

SMYD5 (RAI15) Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP6234a**Specification**

SMYD5 (RAI15) Antibody (C-term) Blocking peptide - Product InformationPrimary Accession
Other Accession[O6GMV2](#)
[NP_006053](#)**SMYD5 (RAI15) Antibody (C-term) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody [AP6234a](/product/products/AP6234a) was selected from the C-term region of human RAI15. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SMYD5 (RAI15) Antibody (C-term) Blocking peptide - 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](http://www.uniprot.org/citations/39048817), PubMed: [39103523](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/39048817), PubMed: [39103523](http://www.uniprot.org/citations/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 (RAI15) Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

SMYD5 (RAI15) Antibody (C-term) Blocking peptide - Images