abcam

## Product datasheet

# Anti-Insulin antibody [D4B8] ab8303

### Overview

| | |
|---|---|
| **Product name** | Anti-Insulin antibody [D4B8] |
| **Description** | Mouse monoclonal [D4B8] to Insulin |
| **Specificity** | Human insulin |
| **Tested applications** | **Suitable for:** IHC-Fr |
| **Species reactivity** | **Reacts with:** Cow, Human, Pig |
| **Immunogen** | Full length native protein (purified) (Human). |
| **General notes** | $K_{ass}$ for clone D4B8 is 1.5 x $10^{8}M^{-1}$ |

### Properties

| | |
|---|---|
| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. |
| **Storage buffer** | PBS with 0.1% sodium azide, pH 7.4 |
| **Purity** | Protein A purified |
| **Clonality** | Monoclonal |
| **Clone number** | D4B8 |
| **Myeloma** | x63-Ag8.653 |
| **Isotype** | IgG1 |
| **Light chain type** | kappa |

### Applications

Our Abpromise guarantee covers the use of **ab8303** 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-Fr | | |

| | |
|---|---|
| **Application notes** | This antibody recognises a different epitope ab8302 (7F8)<br>Immunohistochemistry on frozen sections. |

## 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].<br>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.<br>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.<br>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. |



## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- 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 http://www.abcam.com/abpromise or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors