Revision 6

#3014 Store at -20C

Insulin (C27C9) Rabbit mAb

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
IHC-P, IF-F, IF-IC, FC-FP	H M R	Endogenous	Rabbit IgG	#P01308	3630

Product Usage Information

Application	Dilution
Immunohistochemistry (Paraffin)	1:6400 - 1:25600
Immunofluorescence (Frozen)	1:200 - 1:800
Immunofluorescence (Immunocytochemistry)	1:200 - 1:800
Flow Cytometry (Fixed/Permeabilized)	1:50 - 1:200

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #56823.

Specificity / Sensitivity

Insulin (C27C9) Rabbit mAb detects endogenous levels of total insulin protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to Val42 of human insulin.

Background

The maintenance of glucose homeostasis is an essential physiological process that is regulated by hormones. An elevation in blood glucose levels during feeding stimulates insulin release from pancreatic β cells through a glucose sensing pathway (1). Insulin is synthesized as a precursor molecule, proinsulin, which is processed prior to secretion. A- and B-peptides are joined together by a disulfide bond to form insulin, while the central portion of the precursor molecule is cleaved and released as the C-peptide. Insulin stimulates glucose uptake from blood into skeletal muscle and adipose tissue. Insulin deficiency leads to type 1 diabetes mellitus (2).

Background References

1. Straub, S.G. and Sharp, G.W. (2002) *Diabetes Metab. Res. Rev.* 18, 451-463.
2. Concannon, P. et al. (1998) *Nat. Genet.* 19, 292-296.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

IHC-P: Immunohistochemistry (Paraffin) **IF-F:** Immunofluorescence (Frozen)
IF-IC: Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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