

## Product datasheet

# Anti-Insulin antibody [IN-05] - Low endotoxin, Azide free ab46707

## 5 References

### Overview

<b>Product name</b>	Anti-Insulin antibody [IN-05] - Low endotoxin, Azide free
<b>Description</b>	Mouse monoclonal [IN-05] to Insulin - Low endotoxin, Azide free
<b>Host species</b>	Mouse
<b>Specificity</b>	The antibody blocks binding of insulin to the receptor.
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, IHC-P, ICC/IF, Functional Studies, RIA
<b>Species reactivity</b>	<b>Reacts with:</b> Cow, Human, Pig
<b>Immunogen</b>	Full length protein corresponding to Pig Insulin. Full Length Native Protein Porcine insulin
<b>General notes</b>	<p>This product was changed from ascites to tissue culture supernatant. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <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). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Constituent: 100% PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Purification notes</b>	Purified from TCS. Purity >95% by SDS-PAGE. Preserved by filter sterilization.
<b>Clonality</b>	Monoclonal

Clone number	IN-05
Isotype	IgG1

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab46707 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
ELISA		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
Functional Studies		Use at an assay dependent concentration. Blocks the binding of insulin to the receptor.
RIA		Use at an assay dependent concentration.

## 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.

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

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