Anti-Insulin B Chain Antibody

0807-11

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Rat, Mouse
Applications:	IHC-P, FC, ELISA
Molecular Wt:	Predicted band size: 12 kDa

Description: Insulin is a hormone with extensive effects on both metabolism and several other body systems. It causes most of the body's cells to take up glucose from the blood (including liver, muscle, and fat tissue cells), storing it as glycogen in the liver and muscle, and stops use of fat as an energy source. Insulin is synthesized as a precursor molecule, proinsulin, which is processed prior to its secretion. A- and B-peptides are joined together by a disulfide bond to form insulin, while the central portion of the precursor molecule is cleaved and released as the C-peptide.

Immunogen: Full length human Insulin B Chain protein.

Positive control: Rat pancreas tissue, human pancreas tissue, HepG2, mouse pancreas tissue.

Subcellular location: Secreted.

Database links: SwissProt: P01308 Human | P01325 Mouse | P01322 Rat

Recommended Dilutions:

IHC-P	1:200-1:10,000
FC	1:50-1:100
ELISA	1:5000

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 25% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

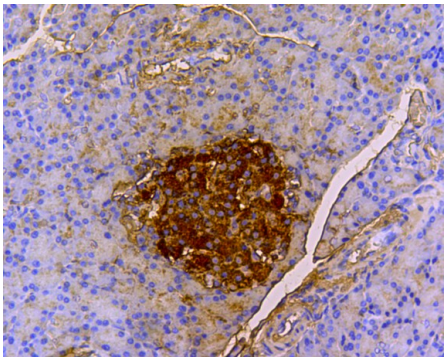

Fig1: Immunohistochemical analysis of paraffin-embedded rat pancreas tissue with Rabbit anti-Insulin B Chain antibody (0807-11) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (0807-11) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

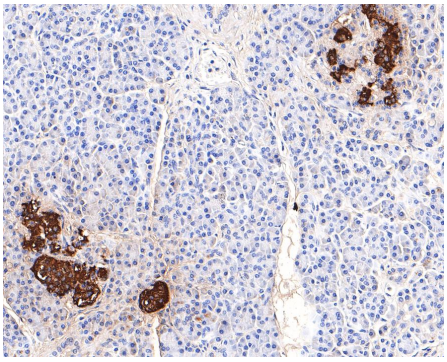

Fig2: Immunohistochemical analysis of paraffin-embedded human pancreas tissue with Rabbit anti-Insulin B Chain antibody (0807-11) at 1/10,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (0807-11) at 1/10,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

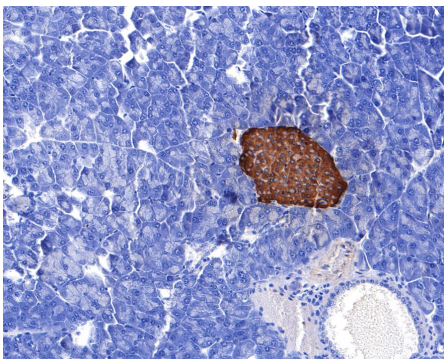

Fig3: Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue with Rabbit anti-Insulin B Chain antibody (0807-11) at 1/10,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (0807-11) at 1/10,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

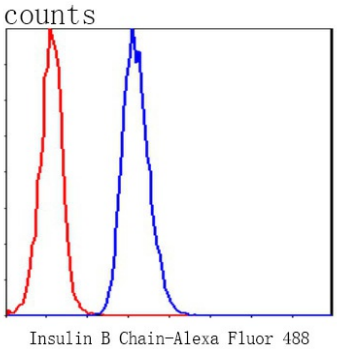

Fig4: Flow cytometric analysis of Insulin B Chain was done on HepG2 cells. The cells were fixed, permeabilized and stained with the primary antibody (0807-11, 1/50) (blue). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; red).

Background References

1. Bell G.I., Pictet R.L., Rutter W.J., Cordell B., Tischer E., Goodman H.M.;"Sequence of the human insulin gene.";Nature 284:26-32(1980).
2. Nicol D.S.H.W., Smith L.F.;"Amino-acid sequence of human insulin.";Nature 187:483-485(1960).
3. Chang X., Joergensen A.M., Bardrum P., Led J.J.;"Solution structures of the R6 human insulin hexamer."; Biochemistry 36:9409-9422(1997).