

Anti-Insulin Ins2 Antibody (Monoclonal, K36AC10)

Catalog Number: MA1052

About Ins2

Insulin, synthesized by the beta cells of the islets of Langerhans, consists of 2 dissimilar polypeptide chains, A and B, which are linked by 2 disulfide bonds. The insulin gene contains 3 exons and 2 introns; exon 2 encodes the signal peptide, the B chain, and part of the C peptide, while exon 3 encodes the remainder of the C peptide and the A chain. Localization of the human insulin gene to the distal end of the short arm of chromosome 11. Harper et al. (1981) and Harper and Saunders (1981) assigned the insulin gene to 11p15.5 by in situ hybridization.

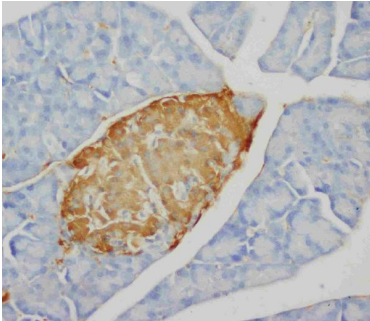
Overview

Product Name	Anti-Insulin Ins2 Antibody (Monoclonal, K36AC10)
Reactive Species	Human, Rabbit, Rat
Description	Boster Bio Anti-Insulin Ins2 Antibody (Monoclonal, K36AC10) catalog # MA1052. Tested in IHC applications. This antibody reacts with Human, Rabbit, Rat.
Application	IHC
Clonality	Monoclonal K36AC10
Formulation	Mouse IgG in stabilizing components, 1.2% sodium acetate and 0.01mg NaN ₃ .
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Mouse
Uniprot ID	P01323

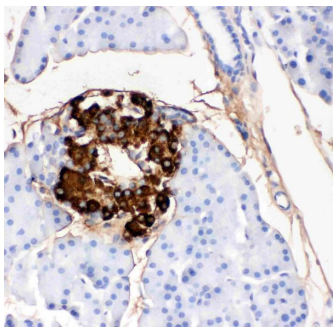
Technical Details

Immunogen	Human insulin.
Recommended Detection Systems	Boster recommends HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 1 ml of PBS buffer will yield a concentration of 100 ug/ml.
Purification	Ascites
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.4-1ug/ml, Human, rabbit, rat

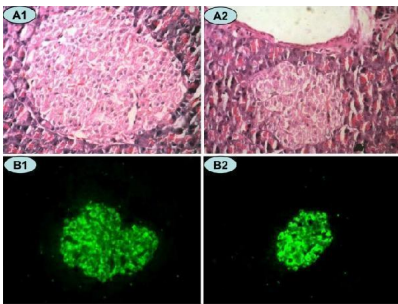
Anti-Insulin Ins2 Antibody (Monoclonal, K36AC10) (MA1052) Images



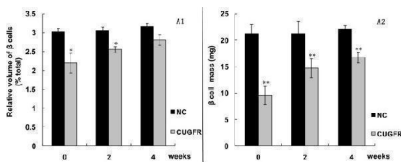
Anti-Insulin antibody (monoclonal), MA1052, IHC(P)IHC(P):
Rat Pancreas Tissue



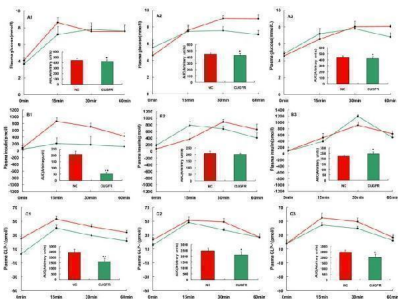
Anti-Insulin antibody (monoclonal), MA1052, IHC(P)IHC(P):
Rat Pancreas Tissue



