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Anti-SETD7/Set7 Rabbit Monoclonal Antibody

Catalog # ABO13580

Product Information

Application	WB, IP
Primary Accession	Q8WTS6
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-SETD7/Set7 Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat.

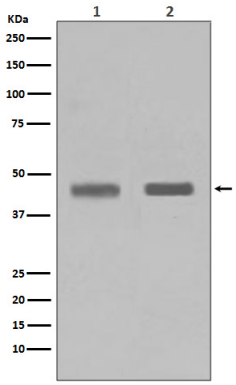
Additional Information

Gene ID	80854
Other Names	Histone-lysine N-methyltransferase SETD7, 2.1.1.364 {ECO:0000255|PROSITE-ProRule:PRU00910, ECO:0000269|PubMed:12540855}, Histone H3-K4 methyltransferase SETD7, H3-K4-HMTase SETD7, Lysine N-methyltransferase 7, SET domain-containing protein 7, SET7/9, SETD7
Calculated MW	40721
Application Details	WB 1:500-1:2000 IP 1:50
Subcellular Localization	Nucleus. Chromosome.
Tissue Specificity	Widely expressed. Expressed in pancreatic islets.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ABA-19
Immunogen	A synthesized peptide derived from human SETD7
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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 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'.