

**SMYD3 Antibody**  
Rabbit mAb  
Catalog # AP91606

## Specification

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### SMYD3 Antibody - Product Information

Application	WB, IHC, FC, ICC, IP
Primary Accession	<a href="#">O9H7B4</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
KMT3E; Smyd3; ZMYND1; ZNFN3A1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	49097 Da

### SMYD3 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SMYD3
Description	Histone methyltransferase. Specifically methylates 'Lys-4' of histone H3, inducing di- and tri-methylation, but not monomethylation. Plays an important role in transcriptional activation as a member of an RNA polymerase complex. Binds DNA containing 5'-CCCTCC-3' or 5'-GAGGGG-3' sequences.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### SMYD3 Antibody - 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](http://www.uniprot.org/citations/15235609), PubMed:[22419068](http://www.uniprot.org/citations/22419068)). Also methylates 'Lys-5' of histone H4 (PubMed:[22419068](http://www.uniprot.org/citations/22419068)). Plays an important role in transcriptional activation as a

member of an RNA polymerase complex (PubMed:<a href="http://www.uniprot.org/citations/15235609" target="\_blank">15235609</a>). Binds DNA containing 5'-CCCTCC-3' or 5'-GAGGGG-3' sequences (PubMed:<a href="http://www.uniprot.org/citations/15235609" target="\_blank">15235609</a>).

#### 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

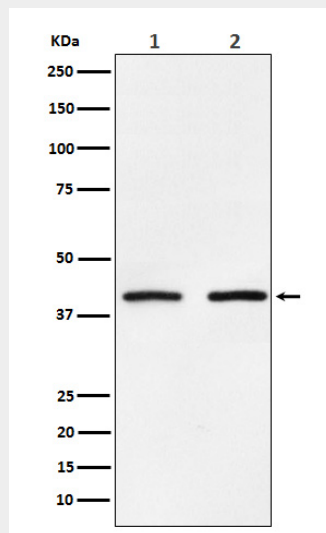
Expressed in skeletal muscles and testis. Overexpressed in a majority of colorectal and hepatocellular carcinomas.

### SMYD3 Antibody - 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 - Images



Western blot analysis of SMYD3 expression in (1) HeLa cell lysate; (2) NIH/3T3 cell lysate.