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SMYD5 Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19403b

Product Information

Application	WB, E
Primary Accession	Q6GMV2
Other Accession	Q3TYX3, NP_006053.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40488
Calculated MW	47341
Antigen Region	343-371

Additional Information

Gene ID	10322
Other Names	SET and MYND domain-containing protein 5, 211-, Protein NN8-4AG, Retinoic acid-induced protein 15, SMYD5, RAI15
Target/Specificity	This SMYD5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 343-371 amino acids from the C-terminal region of human SMYD5.
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 purified through a protein A column, followed by peptide affinity purification.
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	SMYD5 Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SMYD5 {ECO:0000303|PubMed:28951459, ECO:0000312|HGNC:HGNC:16258}
Function	Protein-lysine N-trimethyltransferase that specifically catalyzes

trimethylation of 'Lys-22' of the RPL40/eL40 subunit of the 60S ribosome, thereby promoting translation elongation and protein synthesis (PubMed:39048817, PubMed:39103523). May also act as a histone methyltransferase in the context of histone octamers, but not on nucleosome substrates: trimethylates 'Lys-36' of histone H3 and 'Lys- 20' of histone H4 to form H3K36me3 and H4K20me3, respectively (By similarity). The histone methyltransferase activity, which is independent of its SET domain, is however unsure in vivo (PubMed:39048817, PubMed:39103523). In association with the NCoR corepressor complex, involved in the repression of toll-like receptor 4 (TLR4)-target inflammatory genes in macrophages, possibly by catalyzing the formation of H4K20me3 at the gene promoters (By similarity). Plays an important role in embryonic stem (ES) cell self-renewal and differentiation (By similarity). Maintains genome stability of ES cells during differentiation through regulation of heterochromatin formation and repression of endogenous repetitive DNA elements by promoting H4K20me3 marks (PubMed:28951459). Acts as a regulator of the hypothermia response: its degradation in response to mild hypothermia relieves the formation of H3K36me3 at gene promoters, allowing expression of the neuroprotective gene SP1 (By similarity).

Cellular Location Cytoplasm

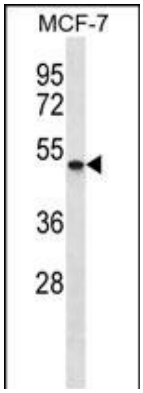
Background

SMYD5 contains 1 MYND-type zinc finger and 1 SET domain. The exact function of SMYD5 remains unknown.

References

Shago, M., et al. Mol. Cell. Biol. 16(8):4337-4348(1996)

Images



SMYD5 Antibody (C-term)(Cat. #AP19403b) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the SMYD5 antibody detected the SMYD5 protein (arrow).

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