

## Anti-NDUFAF4 Antibody Picoband®

Catalog Number: A11650-1

### About NDUFAF4

NADH:ubiquinone oxidoreductase complex assembly factor 4, (NDUFAF4) also known as Hormone-regulated proliferation-associated protein of 20 kDa, (HRPAP20) or C6orf66 is a protein that in humans is encoded by the NDUFAF4 gene. NADH:ubiquinone oxidoreductase (complex I) catalyzes the transfer of electrons from NADH to ubiquinone (coenzyme Q) in the first step of the mitochondrial respiratory chain, resulting in the translocation of protons across the inner mitochondrial membrane. This gene encodes a complex I assembly factor. Mutations in this gene are a cause of mitochondrial complex I deficiency.

### Overview

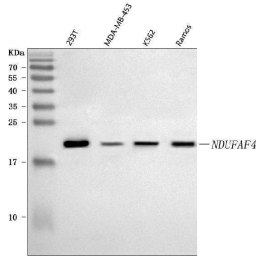
|                      |   |
|----------------------|---|
| Product Name         | Anti-NDUFAF4 Antibody Picoband®   |
| Reactive Species     | Human   |
| Description          | Boster Bio Anti-NDUFAF4 Antibody Picoband® catalog # A11650-1. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. 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, IF, IHC, ICC, WB   |
| Clonality            | Polyclonal  |
| Formulation          | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .   |
| 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           | Q9P032  |

### Technical Details

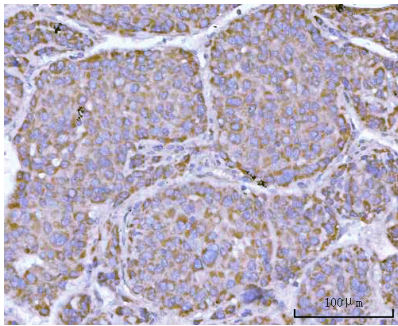
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|-------------------------------|--|
| Immunogen                     | E.coli-derived human NDUFAF4 recombinant protein (Position: K24-K175).   |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC. |
| Cross Reactivity              | No cross-reactivity with other proteins.   |
| Isotype                       | Rabbit IgG   |
| Form                          | Lyophilized  |
| Concentration                 | Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.  |

|                     |  |
|---------------------|--|
| Purification        | Immunogen affinity purified.   |
| Suggested Dilutions | Western blot, 0.1-0.25 ug/ml, Human<br>Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human<br>Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human<br>Immunofluorescence, 5 ug/ml, Human<br>Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human<br>ELISA, 0.1-0.5 ug/ml, - |

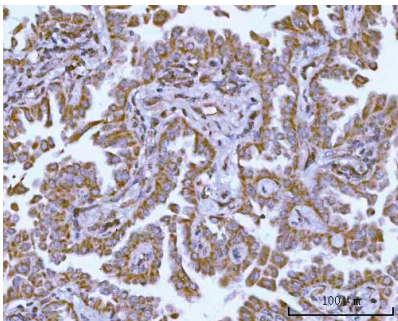
## Anti-NDUFAF4 Antibody Picoband® (A11650-1) Images



Western blot analysis of NDUFAF4 using anti-NDUFAF4 antibody (A11650-1). 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 293T whole cell lysates, Lane 2: human MDA-MB-453 whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: human Ramos 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-NDUFAF4 antigen affinity purified polyclonal antibody (Catalog # A11650-1) at 0.25 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 NDUFAF4 at approximately 21 kDa. The expected band size for NDUFAF4 is at 20,21,25 kDa.

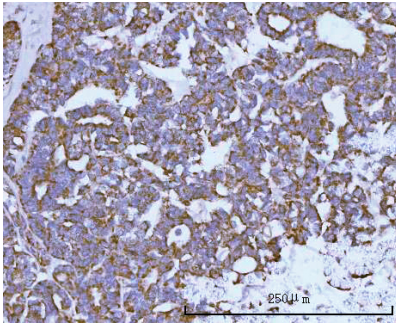


IHC analysis of NDUFAF4 using anti-NDUFAF4 antibody (A11650-1). NDUFAF4 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-NDUFAF4 Antibody (A11650-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

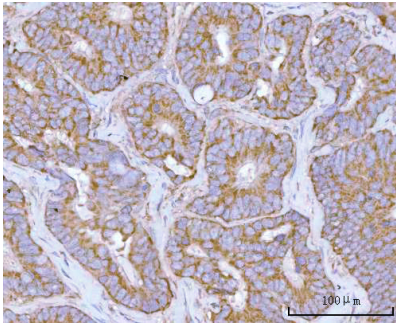


IHC analysis of NDUFAF4 using anti-NDUFAF4 antibody (A11650-1). NDUFAF4 was detected in a paraffin-embedded section of human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-NDUFAF4 Antibody (A11650-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

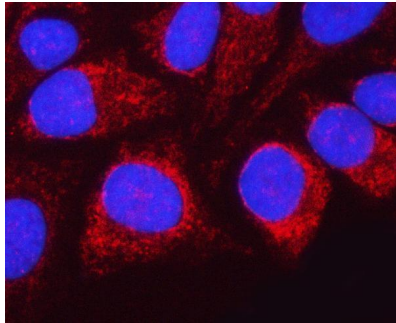
IHC analysis of NDUFAF4 using anti-NDUFAF4 antibody (A11650-1). NDUFAF4 was detected in a paraffin-embedded section of human ovarian tumor tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0,



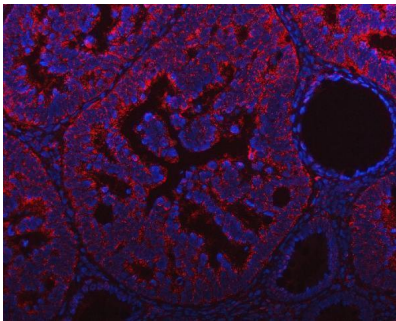
epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-NDUFAF4 Antibody (A11650-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of NDUFAF4 using anti-NDUFAF4 antibody (A11650-1). NDUFAF4 was detected in a paraffin-embedded section of human rectum adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-NDUFAF4 Antibody (A11650-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

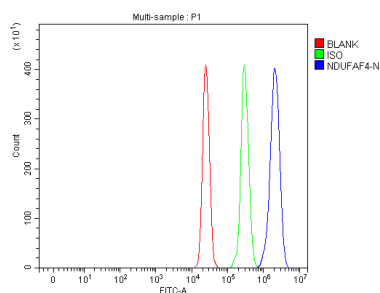


IF analysis of NDUFAF4 using anti-NDUFAF4 antibody (A11650-1). NDUFAF4 was detected in an immunocytochemical section of Hela cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-NDUFAF4 Antibody (A11650-1) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) 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.



IF analysis of NDUFAF4 using anti-NDUFAF4 antibody (A11650-1). NDUFAF4 was detected in a paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-NDUFAF4 Antibody (A11650-1) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) 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 U937 cells using anti-NDUFAF4 antibody (A11650-1). Overlay histogram showing U937 cells stained with A11650-1 (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-NDUFAF4 Antibody (A11650-1, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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### Anti-NDUFAF4 Antibody

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