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SMYD2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1044a

Product Information

Application	WB, E
Primary Accession	Q9NRG4
Other Accession	Q7M6Z3, Q8R5A0
Reactivity	Human, Rat, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14276
Calculated MW	49688
Antigen Region	120-152

Additional Information

Gene ID	56950
Other Names	N-lysine methyltransferase SMYD2, 211-, HSKM-B, Histone methyltransferase SMYD2, Lysine N-methyltransferase 3C, SET and MYND domain-containing protein 2, SMYD2, KMT3C
Target/Specificity	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.
Dilution	WB~~1:1000 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	SMYD2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SMYD2
Synonyms	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

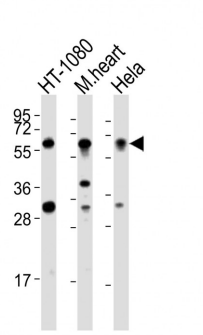
Background

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

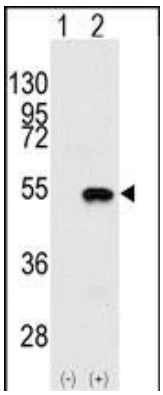
References

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

Images

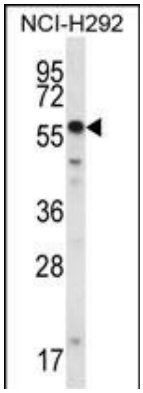


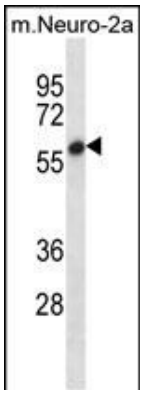
All lanes : Anti-SMYD2 Antibody (N-term) at 1:2000 dilution Lane 1: HT-1080 whole cell lysates Lane 2: mouse heart lysates Lane 3: Hela whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 50 kDa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