

**Insulin (L6B10) Mouse mAb**

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IF-F	R	Endogenous	6	Mouse IgG2a	#P01308	3630

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Frozen)

**Dilution**

1:1000  
1:50  
1:400 - 1:1600

**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.

**Specificity/Sensitivity**

Insulin (L6B10) Mouse mAb recognizes endogenous levels of total insulin and proinsulin.

**Species predicted to react based on 100% sequence homology**

Human, Mouse

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val36 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  $\beta$  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).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **IF-F:** Immunofluorescence (Frozen)

**Cross-Reactivity Key**

**R:** Rat

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