

Rabbit Islet 1/ISL1 Polyclonal Antibody | anti-ISL1 antibody

Anti-Islet 1/ISL1 Antibody Picoband

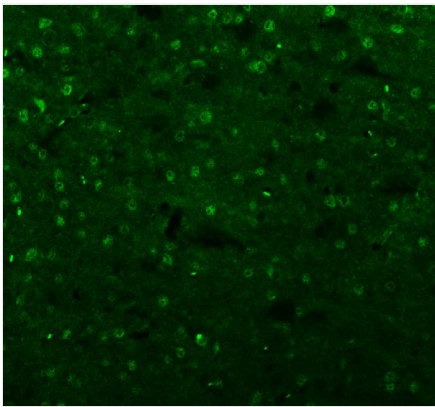
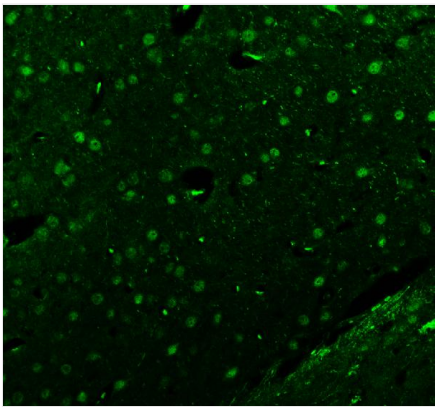
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19785	Rabbit	Human, Mouse, Rat	ELISA, Immunofluorescence, Immunohistochemistry, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

Islet 1/ISL1; Polyclonal Antibody; Anti-Islet 1/ISL1 Antibody Picoband; Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody; KS6B1_HUMAN antibody; p70 alpha antibody; P70 beta 1 antibody; p70 ribosomal S6 kinase alpha antibody; p70 ribosomal S6 kinase beta 1 antibody; p70 S6 kinase alpha antibody; P70 S6 Kinase antibody; p70 S6 kinase alpha 1 antibody; p70 S6 kinase alpha 2 antibody; p70 S6K antibody; p70 S6K-alpha antibody; p70 S6KA antibody; p70(S6K) alpha antibody; p70(S6K)-alpha antibody; p70-alpha antibody; p70-S6K 1 antibody; p70-S6K antibody; P70S6K antibody; P70S6K1 antibody; p70S6Kb antibody; PS6K antibody; Ribosomal protein S6 kinase 70kDa polypeptide 1 antibody; Ribosomal protein S6 kinase beta 1 antibody; Ribosomal protein S6 kinase beta-1 antibody; Ribosomal protein S6 kinase I antibody; RPS6KB1 antibody; S6K antibody; S6K-beta-1 antibody; S6K1 antibody; Serine/threonine kinase 14 alpha antibody; Serine/threonine-protein kinase 14A antibody; STK14A antibody; anti-ISL1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Expressed in all tissues.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-ISL1 antibody	ELISA, IF (Immunofluorescence), IHC (Immunohistochemistry), ICC (Immunocytochemistry), WB (Western Blot)
Application Notes	WB: 0.25-0.5ug/ml, Human IHC: 2-5ug/ml, Mouse, Rat ICC/IF: 5ug/ml, Human IF: 5ug/ml, Mouse, Rat ELISA: 0.1-0.5ug/ml
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.
Subcellular Localization	Cytoplasm, Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross reactivity with other proteins.
Protein Function	Downstream effector of TOR signaling pathway involved in osmotic stress response. Could be involved in the control of plant growth and development. Phosphorylates the ribosomal proteins P14, P16 and S6. Functions as a repressor of cell proliferation and required for maintenance of chromosome stability and ploidy levels through the RBR1-E2F pathway.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

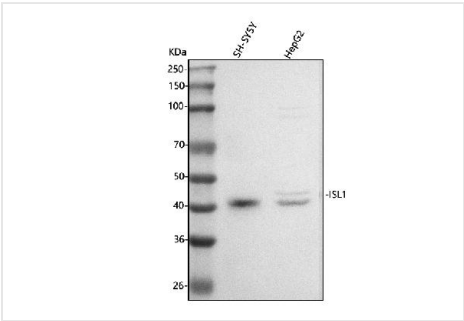


IF (Immunofluorescence)

Figure 6. IF analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (AAA19785).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 5ug/mL rabbit anti-Islet 1/ISL1 Antibody (AAA19785) overnight at 4 degree C. FITC Conjugated Goat Anti-Rabbit IgG (BA1105) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

IF (Immunofluorescence)

Figure 5. IF analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (AAA19785).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 5ug/mL rabbit anti-Islet 1/ISL1 Antibody (AAA19785) overnight at 4 degree C. FITC Conjugated Goat Anti-Rabbit IgG (BA1105) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IF (Immunofluorescence)

Figure 4. IF analysis of Islet 1/ISL1 using anti-Islet 1/ISL1 antibody (AAA19785) 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 (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Islet 1/ISL1 Antibody (AAA19785) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Islet 1/ISL1 Antibody (AAA19785) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (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 (#AAA19785) at 0.5ug/mL overnight at 4 degree 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 (45 kDa).

ADDITIONAL INFORMATION

Related Product Information for anti-ISL1 antibody	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.
Product Categories/Family for anti-ISL1 antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins

References	1. "Entrez Gene: ISL1 ISL1 transcription factor, LIM/homeodomain, (islet-1)".2. Gay F, Anglade I, Gong Z, Salbert G (October 2000). "The LIM/homeodomain protein islet-1 modulates estrogen receptor functions". Mol. Endocrinol. 14 (10): 1627-48.3. Tanizawa Y, Riggs AC, Dagogo-Jack S, Vaxillaire M, Froguel P, Liu L, Donis-Keller H, Permutt MA (July 1994). "Isolation of the human LIM/homeodomain gene islet-1 and identification of a simple sequence repeat polymorphism [corrected]". Diabetes. 43 (7): 935-41.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	47606423
NCBI GeneID	3670
UniProt Accession #	P61371; P20663; P47894
Molecular Weight	349
NCBI Official Full Name	Insulin gene enhancer protein ISL-1
NCBI Official Synonym Full Names	ISL LIM homeobox 1
NCBI Official Symbol	ISL1
NCBI Official Synonym Symbols	Isl-1; ISLET1
NCBI Protein Information	insulin gene enhancer protein ISL-1; islet-1; ISL1 transcription factor, LIM/homeodomain
UniProt Protein Name	Insulin gene enhancer protein ISL-1
UniProt Gene Name	ISL1
UniProt Synonym Gene Names	Islet-1
UniProt Entry Name	ISL1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.