# abcam

## Product datasheet

## Anti-Insulin antibody [K36aC10] ab6995

★★★★★ 9 Abreviews 76 References 1 Image

Overview

Product name Anti-Insulin antibody [K36aC10]

**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: ⊮C-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 instructions** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

**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

1

Clone number

**Isotype** IgG1

K36aC10

#### **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.

Application	Abreviews	Notes
IHC-P	<b>★★★★★</b> ( <u>5</u> )	1/25 - 1/50.

#### **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 fetaures 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.

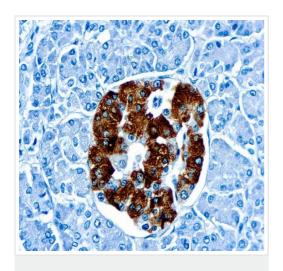
## Sequence similarities

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.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Insulin antibody
[K36aC10] (ab6995)

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

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- Replacement or refund for products not performing as stated on the datasheet
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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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