

## Product datasheet

### Anti-Insulin antibody [E2E3] ab9569

★★★★☆ [2 Abreviews](#) [4 References](#) [2 Images](#)

#### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Insulin antibody [E2E3]  |
| <b>Description</b>         | Mouse monoclonal [E2E3] to Insulin  |
| <b>Host species</b>        | Mouse   |
| <b>Specificity</b>         | The antibody recognizes the biologically most active forms of insulin on the C terminal end. The antibody labels the cytoplasm of beta cells in pancreatic islands and insulinomas (tested on formalin-fixed, paraffin-embedded tissue sections using the Streptavidin-biotinylated peroxidase method).   |
| <b>Tested applications</b> | <b>Suitable for:</b> IHC-P  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human   |
| <b>Immunogen</b>           | Full length protein corresponding to Pig Insulin. Full length Native protein<br>Database link: <a href="#">P01315</a>   |
| <b>General notes</b>       | <p>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.</p> <p>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&amp;As</p> |

#### Properties

|                             |   |
|-----------------------------|---|
| <b>Form</b>                 | Liquid  |
| <b>Storage instructions</b> | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle. |
| <b>Storage buffer</b>       | Preservative: 0.097% Sodium azide<br>Constituent: 0.2% BSA  |
| <b>Purity</b>               | Protein A purified  |
| <b>Clonality</b>            | Monoclonal  |
| <b>Clone number</b>         | E2E3  |
| <b>Isotype</b>              | IgG1  |

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab9569 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       | ★★★★★ (1) | 1/100.<br>Staining of formalin-fixed tissue sections requires treating in boiling 10mM citrate buffer, pH 6.0 for 10-20 minutes. Primary may be incubated for 60 mins at RT. |

## 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.

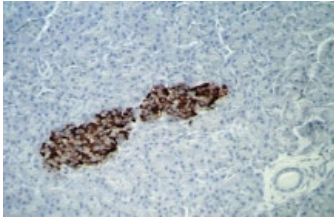
### Sequence similarities

Belongs to the insulin family.

### Cellular localization

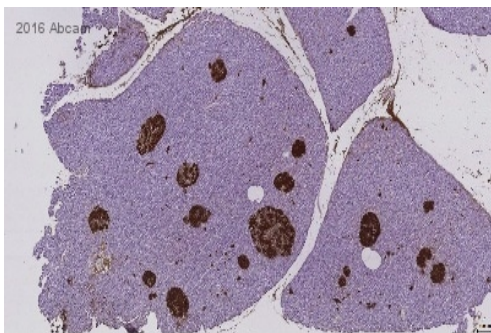
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## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Insulin antibody [E2E3] (ab9569)

Human pancreas stained with ab9569. The antibody labels the cytoplasm of  $\beta$  cells in pancreatic islets and insulinomas (tested on formalin-fixed, paraffin embedded tissue sections using the Streptavidin-biotinylated peroxidase method).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Insulin antibody [E2E3] (ab9569)

Image courtesy of an abreview from Nizar Mourad.

Formalin-fixed, paraffin-embedded monkey pancreas tissue stained for Insulin using ab9569 at 1/800 dilution in immunohistochemical analysis.

Goat Anti-mouse HRP was used as the secondary antibody.

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

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