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Insulin Antibody

Store at -20C
#4590

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

Applications: IHC-P, IF-F, IF-IC, FC-FP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 6	Source/Isotype: Rabbit
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Product Usage Information	Application Immunohistochemistry (Paraffin) Immunofluorescence (Frozen) Immunofluorescence (Immunocytochemistry) Flow Cytometry (Fixed/Permeabilized)	Dilution 1:100 1:100 1:100 1:100
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.	
Specificity/Sensitivity	Insulin Antibody detects endogenous levels of total insulin protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human insulin. Antibodies are purified by protein A and peptide affinity chromatography.	
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	<ol style="list-style-type: none"> 1. Straub, S.G. and Sharp, G.W. (2002) <i>Diabetes Metab. Res. Rev.</i> 18, 451-463. 2. Concannon, P. et al. (1998) <i>Nat. Genet.</i> 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
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