

**SMYD3 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7344c**

**Specification**

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**SMYD3 Antibody (Center) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, FC,E               |
| Primary Accession | <a href="#">O9H7B4</a> |
| Reactivity        | Human                  |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Calculated MW     | 49097                  |
| Antigen Region    | 209-236                |

**SMYD3 Antibody (Center) - Additional Information**

**Gene ID** 64754

**Other Names**

Histone-lysine N-methyltransferase SMYD3, SET and MYND domain-containing protein 3, Zinc finger MYND domain-containing protein 1, SMYD3, ZMYND1, ZNFN3A1

**Target/Specificity**

This SMYD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 209-236 amino acids from the Central region of human SMYD3.

**Dilution**

WB~~1:1000

FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SMYD3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**SMYD3 Antibody (Center) - Protein Information**

**Name** SMYD3

**Synonyms** ZMYND1, ZNFN3A1

**Function** Histone methyltransferase. Specifically methylates 'Lys-4' of histone H3, inducing di- and tri-methylation, but not monomethylation (PubMed:[15235609](#), PubMed:[22419068](#)). Also methylates 'Lys-5' of histone H4 (PubMed:[22419068](#)). Plays an important role in transcriptional activation as a member of an RNA polymerase complex (PubMed:[15235609](#)). Binds DNA containing 5'-CCCTCC-3' or 5'-GAGGGG-3' sequences (PubMed:[15235609](#)).

#### Cellular Location

Cytoplasm. Nucleus. Note=Mainly cytoplasmic when cells are arrested at G0/G1. Accumulates in the nucleus at S phase and G2/M.

#### Tissue Location

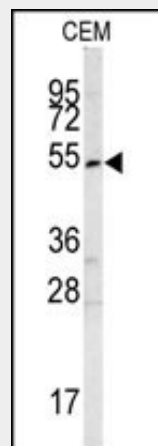
Expressed in skeletal muscles and testis. Overexpressed in a majority of colorectal and hepatocellular carcinomas.

### SMYD3 Antibody (Center) - Protocols

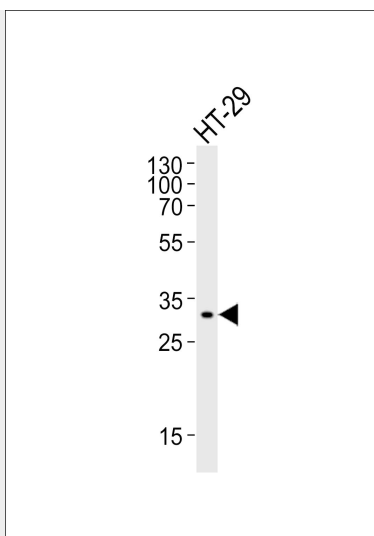
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

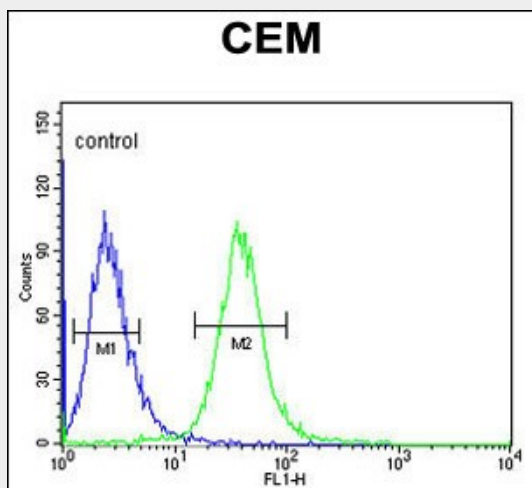
### SMYD3 Antibody (Center) - Images



Western blot analysis of SMYD3 antibody (Center) (Cat.#AP7344c) in CEM cell line lysates (35ug/lane). SMYD3 (arrow) was detected using the purified Pab.



Western blot analysis of lysate from HT-29 cell line, using SMYD3 Antibody (Center)(Cat. #AP7344c). AP7344c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



SMYD3 Antibody (Center) (Cat. #AP7344c) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **SMYD3 Antibody (Center) - Background**

SMYD3 is a histone methyltransferase that plays a role in transcriptional regulation as a member of an RNA polymerase complex.

#### **SMYD3 Antibody (Center) - References**

- Zou,J.N., Wang,S.Z. Cancer Lett. 280 (1), 78-85 (2009)
- Wang,S.Z., Luo,X.G. BMB Rep 41 (4), 294-299 (2008)
- Wang,H., Liu,Y. Cancer Sci. 99 (4), 787-791 (2008)
- Barlesi,F., Giaccone,G. Int. J. Cancer 122 (6), 1441-1442 (2008)
- Hamamoto,R., Silva,F.P. Cancer Sci. 97 (2), 113-118 (2006)