

# **BOSTER BIOLOGICAL TECHNOLOGY, LTD.**

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[www.bosterbio.com](http://www.bosterbio.com)

## **Certificate of Analysis**

Note: this is a sample COA. To get the COA for your lot #, please contact us at support@bosterbio.com

To whom it may concern,

This letter attests that Anti-CIAS1/NALP3/NLRP3 Antibody , catalog # PA1665, is manufactured by Boster Biological Technology., Ltd, through test and assay, we got the following data:

### **1. Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human CIAS1(12-31aa RYLEDLEDVDLKKFKMHLED), different from the related rat and mouse sequences by one amino acid.

### **2. Application Data**

#### **Applications Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 $\mu$ g/ml, Human, Rat, Mouse, By Heat  
Western blot, 0.1-0.5 $\mu$ g/ml, Human  
Immunocytochemistry/ Immunofluorescence, 2 $\mu$ g/ml, Human, Rat  
Flow Cytometry, 1-3 $\mu$ g/1x10<sup>6</sup> cells, Human

### **3. Cross Reaction**

No cross reactivity with other proteins

### **4. Image**

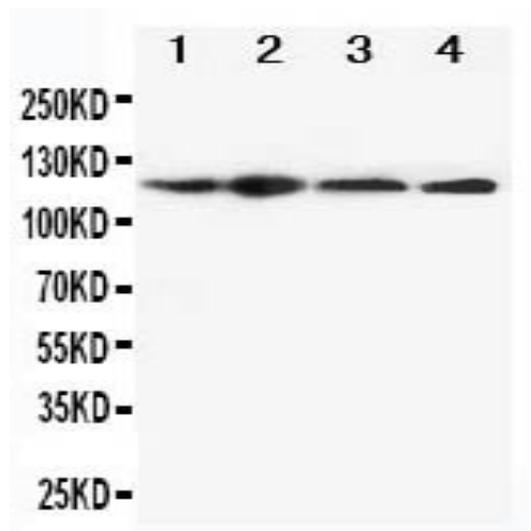


Figure 1. Western blot analysis of -CIAS1/NALP3 using anti- -CIAS1/NALP3 antibody (PA1665). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HEP-2 Cell Lysate  
 Lane 2: A549 Cell Lysate  
 Lane 3: U87 Cell Lysate  
 Lane 4: CEM Cell Lysate

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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- -CIAS1/NALP3 antigen affinity purified polyclonal antibody (Catalog # PA1665) at 0.5 µg/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 1:10000 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 -CIAS1/NALP3 at approximately 118KD. The expected band size for -CIAS1/NALP3 is at 118KD.

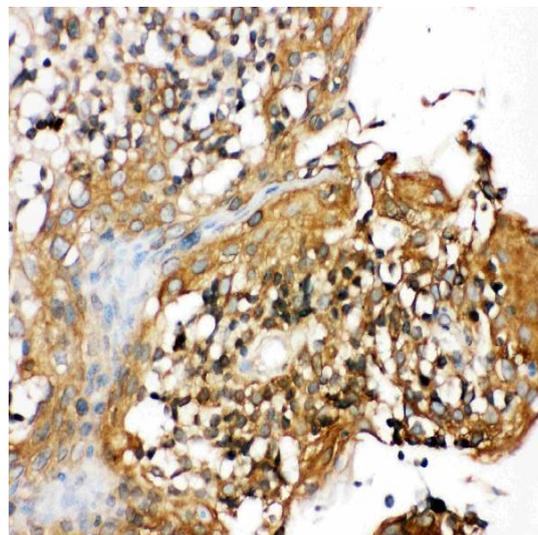


Figure 2. IHC analysis of CIAS1/NALP3 using anti- CIAS1/NALP3 antibody (PA1665). CIAS1/NALP3 was detected in paraffin-embedded section of human tonsil tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml rabbit anti- CIAS1/NALP3 Antibody (PA1665) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

