

# SMYD2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1044a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q9NRG4</a>
<b>Other Accession</b>	<a href="#">Q7M6Z3</a> , <a href="#">Q8R5A0</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Predicted</b>	Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB14276
<b>Calculated MW</b>	49688
<b>Antigen Region</b>	120-152

## Additional Information

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<b>Gene ID</b>	56950
<b>Other Names</b>	N-lysine methyltransferase SMYD2, 211-, HSKM-B, Histone methyltransferase SMYD2, Lysine N-methyltransferase 3C, SET and MYND domain-containing protein 2, SMYD2, KMT3C
<b>Target/Specificity</b>	This SMYD2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 120-152 amino acids from the N-terminal region of human SMYD2.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	SMYD2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	SMYD2
<b>Synonyms</b>	KMT3C

**Function** Protein-lysine N-methyltransferase that methylates both histones and non-histone proteins, including p53/TP53 and RB1. Specifically trimethylates histone H3 'Lys-4' (H3K4me3) in vivo. The activity requires interaction with HSP90alpha. Shows even higher methyltransferase activity on p53/TP53. Monomethylates 'Lys-370' of p53/TP53, leading to decreased DNA-binding activity and subsequent transcriptional regulation activity of p53/TP53. Monomethylates RB1 at 'Lys-860'.

**Cellular Location** Cytoplasm, cytosol. Nucleus

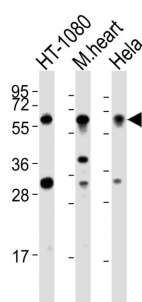
## Background

SET domain-containing proteins, such as SMYD2, catalyze lysine methylation (Brown et al., 2006 [PubMed 16805913]).[supplied by OMIM].

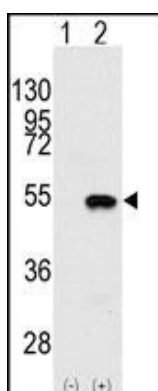
## References

Abu-Farha,M.,Mol. Cell Proteomics 7 (3), 560-572 (2008)  
Ewing,R.M.,Mol. Syst. Biol. 3, 89 (2007)

## Images

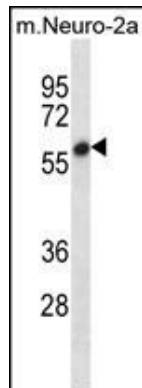
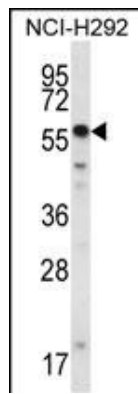


All lanes : Anti-SMYD2 Antibody (N-term) at 1:2000 dilution Lane 1: HT-1080 whole cell lysates Lane 2: mouse heart lysates Lane 3: HeLa whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of SYMD2 (arrow) using rabbit polyclonal SYMD2 Antibody (N-term) (Cat.#AP1044a).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the SYMD2 gene (Lane 2) (Origene Technologies).

SMYD2 Antibody (N-term) (Cat.#AP1044a) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the SMYD2 antibody detected the SMYD2 protein (arrow).



SMYD2 Antibody (N-term) (Cat.#AP1044a) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane). This demonstrates the SMYD2 antibody detected the SMYD2 protein (arrow).

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