

Rabbit anti-Human NOP2 Polyclonal Antibody | anti-NOP2 antibody

Anti-NOP2 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127255	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

NOP2; Polyclonal Antibody; Anti-NOP2 Antibody Picoband; NLR family pyrin domain containing 2; NACHT; LRR and PYD domains-containing protein 2; Nucleotide-binding site protein 1; PYRIN domain and NACHT domain-containing protein 1; PYRIN-containing APAF1-like protein 2; NLRP2; NALP2; NBS1; PAN1; PYPAF2; anti-NOP2 antibody

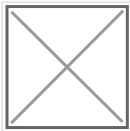
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed at high levels in lung, placenta and thymus and at lower levels in ovary, intestine and brain.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-NOP2 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human NOP2 recombinant protein (Position: L210-Q747).
Subcellular Localization	Cytoplasm
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	Suppresses TNF- and CD40-induced NFκB1 activity at the level of the IKK complex, by inhibiting NFκB1A degradation induced by TNF. When associated with PYCARD, activates CASP1, leading to the secretion of mature proinflammatory cytokine IL1B. May be a component of the inflammasome, a protein complex which also includes PYCARD, CARD8 and CASP1 and whose function would be the activation of proinflammatory caspases.
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 RT4 cells using anti-NOP2 antibody (AAA127255).Overlay histogram showing RT4 cells stained with AAA127255 (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-NOP2 Antibody (AAA127255, 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.



WB (Western Blot)

Figure 1. Western blot analysis of NOP2 using anti-NOP2 antibody (AAA127255).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 HEL whole cell lysates,Lane 2: human Caco-2 whole cell lysates,Lane 3: human A549 whole cell lysates,Lane 4: human Hela whole cell lysates,Lane 5: human RT4 whole cell lysates,Lane 6: human 293T tissue lysates,Lane 7: human SIHA whole cell lyates,Lane 8: human U251 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-NOP2 antigen affinity purified polyclonal antibody (#AAA127255) at 0.25ug/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 NOP2 at approximately 120 kDa. The expected band size for NOP2 is at 120 kDa.



IF (Immunofluorescence)

Figure 5. IF analysis of NOP2 using anti-NOP2 antibody (AAA127255) and anti-Beta Tubulin antibody (M01857-3).NOP2 was detected in immunocytochemical section of U2OS 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-NOP2 Antibody (AAA127255) 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 fluoescence microscope and filter sets appropriate for the label used.

ADDITIONAL INFORMATION

Related Product Information for anti-NOP2 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-NOP2 antibody	Primary Antibodies; Apoptosis; Caspases; Cell Biology; Intracellular
References	1. Baens, M., Chaffanet, M., Aerssens, J., Cassiman, J.-J., Marynen, P. Assignment of the gene for the human proliferating cell nucleolar protein P120 (NOL1) to chromosome 12p13 by fluorescence in situ hybridization and polymerase chain reaction with somatic cell hybrids. Genomics 21: 296-297, 1994. 2. Fonagy, A., Swiderski, C., Wilson, A., Bolton, W., Kenyon, N., Freeman, J. W. Cell cycle regulated expression of nucleolar antigen P120 in normal and transformed human fibroblasts. J. Cell. Physiol. 154: 16-27, 1993.3. Freeman, J. W., Busch, R. K., Gyorkey, F., Gyorkey, P., Ross, B. E., Busch, H. Identification and characterization of a human proliferation-associated nucleolar antigen with a molecular weight of 120,000 expressed in early G1 phase. Cancer Res. 48: 1244-1251, 1988.

NCBI AND UNIPROT INFORMATION

NCBI GI #	76150625
NCBI GeneID	4839
NCBI Accession #	NP_001028886
NCBI GenBank Nucleotide #	NM_001033714

UniProt Accession #	P46087; Q05BA7; Q0P5S5; Q3KQS4; Q58F30; A1A4Z3; B3KPD6
Molecular Weight	92,860 Da
NCBI Official Full Name	probable 28S rRNA (cytosine(4447)-C(5))-methyltransferase isoform 1
NCBI Official Synonym Full Names	NOP2 nucleolar protein
NCBI Official Symbol	NOP2
NCBI Official Synonym Symbols	NOL1; p120; NSUN1; NOP120
NCBI Protein Information	probable 28S rRNA (cytosine(4447)-C(5))-methyltransferase; probable 28S rRNA (cytosine(4447)-C(5))-methyltransferase; NOL1/NOP2/Sun domain family, member 1; NOP2 nucleolar protein homolog; nucleolar protein 1, 120kDa; nucleolar protein 2 homolog; prolifer
UniProt Protein Name	Probable 28S rRNA (cytosine(4447)-C(5))-methyltransferase
UniProt Gene Name	NOP2
UniProt Synonym Gene Names	NOL1; NSUN1
UniProt Entry Name	NOP2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/nop2-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/127255>