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SMYD3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7344a

Specification

SMYD3 Antibody (N-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q9H7B4
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**49097**
Antigen Region	**7-35**

SMYD3 Antibody (N-term) - 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 7-35 amino acids from the N-terminal region of human SMYD3.

Dilution
WB~~1:1000
IHC-P~~1:10~50
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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SMYD3 Antibody (N-term) - 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.

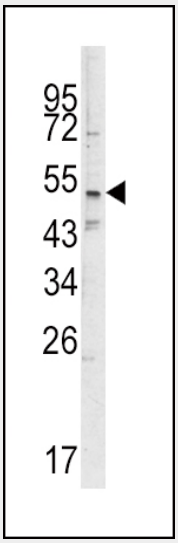
Tissue Location
Expressed in skeletal muscles and testis. Overexpressed in a majority of colorectal and hepatocellular carcinomas.

SMYD3 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SMYD3 Antibody (N-term) - Images



Western blot analysis of SMYD3 antibody (N-term) (Cat. #AP7344a) in CEM cell line lysates (35ug/lane). SMYD3 (arrow) was detected using the purified Pab.

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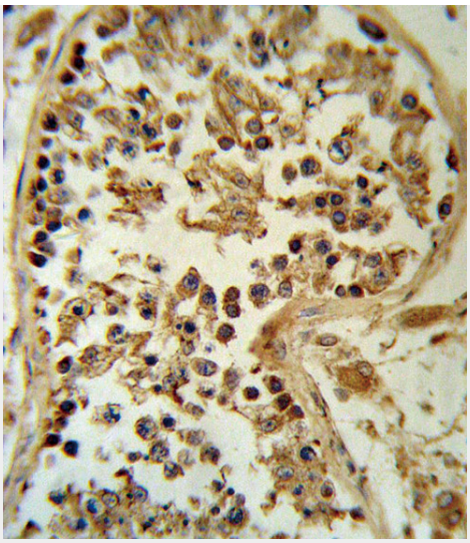
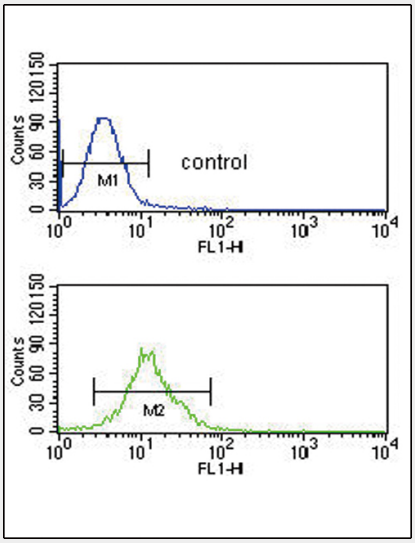


SMYD3 Antibody (N-term) (Cat. #AP7344a) IHC analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SMYD3 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



SMYD3 Antibody (N-term) (Cat. #AP7344a) flow cytometric analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

SMYD3 Antibody (N-term) - Background

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

SMYD3 Antibody (N-term) - 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)

SMYD3 Antibody (N-term) - Citations

- SMYD3 stimulates EZR and LOXL2 transcription to enhance proliferation, migration and invasion in esophageal squamous cell carcinoma.