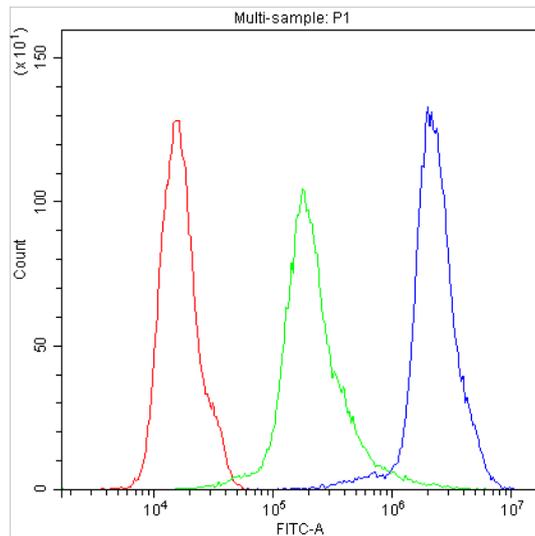


Figure 3. Flow Cytometry analysis of THP-1 cells using anti-CIAS1/NALP3 antibody (PA1665). Overlay histogram showing THP-1 cells stained with PA1665 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CIAS1/NALP3 Antibody (PA1665,  $1\hat{1}\frac{1}{4}g/1x10^6$  cells) for 30 min at  $20\hat{A}^{\circ}C$ . DyLight $\hat{A}$ @488 conjugated goat anti-rabbit IgG (BA1127,  $5-10\hat{1}\frac{1}{4}g/1x10^6$  cells) was used as secondary antibody for 30 minutes at  $20\hat{A}^{\circ}C$ . Isotype control antibody (Green line) was rabbit IgG ( $1\hat{1}\frac{1}{4}g/1x10^6$ ) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

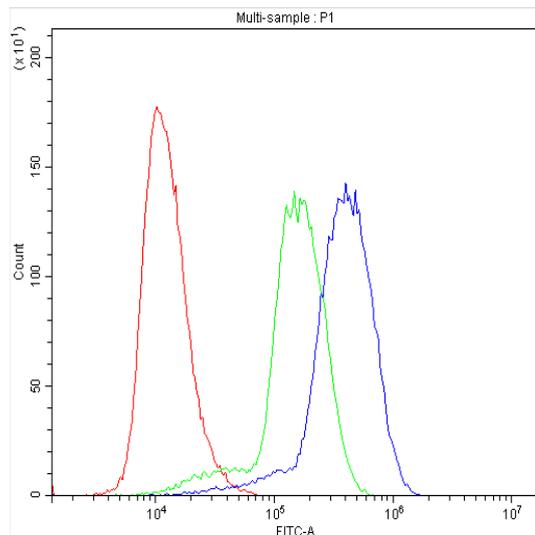


Figure 4. Flow Cytometry analysis of U937 cells using anti-CIAS1/NALP3 antibody (PA1665). Overlay histogram showing U937 cells stained with PA1665 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CIAS1/NALP3 Antibody (PA1665,  $1\hat{1}\frac{1}{4}g/1x10^6$  cells) for 30 min at  $20\hat{A}^{\circ}C$ . DyLight $\hat{A}$ @488 conjugated goat anti-rabbit IgG (BA1127,  $5-10\hat{1}\frac{1}{4}g/1x10^6$  cells) was used as secondary antibody for 30 minutes at  $20\hat{A}^{\circ}C$ . Isotype control antibody (Green line) was rabbit IgG ( $1\hat{1}\frac{1}{4}g/1x10^6$ ) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

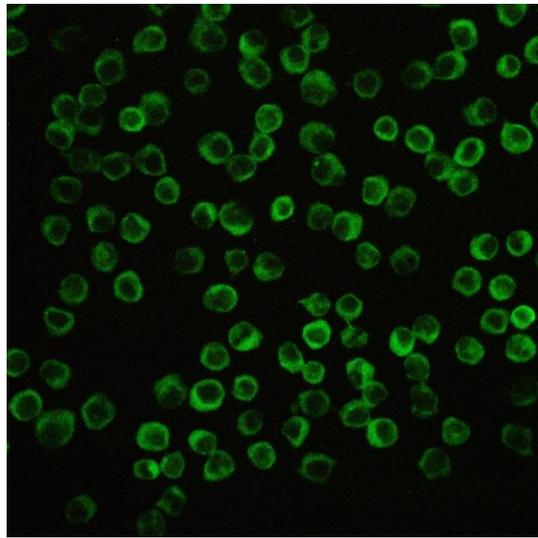


Figure 5. IF analysis of CIAS1/NALP3 using anti- CIAS1/NALP3 antibody (PA1665). CIAS1/NALP3 was detected in immunocytochemical section of THP-1 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2½g/mL rabbit anti- CIAS1/NALP3 Antibody (PA1665) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

