

NAT11 Antibody

Catalog # ASC11040

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q86UY6
Other Accession	NP_079047 , 189571650
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	27194
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	NAT11 antibody can be used for detection of NAT11 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	79829
Other Names	N-alpha-acetyltransferase 40, 2.3.1.-, N-acetyltransferase 11, NatD catalytic subunit, NAA40, NAT11
Target/Specificity	NAA40;
Reconstitution & Storage	NAT11 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	NAT11 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NAA40 {ECO:0000303 PubMed:19660095, ECO:0000312 HGNC:HGNC:25845}
Function	N-alpha-acetyltransferase that specifically mediates the acetylation of the N-terminal residues of histones H4 and H2A (PubMed: 21935442 , PubMed: 25619998). In contrast to other N-alpha- acetyltransferase, has a very specific selectivity for histones H4 and H2A N-terminus and specifically recognizes the 'Ser-Gly-Arg-Gly sequence' (PubMed: 21935442 , PubMed: 25619998). Acts as a negative regulator of apoptosis (PubMed: 26666750). May play a role in hepatic lipid metabolism (By similarity).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

Widely expressed; with the highest expression level in liver and the lowest expression in brain (at protein level)

Background

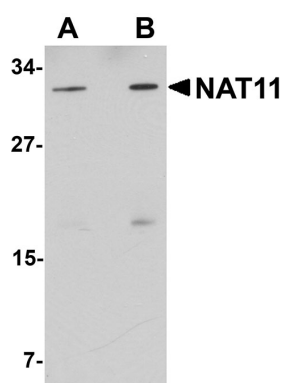
NAT11 Antibody: N-terminal acetylation is one of the most common protein modifications in eukaryotes, occurring on approximately 57% and 84% on yeast and human proteins respectively. There are several N-terminal acetylating enzyme complexes (NatA - NatE). Unlike the other complexes, NatD is composed of a single protein, NAT11, and has recently been described to acetylate the Serine N-termini of histones H2A and H4 in yeast. The role these modifications play is unknown; yeast that do not express NAT11 grow at normal rates and have no observable phenotypes. The role of the human homolog is likewise unknown.

References

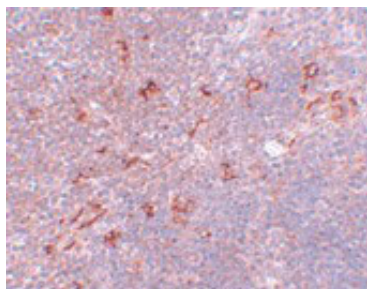
Arnesen T, Van Damme P, Polevoda B, et al. Proteomics analyses reveal the evolutionary conservation and divergence of N-terminal acetyltransferases from yeast and humans. *Proc. Natl. Acad. Sci. USA* 2009; 106:8157-62.

OK Song, Wang X, Waterborg JH, et al. An N-alpha-acetyl-transferase responsible for acetylation of the N-terminal residues of histones H4 and H2A. *J. Biol. Chem.* 2003; 278:38109-1

Images

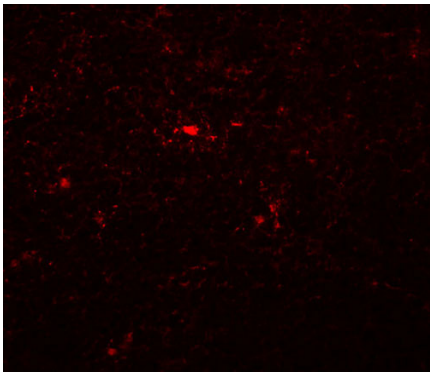


Western blot analysis of NAT11 in human thymus tissue lysate with NAT11 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of NAT11 in mouse thymus tissue with NAT11 antibody at 5 µg/mL.

Immunofluorescence of NAT11 in mouse thymus tissue with NAT11 antibody at 20 µg/mL.



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