

Anti-Islet 1/ISL1 Antibody Picoband®

Catalog Number: A02969-3

About ISL1

Insulin gene enhancer protein ISL-1 is a protein that in humans is encoded by the *isl1* gene. This gene encodes a member of the LIM/homeodomain family of transcription factors. The encoded protein binds to the enhancer region of the insulin gene, among others, and may play an important role in regulating insulin gene expression. The encoded protein is central to the development of pancreatic cell lineages and may also be required for motor neuron generation. Mutations in this gene have been associated with maturity-onset diabetes of the young.

Overview

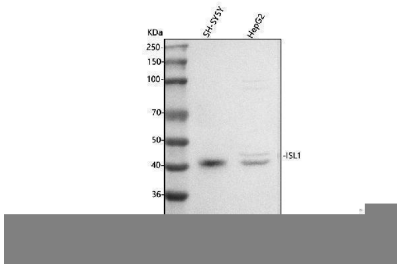
Product Name	Anti-Islet 1/ISL1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Islet 1/ISL1 Antibody Picoband® catalog # A02969-3. Tested in ELISA, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium 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, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
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	P61371

Technical Details

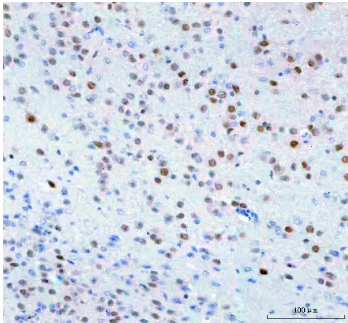
Immunogen	E.coli-derived human Islet 1/ISL1 recombinant protein (Position: D118-E161). Human ISL1 shares 100% amino acid (aa) sequence identity with both mouse and rat ISL1.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and 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, Human Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Immunofluorescence, 5 ug/ml, Mouse, Rat ELISA, 0.1-0.5 ug/ml, -

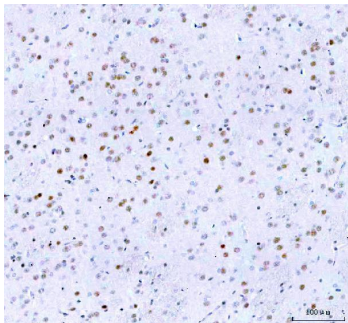
Anti-Islet 1/ISL1 Antibody Picoband® (A02969-3) Images



Western blot analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (A02969-3). 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 SH-SY5Y whole cell lysates, Lane 2: human HepG2 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-Islet 1/ISL1 antigen affinity purified polyclonal antibody (Catalog # A02969-3) 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 Islet 1/ISL1 at approximately 42 kDa. The expected band size for Islet 1/ISL1 is at 39,45 kDa.

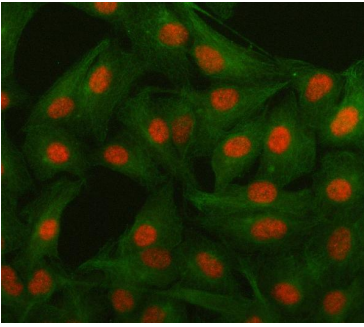


IHC analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (A02969-3). Islet 1/ISL1 was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Islet 1/ISL1 Antibody (A02969-3) 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.

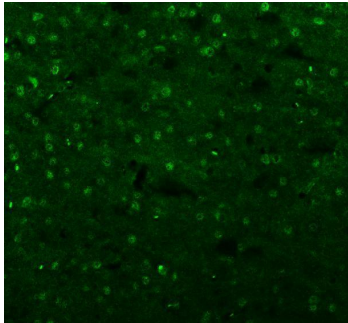


IHC analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (A02969-3). Islet 1/ISL1 was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Islet 1/ISL1 Antibody (A02969-3) 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.

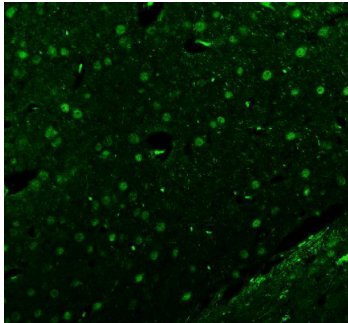
IF analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (A02969-3) and anti-Beta Tubulin antibody (M01857-3). Islet 1/ISL1 was detected in immunocytochemical section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The



cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-Islet 1/ISL1 Antibody (A02969-3) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) and DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IF analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (A02969-3). Islet 1/ISL1 was detected in a paraffin-embedded section of mouse brain 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-Islet 1/ISL1 Antibody (A02969-3) overnight at 4°C. FITC Conjugated Goat Anti-Rabbit IgG (BA1105) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IF analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (A02969-3). Islet 1/ISL1 was detected in a paraffin-embedded section of rat brain 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-Islet 1/ISL1 Antibody (A02969-3) overnight at 4°C. FITC Conjugated Goat Anti-Rabbit IgG (BA1105) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-Islet 1/ISL1 Antibody

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