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NAA10 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21992c

Product Information

Application	WB, IF, E
Primary Accession	P41227
Other Accession	Q2KI14, Q9QY36
Reactivity	Human, Mouse
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB54653
Calculated MW	26459

Additional Information

Gene ID	8260
Other Names	N-alpha-acetyltransferase 10, 2.3.1.-, 2.3.1.88, N-terminal acetyltransferase complex ARD1 subunit homolog A, NatA catalytic subunit Naa10, NAA10, ARD1, ARD1A, TE2
Target/Specificity	This NAA10 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 135-167 amino acids from the Central region of human NAA10.
Dilution	WB~~1:2000 IF~~1:25 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	NAA10 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NAA10
Synonyms	ARD1, ARD1A, TE2

Function	Catalytic subunit of N-terminal acetyltransferase complexes which display alpha (N-terminal) acetyltransferase activity (PubMed:15496142, PubMed:19420222, PubMed:19826488, PubMed:20145209, PubMed:20154145, PubMed:25489052, PubMed:27708256, PubMed:29754825, PubMed:32042062). Acetylates amino termini that are devoid of initiator methionine (PubMed:19420222). The alpha (N-terminal) acetyltransferase activity may be important for vascular, hematopoietic and neuronal growth and development. Without NAA15, displays epsilon (internal) acetyltransferase activity towards HIF1A, thereby promoting its degradation (PubMed:12464182). Represses MYLK kinase activity by acetylation, and thus represses tumor cell migration (PubMed:19826488). Acetylates, and stabilizes TSC2, thereby repressing mTOR activity and suppressing cancer development (PubMed:20145209). Acetylates HSPA1A and HSPA1B at 'Lys-77' which enhances its chaperone activity and leads to preferential binding to co-chaperone HOPX (PubMed:27708256). Acetylates HIST1H4A (PubMed:29754825). Acts as a negative regulator of sister chromatid cohesion during mitosis (PubMed:27422821).
Cellular Location	Cytoplasm. Nucleus. Note=Also present in the free cytosolic and cytoskeleton-bound polysomes.
Tissue Location	Ubiquitous..

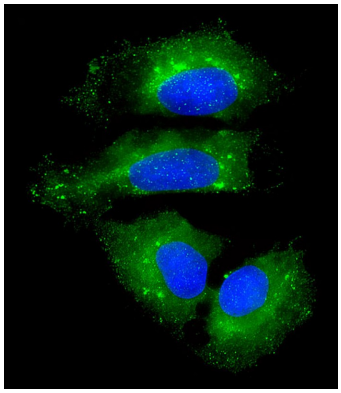
Background

Catalytic subunit of the N-terminal acetyltransferase A (NatA) complex which displays alpha (N-terminal) acetyltransferase activity. The NAT activity may be important for vascular, hematopoietic and neuronal growth and development. Without NAA15, displays epsilon (internal) acetyltransferase activity towards HIF1A, thereby promoting its degradation. Represses MYLK kinase activity by acetylation, and thus represses tumor cell migration. Acetylates, and stabilizes TSC2, thereby repressing mTOR activity and suppressing cancer development.

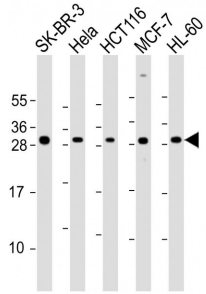
References

Tribioli C.,et al.Hum. Mol. Genet. 3:1061-1068(1994).
Arnesen T.,et al.Biochem. J. 386:433-443(2005).
Ross M.T.,et al.Nature 434:325-337(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Jeong J.-W.,et al.Cell 111:709-720(2002).

Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling NAA10 with AP21992c at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and weak nucleus staining on U-2 OS cell line. The nuclear counter stain is DAPI (blue).



All lanes : Anti-NAA10 Antibody (Center) at 1:2000 dilution Lane 1: SK-BR-3 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HCT116 whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: HL-60 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 : 26 kDa Blocking/Dilution buffer: 5% NFDM/TBST.