abcam

Product datasheet

Anti-C Peptide antibody [5D3] ab28198

Overview

Product name	Anti-C Peptide antibody [5D3]
Description	Mouse monoclonal [5D3] to C Peptide
Host species	Mouse
Specificity	ab28198 recognises Peptide C.
Tested applications	**Suitable for:** ELISA, Sandwich ELISA
Species reactivity	**Reacts with:** Rat
Immunogen	Synthetic peptide corresponding to the N terminal portion of C peptide (Rat) conjugated to a carrier protein.
Epitope	ab28198 reacts with an epitope located in the N terminal region of peptide C.
General notes	C Peptide is part of the molecule of Proinsulin, that consists of three parts: C Peptide and two long strands of amino acids (called the alpha and beta chains) that later become linked together to form the insulin molecule. From every molecule of proinsulin, one molecule of insulin plus one molecule of C Peptide are produced. C peptide is released into the blood stream in equal amounts to insulin. A test of C peptide levels will show how much insulin the body is making. 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.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.1% Sodium Azide Constituents: PBS, pH 7.4
Purity	Protein A purified
Purification notes	Protein A affinity chromatography. ab28198 purity was tested by SDS PAGE.
Primary antibody notes	C Peptide is part of the molecule of Proinsulin, that consists of three parts: C Peptide and two long strands of amino acids (called the alpha and beta chains) that later become linked together to form the insulin molecule. From every molecule of proinsulin, one molecule of insulin plus one molecule of C Peptide are produced. C peptide is released into the blood stream in equal amounts to insulin. A test of C peptide levels will show how much insulin the body is making.

	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.
Clonality	Monoclonal
Clone number	5D3
Myeloma	Sp2/0
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab28198 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.
Sandwich ELISA		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 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.

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