

Histone-Lysine N-Methyltransferase SETD7 (SET7) Antibody

Catalogue No.: abx026519



Histone methyltransferases (HMTases) selectively methylate evolutionarily conserved arginine or lysine residues, primarily in the N-terminal tails of histones H3 and H4. Signal transduction pathways affecting the N-terminal tails of histones lead to a number of post-translational modifications including acetylation, phosphorylation, poly (ADP-ribosylation), ubiquitination and methylation. These modifications play critical roles in regulating chromatin structure and gene expression. Set7/9 is a histone specific HMTase that methylates histone H3 lysine 4. Set7/9 transfers methyl groups to lysine 4 of histone H3 in complex with S-adenosyl-L-methionine. In yeast, H4-K20 methylation does not have any apparent role in the regulation of gene expression or heterochromatin function; rather it appears to play a role in DNA damage response. Loss of Set9 activity or mutation of H4-K20 markedly impairs yeast cell survival after genotoxic challenge and compromises the ability of cells to maintain checkpoint mediated cell cycle arrest. Genetic experiments link Set9 to Crb2, a homolog of the mammalian checkpoint protein 53BP1, and the enzyme is required for Crb2 localization to sites of DNA damage.

Target: Histone-Lysine N-Methyltransferase SETD7 (SET7)

Clonality: Polyclonal

Reactivity: Human

Tested Applications: ELISA, WB

Host: Rabbit

Recommended dilutions: WB: 1/1000. Optimal dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

Immunogen: KLH-conjugated synthetic peptide between 289-317 amino acids from the C-terminal region of human SET7.

Isotype: IgG

Form: Liquid

Purification: Purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.

Datasheet

Version: 3.0.0

Revision date: 09 Oct 2025



Storage: Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

UniProt Primary AC: Q8WTS6 ([UniProt](#), [ExPASy](#))

KEGG: hsa:80854

String: [9606.ENSP00000274031](#)

Molecular Weight: Calculated MW: 40.7 kDa

Buffer: PBS containing 0.09% sodium azide.

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

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