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SMYD3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7344c

Product Information

Application	WB, FC, E
Primary Accession	Q9H7B4
Reactivity	Human, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19145
Calculated MW	49097
Antigen Region	209-236

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 E~~Use at an assay dependent concentration.
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.

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.

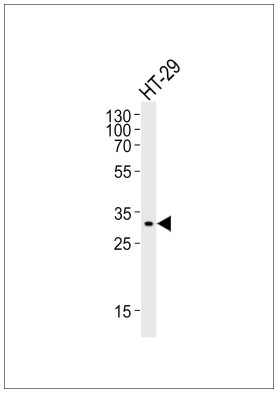
Background

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

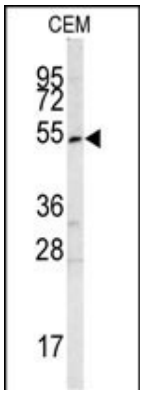
References

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)

Images

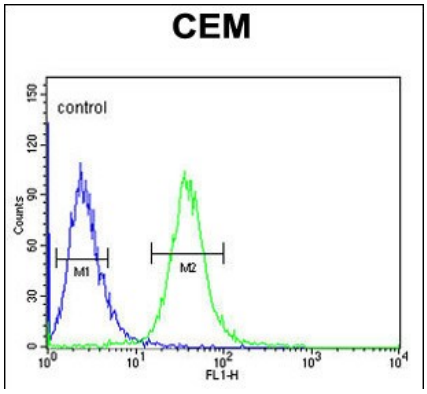


Western blot analysis of lysate from HT-29 cell line, using SMYD3 Antibody (Center)(Cat. #AP7344c). AP7344c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



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

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.