10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

SMYD3 Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	Q9H7B4
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.

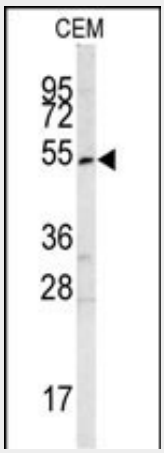
Tissue Location
Expressed in skeletal muscles and testis. Overexpressed in a majority of colorectal and hepatocellular carcinomas.

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 Cytomety
- 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.

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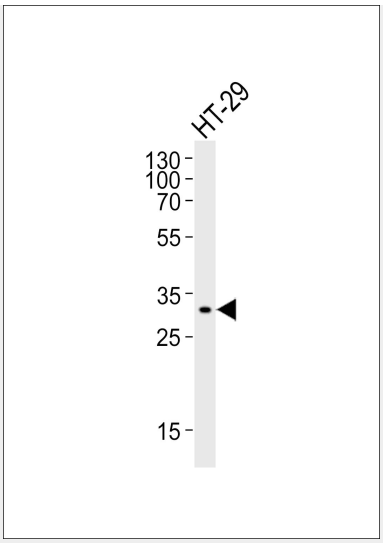
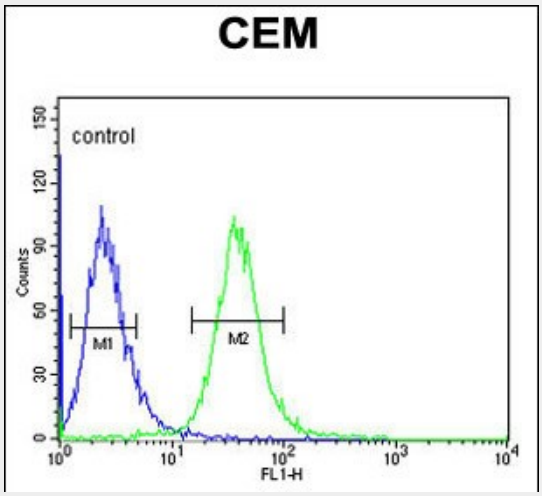


Western blot analysis of lysate from HT-29 cell line, using SMYD3 Antibody (Center)(Cat. #AP7344c). AP7344c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



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)
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Hamamoto,R., Silva,F.P. Cancer Sci. 97 (2), 113-118 (2006)