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Product Information

SETD8, GST-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5260**
Storage Temperature –70 °C

Synonyms: PR-Set7, SET07, SET8

Product Description

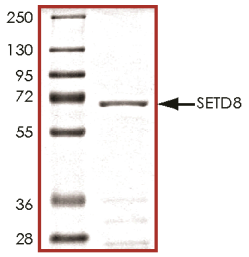
SETD8 or SET domain containing lysine methyltransferase 8 is a lysine methyltransferase that monomethylates p53 in human cell lines. The monomethylation by SETD8 suppresses p53-mediated transcriptional activation of highly responsive target genes, such as p21 (CDKN1A) and PUMA (BBC3), but it has little influence on weak p53 targets.[1] Depletion of SET8 augmented the proapoptotic and checkpoint activation functions of p53, and SETD8 expression is downregulated during DNA damage. SETD8 is a Wnt signaling mediator and is recruited by LEF1/TCF4 to regulate the transcription of Wnt-activated genes, possibly through H4K20 monomethylation at the target gene promoters.[2]

Recombinant full-length human SETD8 was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST-tag. The SETD8 gene accession number is BC050346. It is supplied in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~68 kDa

The enzymatic activity of this product has not been determined.

Figure 1.
SDS-PAGE Gel of Typical Lot:
≥70% (SDS-PAGE, densitometry)



Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

References

1. Shi, X. et al., Modulation of p53 function by SET8-mediated methylation at lysine 382. Molec. Cell, **27**, 636-646 (2007).
2. Li, Z. et al., Histone H4 Lys 20 monomethylation by histone methylase SET8 mediates Wnt target gene activation. Proc Natl Acad Sci U S A., **108**(8), 3116-23 (2011).

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