

Rabbit anti-Human NHP2 Polyclonal Antibody | anti-NHP2 antibody

Anti-NHP2 Antibody Picoband

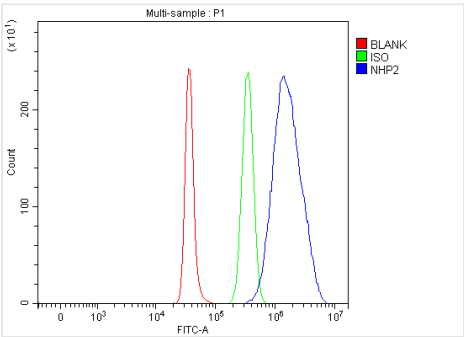
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127315	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

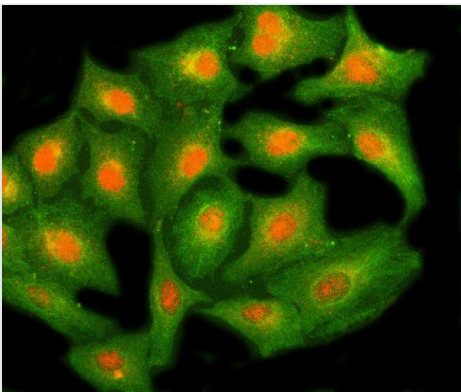
NHP2; Polyclonal Antibody; Anti-NHP2 Antibody Picoband; N-alpha-acetyltransferase 15; NatA auxiliary subunit; Gastric cancer antigen Ga19; N-terminal acetyltransferase; NMDA receptor-regulated protein 1; Protein tubedown-1; Tbdn100; NAA15; GA19; NARG1; NATH; TBDN100; anti-NHP2 antibody

PRODUCT SPECIFICATIONS

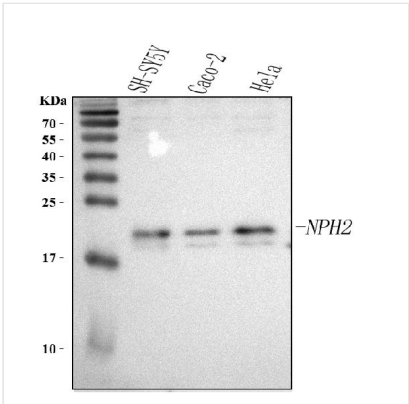
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed at high levels in testis and in ocular endothelial cells. Also found in brain (corpus callosum), heart, colon, bone marrow and at lower levels in most adult tissues, including thyroid, liver, pancreas, mammary and salivary glands, lung, ovary, urogenital system and upper gastrointestinal tract. Overexpressed in gastric cancer, in papillary thyroid carcinomas and in a Burkitt lymphoma cell line (Daudi). Specifically suppressed in abnormal proliferating blood vessels in eyes of patients with proliferative diabetic retinopathy.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-NHP2 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human NHP2 recombinant protein (Position: E21-Q136).
Subcellular Localization	Cytoplasm, Nucleus. Mainly cytoplasmic, nuclear in some cases. Present in the free cytosolic and cytoskeleton-bound polysomes, but not in the membrane-bound polysomes
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins
Protein Function	Auxillary 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. Required to control retinal neovascularization in adult ocular endothelial cells. In complex with XRCC6 and XRCC5 (Ku80), up-regulates transcription from the osteocalcin promoter.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 3. Flow Cytometry analysis of SH-SY5Y cells using anti-NHP2 antibody (AAA127315). Overlay histogram showing SH-SY5Y cells stained with AAA127315 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NHP2 Antibody (AAA127315, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)
Figure 2. IF analysis of NHP2 using anti-NHP2 antibody (AAA127315) and anti-Beta Tubulin antibody (M01857-3). NHP2 was detected in immunocytochemical section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-NHP2 Antibody (AAA127315) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) and DyLight488 Conjugated Goat Anti-Mouse IgG (BA1126) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)
Figure 1. Western blot analysis of NHP2 using anti-NHP2 antibody (AAA127315). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human SH-SY5Y whole cell lysates, Lane 2: human Caco-2 whole cell lysates, Lane 3: human HeLa whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NHP2 antigen affinity purified polyclonal antibody (#AAA127315) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for NHP2 at approximately 20 kDa. The expected band size for NHP2 is at 20 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-NHP2 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-NHP2 antibody	Primary Antibodies; Cancer; Cancer Susceptibility; Cardiovascular; Domain Families; Epigenetics and Nuclear Signaling; Hlh/Leucine Zipper; Hypertrophy; Immunology; Innate Immunity; Oncoproteins; Oncoproteins/Suppressors; Proto-Oncogenes; TLR Signaling; Tr

References	1. Gross, M. B. Personal Communication. Baltimore, Md. 11/1/2021.2. Pogacic, V., Dragon, F., Filipowicz, W. Human H/ACA small nucleolar RNPs and telomerase share evolutionarily conserved proteins NHP2 and NOP10. Molec. Cell. Biol. 20: 9028-9040, 2000. 3. Tollervey, D., Kiss, T. Function and synthesis of small nucleolar RNAs. Curr. Opin. Cell Biol. 9: 337-342, 1997.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	77812674
NCBI GeneID	55651
NCBI Accession #	NP_001030005.1
NCBI GenBank Nucleotide #	NM_001034833.1
UniProt Accession #	Q9NX24; Q9P095; A6NKY8
Molecular Weight	17,201 Da
NCBI Official Full Name	H/ACA ribonucleoprotein complex subunit 2 isoform b
NCBI Official Synonym Full Names	NHP2 ribonucleoprotein
NCBI Official Symbol	NHP2
NCBI Official Synonym Symbols	DKCB2; NHP2P; NOLA2
NCBI Protein Information	H/ACA ribonucleoprotein complex subunit 2; NHP2 ribonucleoprotein homolog; NHP2-like protein; nucleolar protein family A, member 2 (H/ACA small nucleolar RNPs); snoRNP protein NHP2
UniProt Protein Name	H/ACA ribonucleoprotein complex subunit 2
UniProt Gene Name	NHP2
UniProt Synonym Gene Names	NOLA2
UniProt Entry Name	NHP2_HUMAN

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