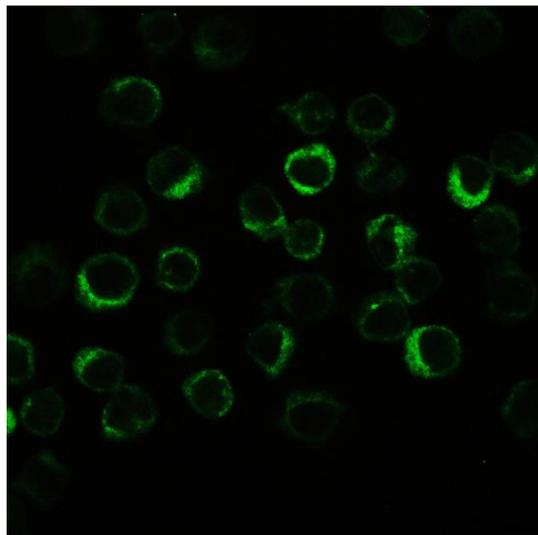


Figure 6. IF analysis of CIAS1/NALP3 using anti- CIAS1/NALP3 antibody (PA1665). CIAS1/NALP3 was detected in immunocytochemical section of THP-1 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2½g/mL rabbit anti- CIAS1/NALP3 Antibody (PA1665) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

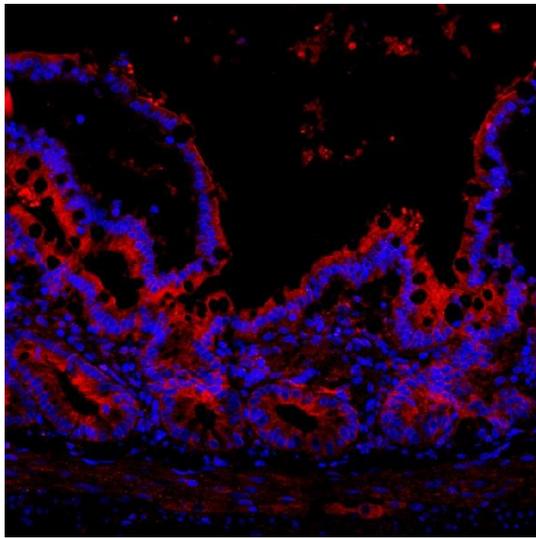


Figure 9. IF analysis of CIAS1/NALP3 using anti- CIAS1/NALP3 antibody (PA1665)  
CIAS1/NALP3 was detected in paraffin-embedded section of rat colon tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution ) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\frac{1}{4}$ g/mL rabbit anti- CIAS1/NALP3 Antibody (PA1665) overnight at 4 $\text{^\circ}$ C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 $\text{^\circ}$ C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

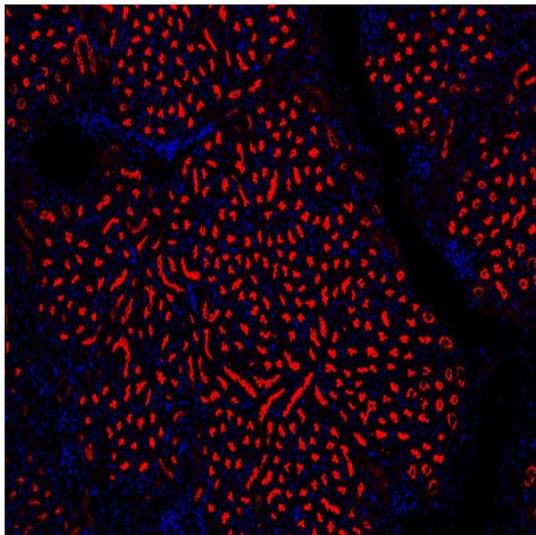


Figure 7. IF analysis of CIAS1/NALP3 using anti- CIAS1/NALP3 antibody (PA1665)  
CIAS1/NALP3 was detected in paraffin-embedded section of rat kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution ) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\frac{1}{4}$ g/mL rabbit anti- CIAS1/NALP3 Antibody (PA1665) overnight at 4 $\text{^\circ}$ C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 $\text{^\circ}$ C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

