10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Anti-SETD7 Antibody

Catalog # AP96048

## Product Information

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

## Additional Information

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|---|---|
| **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

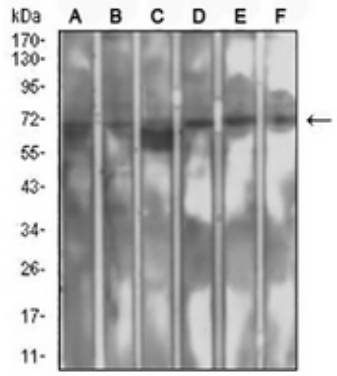
| | |
|---|---|
| **Name** | SETD7 |
| **Function** | Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3 (PubMed:11779497, PubMed:11850410, PubMed:12540855, PubMed:12588998, PubMed:16141209). H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional 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).

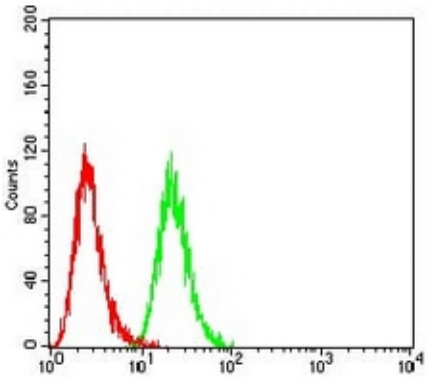
**Cellular Location** Nucleus. Chromosome

**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'.