

Product datasheet for **BM270A**

C-Peptide Mouse Monoclonal Antibody [Clone ID: C-PEP-01]

Product data:

Product Type:	Primary Antibodies
Clone Name:	C-PEP-01
Applications:	ELISA, IHC
Recommended Dilution:	Immunohistochemistry on Paraffin Sections: 0.2 µg/ml (1/5000) (No pretreatment necessary). <i>Recommended Positive Control:</i> Human pancreas. Has been described to work in ELISA .
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	C-Peptide of Human Proinsulin
Specificity:	This monoclonal <i>C-PEP-01</i> antibody reacts with the C-peptide of Human Proinsulin. In normal tissues it reacts with normal pancreatic islet Beta-cells. In tumor tissues it stains Insulin secreting neoplasms (insulinomas). The antibody reacts with Human Proinsulin but not with Insulin, Glucagon or Somatostatin, and recognizes the amino acid residues 8-13 and 25-31.
Formulation:	Stock solution contains PBS, pH 7.2 with 5 mg/ml BSA as a stabilizer and 0.1% Kathon as a preservative State: Ascites State: Lyophilized purified Ascites
Reconstitution Method:	Restore with 0.5 ml distilled water.
Concentration:	1.0 mg/ml (after reconstitution)
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Do Not Freeze working dilutions Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.



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Background:

A precursor of Insulin it is converted to Insulin by removal of the connecting C peptide, leaving the two (A and B) chains. From every molecule of Proinsulin, one molecule of Insulin plus one molecule of C Peptide are produced. 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.

Synonyms:

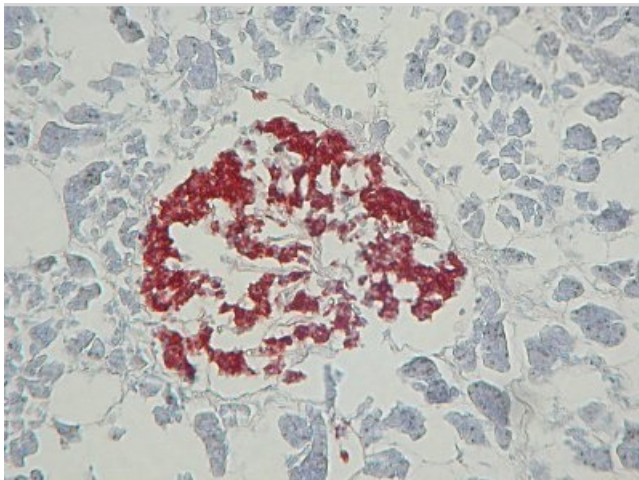
Proinsulin, Connecting Peptide

Note:

Protocol: **Protocol with formalin-fixed, paraffin-embedded sections:**

The whole procedure is performed at room temperature

1. Deparaffinize and rehydrate tissue section
2. Block endogenous peroxidase
3. Wash in PBS
4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
6. Wash in PBS
7. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber
8. Wash in PBS
9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
10. Wash in PBS
11. Counterstain with Mayer's hemalum

Product images:

C-Peptide antibody staining of Human Pancreas Paraffin Section.