

## Anti-Synaptogyrin 1 Antibody Picoband®

Catalog Number: A10148-1

### About SYNGR1

Synaptogyrin-1 is a protein that in humans is encoded by the SYNGR1 gene. This gene encodes an integral membrane protein associated with presynaptic vesicles in neuronal cells. The exact function of this protein is unclear, but studies of a similar murine protein suggest that it functions in synaptic plasticity without being required for synaptic transmission. The gene product belongs to the synaptogyrin gene family. Three alternatively spliced variants encoding three different isoforms have been identified.

### Overview

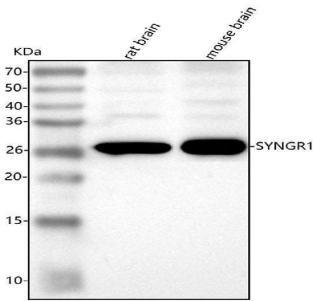
Product Name	Anti-Synaptogyrin 1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Synaptogyrin 1 Antibody Picoband® catalog # A31798. Tested in WB, IHC, ICC/IF, FCM, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is 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	O43759

### Technical Details

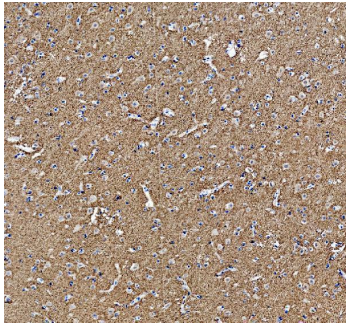
Immunogen	E.coli-derived human Synaptogyrin 1 recombinant protein (Position: S42-Y233). Human SYNGR1 shares 93.3% and 92.2% amino acid (aa) sequence identity with mouse and rat SYNGR1, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) 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	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, Mouse, Rat 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, -

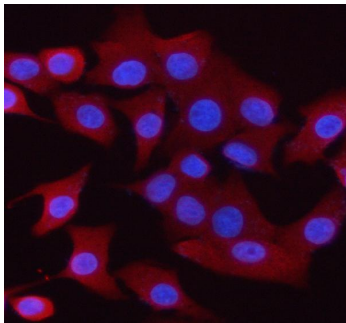
## Anti-Synaptogyrin 1 Antibody Picoband® (A10148-1) Images



Western blot analysis of Synaptogyrin 1 using anti-Synaptogyrin 1 antibody (A10148-1). 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: rat brain tissue lysates, Lane 2: mouse brain tissue 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-Synaptogyrin 1 antigen affinity purified polyclonal antibody (Catalog # A10148-1) 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 Synaptogyrin 1 at approximately 28 kDa. The expected band size for Synaptogyrin 1 is at 25 kDa.

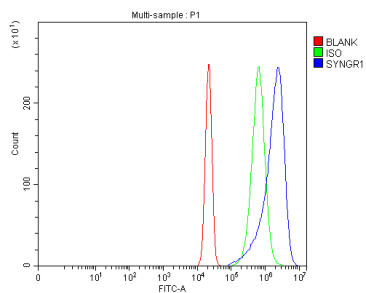


IHC analysis of SYNGR1 using anti-SYNGR1 antibody (A10148-1). SYNGR1 was detected in a paraffin-embedded section of human cerebral cortex tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-SYNGR1 Antibody (A10148-1) 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 Synaptogyrin 1 using anti-Synaptogyrin 1 antibody (A10148-1). Synaptogyrin 1 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-Synaptogyrin 1 Antibody (A10148-1) 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 RT4 cells using anti-Synaptogyrin 1 antibody (A10148-1). Overlay histogram showing RT4 cells stained with A10148-1 (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-Synaptogyrin 1 Antibody (A10148-1, 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-Synaptogyrin 1 Antibody

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