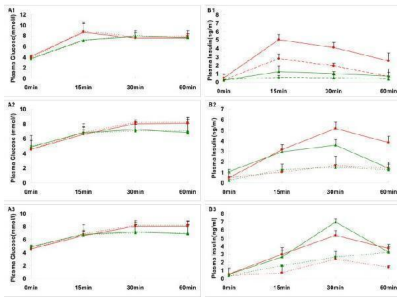
HE Staining ($\times 400$ magnification) and insulin immunofluorescence staining ($\times 200$ magnification) in a rat pancreatic islet. Islet cells in the NC (A1 and B1) and CUGFR (A2 and B2) groups 4 weeks after catch-up growth with HE staining (A1 and A2) and insulin fluorescence staining (B1 and B2). Green fluorescence shows cells positive for insulin. Index in PubMed under a CC BY license. PMID: 20504302



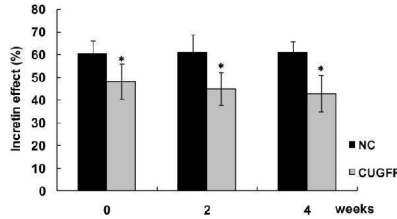
Effect of catch-up growth on beta cell relative area and mass. After insulin staining of rat pancreatic islet, the area positively stained for insulin was quantified by Image Pro Plus software. Values are means \pm SD ($n = 6$). * $P < 0.05$ versus NC group. ** $P < 0.01$ versus NC group. Index in PubMed under a CC BY license. PMID: 20504302



Effect of catch-up growth on islet function and GLP-1 concentration. Plasma glucose (A), insulin (B), GLP-1 (C) levels and AUC Insulin, AUC Glucose, AUC GLP-1 during a 1-hour OGTT, which was conducted 0 (A1, B1 and C1), 2 (A2, B2 and C2) and 4 (A3, B3 and C3) weeks after catch-up growth in the NC (red) and CUGFR (green) groups, were measured. Data are expressed as means \pm SD of six rats in each group. * $P \leq 0.05$ versus NC group; ** $P \leq 0.01$ versus NC group. Index in PubMed under a CC BY license. PMID: 20504302



Time course of the glucose and insulin following oral and IV glucose in the normal and catch-up growth rats . Plasma glucose (A1, A2, A3) and insulin (B1, B2, B3) concentrations in rats of NC group (red) or CUGFR group (green) during oral glucose tolerance test (solid line) and intravenous glucose infusion test (broken lines) designed to match the oral glucose curve in six rats, were detected after catch up growth for 0 (A1, B1), 2(A2, B2) and 4 (A3, B3) weeks. Data are expressed as means \pm SD. Index in PubMed under a CC BY license. PMID: 20504302



Effect of catch-up growth on the incretin effect . Data are expressed as means \pm SD. The incretin effect was calculated by comparing the insulin response to oral and matched IV glucose load. * P \leq 0.05 versus NC group. Index in PubMed under a CC BY license. PMID: 20504302

25 Publications Citing This Product

1. PubMed ID: 31687407, Gao T, Jiao Y, Liu Y, Li T, Wang Z, Wang D. Protective Effects of Konjac and Inulin Extracts on Type 1 and Type 2 Diabetes. *J Diabetes Res.* 2019 Oct 7; 2019:3872182. doi:10.1155/2019/3872182. PMID:31687407; PMCID:PMC6800947.
2. PubMed ID: 31743716, Dong X, Zhao SX, Yin XL, Wang HY, Wei ZG, Zhang YQ. Silk sericin has significantly hypoglycaemic effect in type 2 diabetic mice via anti-oxidation and anti-inflammation. *Int J Biol Macromol.* 2020 May 1; 150:1061-1071. doi:10.1016/j.ijbiomac.2019.10.111. Epub 2019 Nov 16. PMID:31743716.
3. PubMed ID: 32328034, Huo K, Li X, Hu W, Song X, Zhang D, Zhang X, Chen X, Yuan J, Zuo J, Wang X. RFRP-3, the Mammalian Ortholog of GnIH, Is a Novel Modulator Involved in Food Intake and Glucose Homeostasis. *Front Endocrinol (Lausanne).* 2020 Apr 9; 11:194. doi:10.3389/fendo.2020.00194. PMID

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