

## Anti-Nesprin 2/SYNE2 Antibody Picoband®

Catalog Number: A02818-1

### About SYNE2

Nesprin-2 is a protein that in humans is encoded by the SYNE2 gene. The protein encoded by this gene is a nuclear outer membrane protein that binds cytoplasmic F-actin. This binding tethers the nucleus to the cytoskeleton and aids in the maintenance of the structural integrity of the nucleus. Several transcript variants encoding different isoforms have been found for this gene.

### Overview

Product Name	Anti-Nesprin 2/SYNE2 Antibody Picoband®
Reactive Species	Human, Monkey
Description	Boster Bio Anti-Nesprin 2/SYNE2 Antibody Picoband® catalog # A02818-1. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Monkey. 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	Q8WXH0

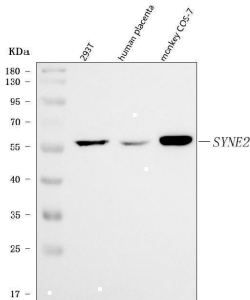
### Technical Details

Immunogen	E.coli-derived human Nesprin 2/SYNE2 recombinant protein (Position: Q3765-Q5590).
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).
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.

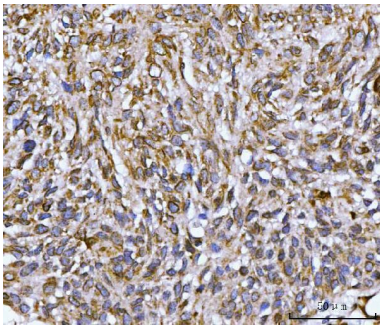
Suggested Dilutions

Western blot, 0.25-0.5 ug/ml, Human, Monkey  
Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human  
Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human  
Flow Cytometry (Fixed), 1-3 ug/1x10<sup>6</sup> cells, Human  
ELISA, 0.1-0.5 ug/ml, -

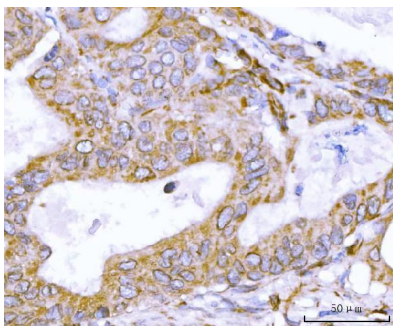
## Anti-Nesprin 2/SYNE2 Antibody Picoband® (A02818-1) Images



Western blot analysis of Nesprin 2/SYNE2 using anti-Nesprin 2/SYNE2 antibody (A02818-1). 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 placenta tissue lysates, Lane 3: monkey COS-7 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-Nesprin 2/SYNE2 antigen affinity purified polyclonal antibody (Catalog # A02818-1) 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 Nesprin 2/SYNE2 at approximately 50-60 kDa. The expected band size for Nesprin 2/SYNE2 is at 796 kDa.

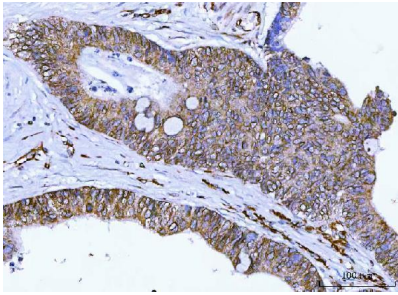


IHC analysis of Nesprin 2/SYNE2 using anti-Nesprin 2/SYNE2 antibody (A02818-1). Nesprin 2/SYNE2 was detected in a paraffin-embedded section of human penis squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Nesprin 2/SYNE2 Antibody (A02818-1) 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.

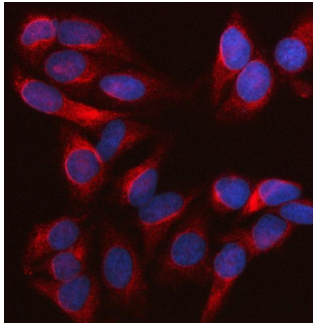


IHC analysis of Nesprin 2/SYNE2 using anti-Nesprin 2/SYNE2 antibody (A02818-1). Nesprin 2/SYNE2 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Nesprin 2/SYNE2 Antibody (A02818-1) 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.

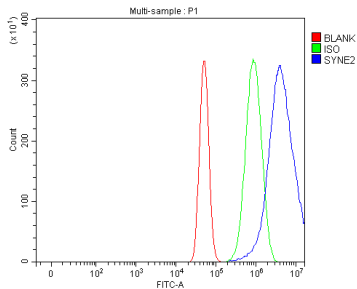
IHC analysis of Nesprin 2/SYNE2 using anti-Nesprin 2/SYNE2 antibody (A02818-1). Nesprin 2/SYNE2 was detected in a



paraffin-embedded section of human colon 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-Nesprin 2/SYNE2 Antibody (A02818-1) 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 Nesprin 2/SYNE2 using anti-Nesprin 2/SYNE2 antibody (A02818-1). Nesprin 2/SYNE2 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-Nesprin 2/SYNE2 Antibody (A02818-1) overnight at 4°C. DyLight594 Conjugated Goat Anti-Rabbit IgG (BA1142) 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 U87 cells using anti-Nesprin 2/SYNE2 antibody (A02818-1). Overlay histogram showing U87 cells stained with A02818-1 (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-Nesprin 2/SYNE2 Antibody (A02818-1, 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 without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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### Anti-Nesprin 2/SYNE2 Antibody

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