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N6AMT1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18103a

Specification

N6AMT1 Antibody (N-term) - Product Information

Application	**WB, FC,E**
Primary Accession	Q9Y5N5
Other Accession	NP_037372.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

N6AMT1 Antibody (N-term) - Additional Information

Gene ID 29104

Other Names
HemK methyltransferase family member 2, 211-, MHsaHemK2P, N(6)-adenine-specific DNA methyltransferase 1, N6AMT1, C21orf127, HEMK2

Target/Specificity
This N6AMT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human N6AMT1.

Dilution
WB~~1:2000
FC~~1:25

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
N6AMT1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

N6AMT1 Antibody (N-term) - Protein Information

Name N6AMT1 {ECO:0000303|PubMed:30017583, ECO:0000312|HGNC:HGNC:16021}

Function Methyltransferase that can methylate proteins and, to a lower extent, arsenic

(PubMed:18539146, PubMed:21193388, PubMed:30017583, PubMed:31636962, PubMed:31061526). Catalytic subunit of a heterodimer with TRMT112, which monomethylates 'Lys-12' of histone H4 (H4K12me1), a modification present at the promoters of numerous genes encoding cell cycle regulators (PubMed:31061526). Catalytic subunit of a heterodimer with TRMT112, which catalyzes N5-methylation of Glu residue of proteins with a Gly-Gln-Xaa-Xaa-Xaa-Arg motif (PubMed:18539146, PubMed:31632689, PubMed:31636962). Methylates ETF1 on 'Gln-185'; ETF1 needs to be complexed to ERF3 in its GTP-bound form to be efficiently methylated (PubMed:18539146, PubMed:20606008, PubMed:31636962, PubMed:31061526). May also play a role in the modulation of arsenic-induced toxicity by mediating the conversion of monomethylarsonous acid (3+) into the less toxic dimethylarsonic acid (PubMed:21193388, PubMed:25997655). It however only plays a limited role in arsenic metabolism compared with AS3MT (PubMed:25997655).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q6SKR2}.

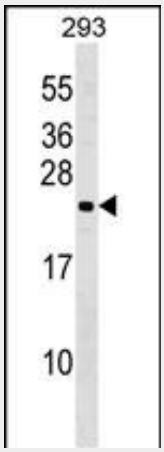
Tissue Location
Widely expressed, with highest expression in parathyroid and pituitary glands, followed by adrenal gland and kidney, and lowest expression in leukocytes and mammary gland

N6AMT1 Antibody (N-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

N6AMT1 Antibody (N-term) - Images



N6AMT1 Antibody (N-term) (Cat. #AP18103a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the N6AMT1 antibody detected the N6AMT1 protein (arrow).

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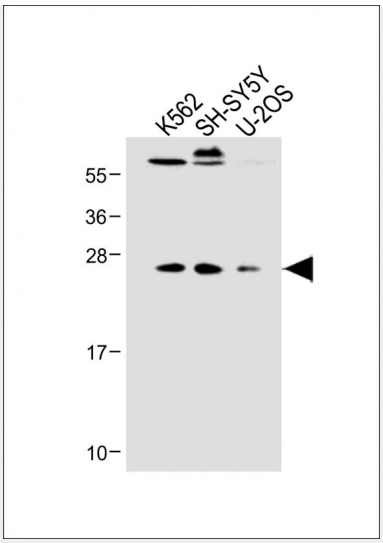
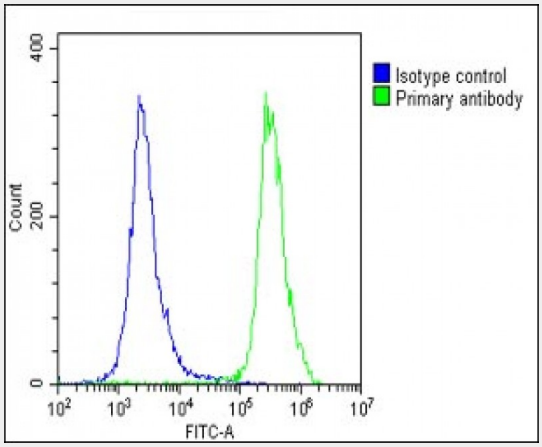


All lanes : Anti-N6AMT1 Antibody (N-term) at 1:2000 dilution Lane 1: K562 whole cell lysate Lane 2: SH-SY5Y whole cell lysate Lane 3: U-2OS whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing U-2 OS cells stained with AP18103a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP18103a, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

N6AMT1 Antibody (N-term) - Background

The protein encoded by this gene belongs to the methyltransferase superfamily. Alternative splicing occurs at this locus and two transcript variants encoding distinct isoforms have been identified.

N6AMT1 Antibody (N-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Figaro, S., et al. FEBS Lett. 582(16):2352-2356(2008)

Seshadri, S., et al. BMC Med. Genet. 8 SUPPL 1, S15 (2007) :
Hwang, S.J., et al. BMC Med. Genet. 8 SUPPL 1, S10 (2007) :