



# Mouse anti-C-Peptide Monoclonal antibody (DCABH-20041)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Monoclonal Antibody to Human C-peptide
<b>Antigen Description</b>	<p>The connecting peptide, or C-peptide, is a short 31-amino-acid protein that connects insulin's A-chain to its B-chain in the proinsulin molecule.</p> <p>In the insulin synthesis pathway, first preproinsulin is translocated into the endoplasmic reticulum of beta cells of the pancreas with an A-chain, a C-peptide, a B-chain, and a signal sequence. The signal sequence is cleaved from the N-terminus of the peptide by a signal peptidase, leaving proinsulin. After proinsulin is packaged into vesicles in the Golgi apparatus, the C-peptide is removed, leaving the A-chain and B-chain, bound together by disulfide bonds, that constitute the insulin molecule.</p>
<b>Specificity</b>	<p>The binding site is located within the range 12-30, with the most critical amino acids for binding being LEGSL (26-30). There was no binding signal detected with peptides without the amino acid L(26).</p> <p>Cross-reactivity: Human proinsulin (recombinant) 0.93 %</p>
<b>Target</b>	C-Peptide
<b>Immunogen</b>	Recombinant C-peptide.
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Affinity Constant</b>	$K_d > 1 \times 10^9$
<b>Purification</b>	>90% pure. Protein A Sepharose chromatography. Purity is tested by electrophoresis

<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(Cap)
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	2.0mg/ml (OD280nm, E0.1% = 1.4)
<b>Size</b>	1 mg
<b>Buffer</b>	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN3 as a preservative
<b>Preservative</b>	0.095 % NaN3
<b>Storage</b>	Store at -20°C.

## BACKGROUND

<b>Introduction</b>	<p>The connecting peptide, or C-peptide, is a short 31-amino-acid protein that connects insulin's A-chain to its B-chain in the proinsulin molecule.</p> <p>In the insulin synthesis pathway, first preproinsulin is translocated into the endoplasmic reticulum of beta</p>
<b>Keywords</b>	<p>Anti-Rat C-peptide I &amp; II, N-terminal MAb; C-peptide</p> <p>; Mouse Anti-Rat C-peptide I &amp; II, N-terminal Monoclonal Antibody; Ins; Ins1; insulin1; Mouse Anti-Rat INS1 Molecule Monoclonal Antibody; INS1 MAb; INS1 antibody; INS1 molecule MAb; NM_019129; NP_062002</p>

## GENE INFORMATION

<b>Entrez Gene ID</b>	<a href="#">3630</a>
<b>UniProt ID</b>	<a href="#">I3WAC9</a>