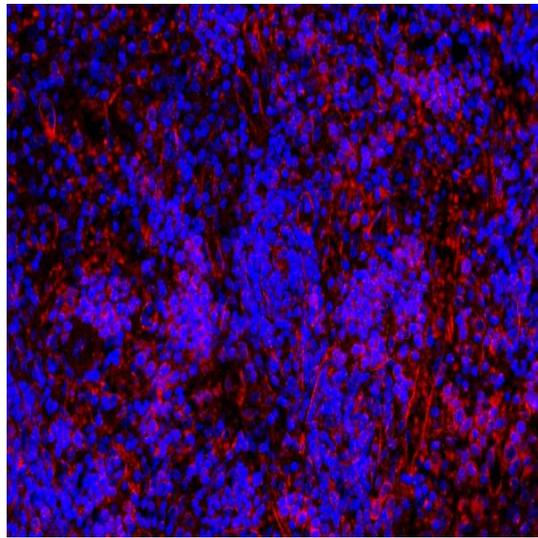


Figure 8. IF analysis of CIAS1/NALP3 using anti- CIAS1/NALP3 antibody (PA1665)  
CIAS1/NALP3 was detected in paraffin-embedded section of rat spleen tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution ) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1½g/mL rabbit anti- CIAS1/NALP3 Antibody (PA1665) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:100 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.

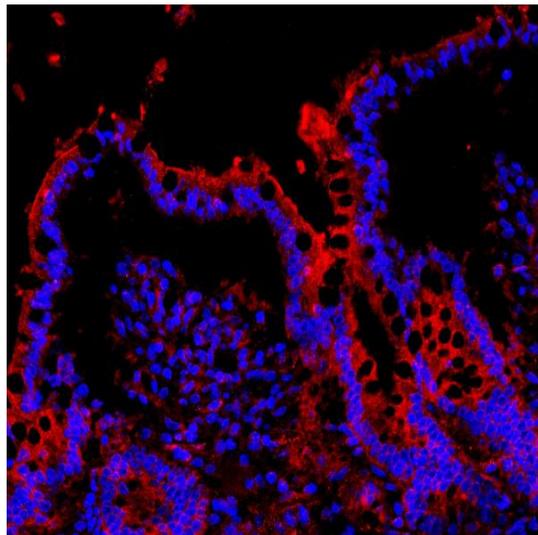


Figure 10. IF analysis of CIAS1/NALP3 using anti- CIAS1/NALP3 antibody (PA1665)  
CIAS1/NALP3 was detected in paraffin-embedded section of rat colon tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution ) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1½g/mL rabbit anti- CIAS1/NALP3 Antibody (PA1665) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:100 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.

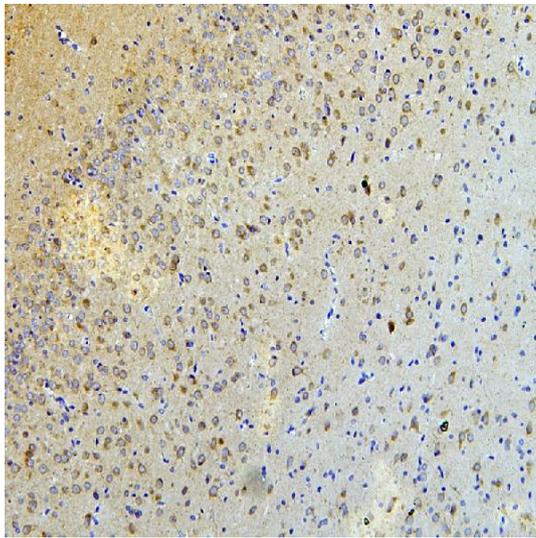


Figure 11. IHC analysis of NLRP3 using anti- NLRP3 antibody (PA1665).

NLRP3 was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti- NLRP3 Antibody (PA1665) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Approved by:

A handwritten signature in blue ink, appearing to read 'Yangjing Yue'.

Ms. Yangjing Yue Chief technician

Quality Control System of ELISA

Date: May 13, 2016