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SMYD5 Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19403b

Specification

SMYD5 Antibody(C-term) - Product Information

Application	**WB,E**
Primary Accession	Q6GMV2
Other Accession	Q3TYX3, NP_006053.2
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**47341**
Antigen Region	**343-371**

SMYD5 Antibody(C-term) - 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.

SMYD5 Antibody(C-term) - 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).

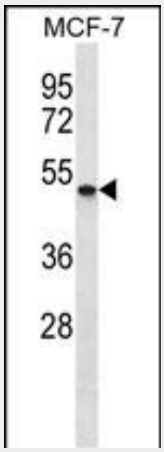
Cellular Location
Cytoplasm

SMYD5 Antibody(C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SMYD5 Antibody(C-term) - 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).

SMYD5 Antibody(C-term) - Background

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

SMYD5 Antibody(C-term) - References

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