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Product Information

SMYD3, GST-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5215**
Storage Temperature –70 °C

Synonyms: ZMYND1, ZNFN3A1, FLJ21080

Product Description

SMYD3 (SET and MYND domain containing 3) is a histone methyltransferase that plays a role in transcriptional regulation as a member of an RNA polymerase complex. The introduction of SMYD3 enhanced cell growth and the histone methyl-transferase activity of SMYD3 is involved in the proliferation of cancer cells.[1] A variable number of tandems repeat polymorphism in an E2F-1 binding element in the 5′ flanking region of SMYD3 is a risk factor for human cancers.[2]

Recombinant, full-length, human SMYD3 was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST tag. The gene accession number is BC031010. Recombinant protein stored 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: ~71 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

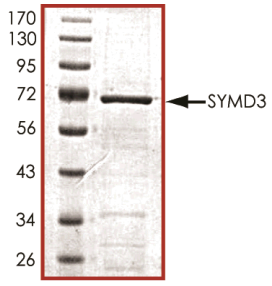
Precautions and Disclaimer

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.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Hamamoto, R. et al., SMYD3 encodes a histone methyltransferase involved in the proliferation of cancer cells. Nature Cell Biol., **6**, 731-740 (2004).
2. Tsuge, M. et al., A variable number of tandem repeats polymorphism in an E2F-1 binding element in the 5-prime flanking region of SMYD3 is a risk factor for human cancers. Nature Genet., **37**, 1104-1107 (2005).

RC,MAM 11/11-1