

BM270A**Monoclonal Antibody to C-peptide (+ Proinsulin) - Purified Ascites**

Alternate names:	Connecting Peptide, Proinsulin
Quantity:	0.5 mg
Concentration:	1.0 mg/ml (after reconstitution)
Background:	<p>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.</p> <p>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.</p>
Host / Isotype:	Mouse / IgG1
Clone:	C-PEP-01
Immunogen:	C-Peptide of Human Proinsulin
Format:	State: Lyophilized purified Ascites Buffer System: Stock solution contains PBS, pH 7.2 with 5 mg/ml BSA as a stabilizer and 0.1% Kathon as a preservative Reconstitution: Restore with 0.5 ml distilled water.
Applications:	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 . Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
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.
Species Reactivity:	Tested: Human.

- 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.
Shelf life: One year from despatch.
- General Readings:** 1. Hilgert, I. et al.: Hybridoma 10: 379-386. (1991)
- Protocols:** **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
- Pictures:** BM270A C-Peptide antibody staining of Human Pancreas Paraffin Section.

