Product name: Anti-Insulin antibody [K36aC10] ab6995

Description: Mouse monoclonal [K36aC10] to Insulin

Host species: Mouse

Specificity: The antibody exhibits cross-reactivity with human proinsulin. This antibody recognizes purified insulin from the pancreas of human, bovine, horse, sheep, and proinsulin from human. Cross reaction has been observed with insulin containing cells in fixed sections of pancreas from human, porcine, dog, rabbit, bovine, sheep, rat, guinea pig and cat.

Tested applications: Suitable for: IHC-P

Species reactivity: Reacts with: Human

Immunogen: Human insulin.

Positive control: IHC: Pancreas tissue

General notes: The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form: Liquid


Storage buffer: pH: 7.30
Preservative: 0.05% Sodium azide
Constituents: PBS, BSA

Purity: Ascites

Purification notes: Ascites diluted in a PBS-based diluent.

Clonality: Monoclonal
Clone number: K36aC10
Isotype: IgG1

Applications

The Abpromise guarantee: Our Abpromise guarantee covers the use of ab6995 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<td>IHC-P</td>
<td>⭐⭐⭐⭐⭐ (5)</td>
<td>1/25 - 1/50.</td>
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Target

Function: Insulin decreases blood glucose concentration. It increases cell permeability to monosaccharides, amino acids and fatty acids. It accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver.

Involvement in disease: Defects in INS are the cause of familial hyperproinsulinemia (FHPRI) [MIM:176730]. Defects in INS are a cause of diabetes mellitus insulin-dependent type 2 (IDDM2) [MIM:125852]. IDDM2 is a multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical features are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels.

Defects in INS are a cause of diabetes mellitus permanent neonatal (PNDM) [MIM:606176]. PNDM is a rare form of diabetes distinct from childhood-onset autoimmune diabetes mellitus type 1. It is characterized by insulin-requiring hyperglycemia that is diagnosed within the first months of life. Permanent neonatal diabetes requires lifelong therapy.

Defects in INS are a cause of maturity-onset diabetes of the young type 10 (MODY10) [MIM:613370]. MODY10 is a form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the beginning of the disease.

Sequence similarities: Belongs to the insulin family.

Cellular localization: Secreted.

Images
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human pancreas tissue labelling insulin with ab6995 at 1/25 dilution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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