BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-NLRP2 Antibody Picoband®

Catalog Number: A04819-3

About NLRP2

NACHT, LRR and PYD domains-containing protein 2 is a protein that in humans is encoded by the NLRP2 gene. This gene is a member of the nucleotide-binding and leucine-rich repeat receptor (NLR) family, and is predicted to contain an N-terminal pyrin effector domain (PYD), a centrally-located nucleotide-binding and oligomerization domain (NACHT) and C-terminal leucine-rich repeats (LRR). Members of this gene family are thought to be important regulators of immune responses. This gene product interacts with components of the IkB kinase (IKK) complex, and can regulate both caspase-1 and NF-kB (nuclear factor kappa-light-chain-enhancer of activated B cells) activity. The pyrin domain is necessary and sufficient for suppression of NF-kB activity. An allelic variant (rs147585490) has been found that is incapable of blocking the transcriptional activity of NF-kB. Alternative splicing results in multiple transcript variants encoding different isoforms.

Submit a product review to Biocompare.com





Submit a review of this product to Biocompare.com to receive a $20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.

Overview

Product Name	Anti-NLRP2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-NLRP2 Antibody Picoband® catalog # A04819-3. Tested in WB,ICC/IF,IP,FCM,ELISA applications. This antibody reacts with Human. 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.
Application	ELISA, Flow Cytometry, IP, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q9NX02

Technical Details

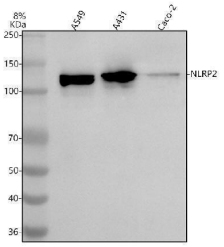
Immunogen	E.coli-derived human NLRP2 recombinant protein (Position: H80-D1044).

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

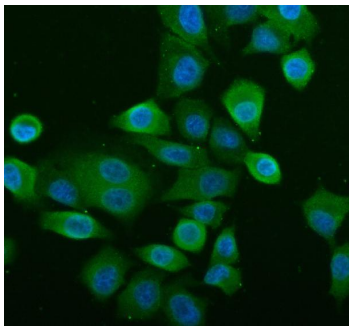
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Immunoprecipitation, 0.5-2 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10^6 cells, Human ELISA, 0.1-0.5 ug/ml, - Note: For flow cytometry (FCM), suitable for fixed cells only. Not suitable for FACS or surface flow cytometry using live cells.

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

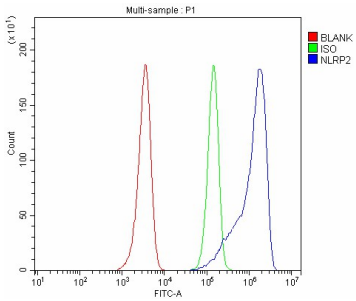
Anti-NLRP2 Antibody Picoband® (A04819-3) Images



Western blot analysis of NLRP2 using anti-NLRP2 antibody (A04819-3). 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 A549 whole cell lysates, Lane 2: human A431 whole cell lysates, Lane 3: human Caco-2 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-NLRP2 antigen affinity purified polyclonal antibody (Catalog # A04819-3) at 0.5 ug/mL overnight at 4°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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NLRP2 at approximately 121 kDa. The expected band size for NLRP2 is at 121 kDa.



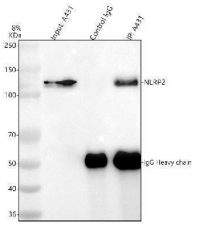
IF analysis of NLRP2 using anti-NLRP2 antibody (A04819-3). NLRP2 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-NLRP2 Antibody (A04819-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of HEL cells using anti-NLRP2 antibody (A04819-3). Overlay histogram showing HEL cells stained with A04819-3 (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-NLRP2 Antibody (A04819-3, 1 ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Immunoprecipitating NLRP2 in A431 whole cell lysate.Western blot analysis of NLRP2 using anti-NLRP2

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com



antibody (A04819-3).Lane 1: A431 whole cell lysates (30ug)Lane 2: Rabbit control IgG instead of anti-NLRP2 antibody in A431 whole cell lysate.Lane 3: anti-NLRP2 antibody (2ug) + A431 whole cell lysate (500ug)After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-NLRP2 antigen affinity purified polyclonal antibody (A04819-3) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for NLRP2 at approximately 121 kDa. The expected band size for NLRP2 is at 121 kDa.

Anti-NLRP2 Antibody

For Research Use Only. Not for use in diagnostic procedures.