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NAT13 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5060b

Product Information

Application	FC, WB, E
Primary Accession	Q9GZZ1
Other Accession	Q6GP53, Q6PGB6, Q6DBY2, Q0IIJ0
Reactivity	Human
Predicted	Bovine, Zebrafish, Mouse, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB26019
Calculated MW	19398
Antigen Region	117-146

Additional Information

Gene ID	80218
Other Names	N-alpha-acetyltransferase 50, 231-, N-acetyltransferase 13, N-acetyltransferase 5, hNAT5, N-acetyltransferase san homolog, hSAN, NatE catalytic subunit, NAA50, MAK3, NAT13, NAT5
Target/Specificity	This NAT13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 117-146 amino acids from the C-terminal region of human NAT13.
Dilution	FC~~1:10~50 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	NAT13 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NAA50 (HGNC:29533)
Function	N-alpha-acetyltransferase that acetylates the N-terminus of proteins that

retain their initiating methionine (PubMed:19744929, PubMed:21900231, PubMed:22311970, PubMed:27484799). Has a broad substrate specificity: able to acetylate the initiator methionine of most peptides, except for those with a proline in second position (PubMed:27484799). Also displays N-epsilon-acetyltransferase activity by mediating acetylation of the side chain of specific lysines on proteins (PubMed:19744929). Autoacetylates in vivo (PubMed:19744929). The relevance of N-epsilon-acetyltransferase activity is however unclear: able to acetylate H4 in vitro, but this result has not been confirmed in vivo (PubMed:19744929). Component of N-alpha-acetyltransferase complexes containing NAA10 and NAA15, which has N-alpha-acetyltransferase activity (PubMed:16507339, PubMed:27484799, PubMed:29754825, PubMed:32042062). Does not influence the acetyltransferase activity of NAA10 (PubMed:16507339, PubMed:27484799). However, it negatively regulates the N-alpha-acetyltransferase activity of the N-terminal acetyltransferase A complex (also called the NatA complex) (PubMed:32042062). The multiprotein complexes probably constitute the major contributor for N-terminal acetylation at the ribosome exit tunnel, with NAA10 acetylating all amino termini that are devoid of methionine and NAA50 acetylating other peptides (PubMed:16507339, PubMed:27484799). Required for sister chromatid cohesion during mitosis by promoting binding of CDCA5/sororin to cohesin: may act by counteracting the function of NAA10 (PubMed:17502424, PubMed:27422821).

Cellular Location

Cytoplasm. Nucleus Note=Localizes to the cytoplasm in interphase cells (PubMed:17502424)

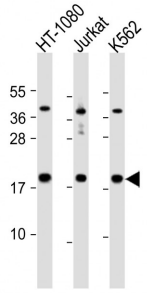
Background

NAT13 is probable catalytic component of the ARD1A-NARG1 complex which displays alpha (N-terminal) acetyltransferase activity.

References

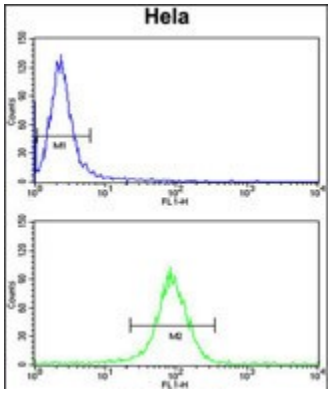
Starheim, K.K., et al. Mol. Cell. Biol. 29(13):3569-3581(2009)
Polevoda, B., et al. BMC Proc 3 SUPPL 6, S2 (2009)
Hou, F., et al. J. Cell Biol. 177(4):587-597(2007)

Images



All lanes : Anti-NAT13 Antibody (C-term) at 1:1000 dilution Lane 1: HT-1080 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: K562 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 : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

NAT13 Antibody (C-term) (Cat.#AP5060b) flow cytometry analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the



analysis.

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