Insulin (C27C9) Rabbit mAb (Alexa Fluor® 488 Conjugate)

**Description:** This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 488 fluorescent dye and tested in-house for direct immunofluorescent analysis in rat cells and flow cytometry in human and mouse cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated Insulin (C27C9) Rabbit mAb #3014.

**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).

**Specificity/Sensitivity:** Insulin (C27C9) Rabbit mAb (Alexa Fluor® 488 Conjugate) recognizes endogenous levels of total insulin protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the sequence of human insulin.

**Recommended Antibody Dilutions:**
- Immunofluorescence (IF-F): 1:200
- Flow Cytometry: 1:50

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**Storage:** Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.

**Species Cross-reactivity:**
- 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
- Ce — C. elegans
- Hr — horse

**Applications Key:**
- W — Western
- IP — Immunoprecipitation
- IHC — Immunohistochemistry
- ChIP — Chromatin Immunoprecipitation
- IF — Immunofluorescence
- F — Flow cytometry
- E-P — ELISA-Peptide

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*Species cross-reactivity other than human and mouse is determined by western using the unconjugated antibody.*

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