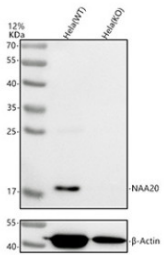
NAA20 Antibody / NAT5 Polyclonal Antibody (FY13692)

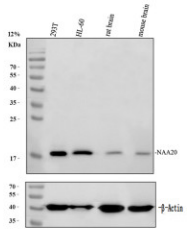
Catalog No.	Formulation	Size
FY13692	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P61599
Applications	Western blot: 0.5-1ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This NAA20 Antibody / NAT5 Polyclonal Antibody is available for research use only.



NAA20 Antibody WB Analysis of HeLa Wild-Type and NAA20 Knockout Cells. Western blot analysis of human HeLa wild-type (WT) and NAA20 knockout (KO) cell lysates using NAT5 Polyclonal Antibody. An immunoreactive band at approximately 18 kDa is detected in WT cells but is absent in NAA20 KO cells, supporting antibody specificity for NAA20. Beta-actin serves as the loading control.



NAA20 Antibody WB Analysis of 293T, HL-60, Rat Brain and Mouse Brain Lysates. Western blot analysis of human 293T cells (lane 1), human HL-60 cells (lane 2), rat brain tissue (lane 3), and mouse brain tissue (lane 4) using NAT5 Polyclonal Antibody. An immunoreactive band is detected at approximately 18 kDa in all four samples. Beta-actin serves as the loading control.

Description

NAA20 Antibody / NAT5 Polyclonal Antibody targets N-alpha-acetyltransferase 20 (NAA20), also known as NAT5, an enzyme responsible for protein N-terminal acetylation. NAA20 functions as the catalytic subunit of the NatB N-terminal acetyltransferase complex, which modifies newly synthesized proteins during translation. N-terminal acetylation is one of the most common protein modifications in eukaryotic cells and can influence protein stability, molecular interactions, subcellular localization, and biological activity. The NAA20 gene encodes a member of the GNAT family of acetyltransferases, which transfer acetyl groups from acetyl-CoA to specific protein substrates.

The NatB complex consists of NAA20 and the auxiliary subunit NAA25, which supports complex assembly, ribosome association, and substrate recognition. NatB primarily acetylates proteins that retain their initiator methionine followed by an acidic or amide-containing residue, particularly aspartate, glutamate, asparagine, or glutamine. This substrate preference distinguishes NatB from other N-terminal acetyltransferase complexes, including NatA and NatC. By modifying proteins as they emerge from the ribosome, NAA20 contributes to the establishment of protein properties early in their synthesis.

NAA20-dependent acetylation affects numerous cellular processes through modification of a broad range of protein substrates. N-terminal acetylation can alter protein interactions, influence protein turnover, and contribute to the organization and function of multiprotein complexes. Although the biological consequences vary among individual substrates, NatB activity is important for maintaining normal cellular protein function. Studies of N-terminal acetyltransferases have also established connections between protein acetylation, cell proliferation, cytoskeletal organization, and responses to cellular stress. Disruption of NatB activity can affect multiple pathways because its substrates participate in diverse cellular functions.

NAA20 is therefore an important component of the machinery responsible for cotranslational protein modification and proteome regulation. Its activity is closely associated with NAA25, making the integrity of the NatB complex essential for efficient substrate acetylation. Research involving NAA20 helps clarify how N-terminal protein modifications influence cellular physiology and the consequences of altered acetyltransferase activity. NAA20 Antibody provides a means of investigating the expression and regulation of this enzyme within the broader context of protein maturation, acetylation-dependent signaling, and cellular homeostasis.

NAA20 participates in cotranslational protein acetylation, a fundamental process influencing protein stability, molecular interactions, and cellular regulation.

Application Notes

Optimal dilution of the NAA20 Antibody / NAT5 Polyclonal Antibody should be determined by the researcher.

Immunogen

E. Coli-derived human N-alpha-acetyltransferase 20 recombinant protein (amino acids R113-E178) was used as the immunogen for the NAA20 Antibody.

Storage

After reconstitution, the NAA20 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

NAT5 antibody, NAA20 antibody, N-alpha-acetyltransferase 20 antibody, N-alpha-acetyltransferase 20 catalytic subunit antibody, N-acetyltransferase 5 antibody, N-terminal acetyltransferase B catalytic subunit antibody, NatB catalytic subunit antibody, NAA20 protein antibody

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