressed. Expressed in pancreatic islets.

Images



Western blot analysis of SETD7 expression in MCF7 (A), HeLa (B), A549 (C), COS7 (D), Jurkat (E), PC12 (F) whole cell lysates. (Predicted band size: 41 kD; Observed band size: 70 kD)



Flow cytometric analysis of HeLa cells using Anti-SETD7 Antibody (green) and negative control (red).

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