

## Product datasheet

# Anti-Insulin antibody [D4B8] ab8303

### Overview

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

### Properties

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

|                          |  |
|--------------------------|--|
| <b>Application notes</b> | This antibody recognises a different epitope <a href="#">ab8302</a> (7F8) Immunohistochemistry on frozen sections. |
|--------------------------|--|

## Target

---

|                               |  |
|-------------------------------|--|
| <b>Function</b>               | 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.  |
| <b>Involvement in disease</b> | <p>Defects in INS are the cause of familial hyperproinsulinemia (FHPRI) [MIM:176730].</p> <p>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.</p> <p>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.</p> <p>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.</p> |
| <b>Sequence similarities</b>  | Belongs to the insulin family.   |
| <b>Cellular localization</b>  | Secreted.  |

---

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

## 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