

#4593 Store at -20°C

C-Peptide Antibody

100 µl
 (100 sections)

Orders ■ 877-616-CELL (2355)
 orders@cellsignal.com
Support ■ 877-678-TECH (8324)
 info@cellsignal.com
Web ■ www.cellsignal.com

rev. 07/21/09

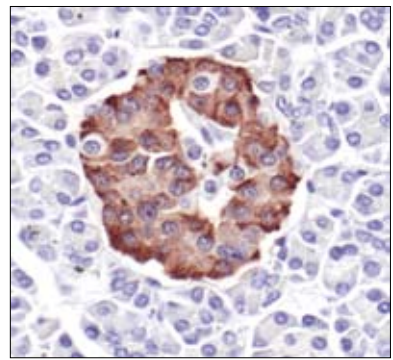
This product is for *in vitro* research use only and is not intended for use in humans or animals.
 This product is not intended for use as a therapeutic or in diagnostic procedures.

Applications	Species Cross-Reactivity	Molecular Wt.	Source
IHC-P, IHC-F, IF-IC, IF-F Endogenous	H, M, R	4 kDa	Rabbit**

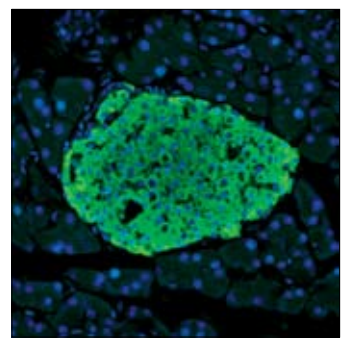
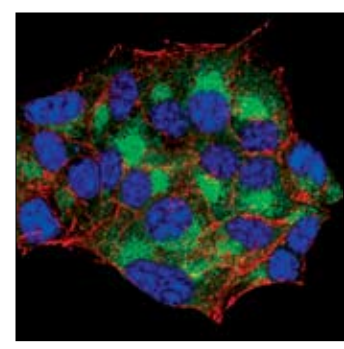
Background: Glucose homeostasis is regulated by hormones. Elevation of blood glucose levels during feeding stimulates insulin release from pancreatic β cells through a glucose sensing pathway (1). Proinsulin, the insulin precursor molecule, is processed prior to its secretion. Insulin is composed of A-peptide and B-peptide which are joined by a disulfide bond. The center one-third of the precursor molecule is cleaved and released as C-peptide, which has a longer half-life than insulin (2).

Specificity/Sensitivity: C-peptide Antibody detects endogenous levels of total C-peptide protein.

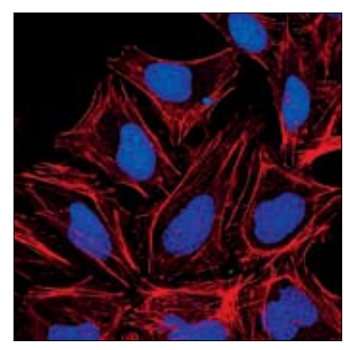
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) derived from the sequence of human C-peptide. Antibodies are purified by protein A and peptide affinity chromatography.



Immunohistochemical analysis of paraffin-embedded human pancreas, showing staining of β cells, using C-Peptide Antibody.



Confocal immunofluorescent analysis of mouse pancreas using C-Peptide Antibody (green). Blue pseudocolor = DRAQ5[®] #4084 (fluorescent DNA dye).



◀ *Confocal immunofluorescent analysis of β -TC-6 cells (upper) and HeLa cells (lower) using C-Peptide Antibody (green). Actin filaments have been labeled with DY-555 phalloidin (red). Blue pseudocolor = DRAQ5[®] #4084 (fluorescent DNA dye).*

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Immunohistochemistry (Paraffin)	1:100
IHC Protocol: Unmasking buffer/Antibodies diluent Citrate/TBST-5%NGS	
Immunohistochemistry (Frozen)	1:100
Fixative:	3% Formaldehyde
Immunofluorescence (IF-IC)	1:100
Immunofluorescence (IF-F)	1:400

For application specific protocols please see the web page for this product at www.cellsignal.com.

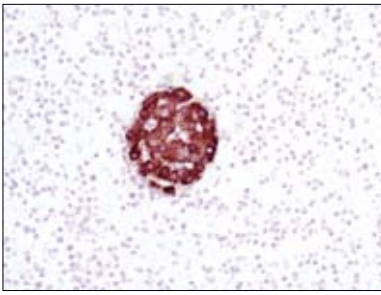
Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

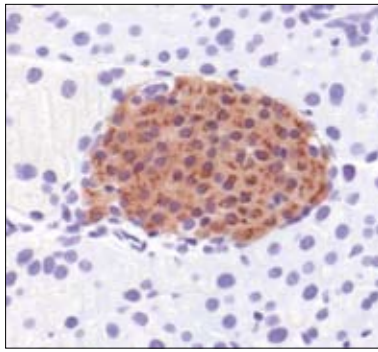
- (1) Straub, S.G. and Sharp, G.W. (2002) *Diabetes Metab. Res. Rev.* 18, 451-463.
- (2) Polonsky, K.S. and Rubenstein, A.H. (1984) *Diabetes* 33, 486-494.

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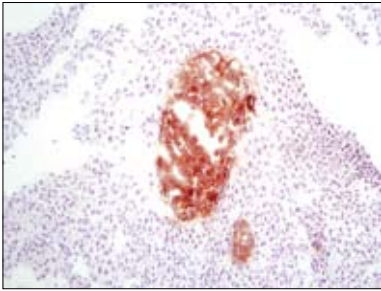
Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E—ELISA E-P—ELISA Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.



Immunohistochemical analysis of paraffin-embedded rat pancreas showing staining of β -cells using C-Peptide Antibody.



Immunohistochemical analysis of paraffin-embedded mouse pancreas, showing staining of β cells, using C-Peptide Antibody.



Immunohistochemical analysis of frozen mouse pancreas using C-Peptide Antibody.