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SMYD2 Rabbit pAb

Catalog # AP99915

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9NRG4
Other Accession	Q9NRG4
Reactivity	Rat, Mouse
Predicted	Pig, Human, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49688
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SMYD2
Epitope Specificity	245-340/433
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 MYND-type zinc finger. Contains 1 SET domain.
SUBUNIT	Interacts with RNA polymerase II and HELZ. Interacts with SIN3A and HDAC1 (By similarity). Interacts (via MYND-type zinc finger) with EPB41L3. Interacts (via SET domain) with p53/TP53. Interacts with RB1 and HSP90AA1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SET domain-containing proteins, such as SMYD2, catalyze lysine methylation (Brown et al., 2006 [PubMed 16805913]).[supplied by OMIM, Nov 2008]

Additional Information

Gene ID	56950
Other Names	HSKM-B; KMT3C; ZMYND14; 1110020E07Rik; 4930402C15; SMYD2_BOVIN; SMYD2; Histone methyltransferase SMYD2; SET and MYND domain-containing protein 2; 2.1.1.-; SMYD2_HUMAN; Lysine N-methyltransferase 3C; SMYD2_MOUSE; SMYD2_PIG; SMYD2_RAT; SET and MYND domain containing 2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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