

Product name:	Insulin Rabbit Polyclonal Antibody
Cat number:	ABN12638
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Insulin. AA range:49-98
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

After removal of the precursor signal peptide, proinsulin is post-translationally cleaved into three peptides: the B chain and A chain peptides, which are covalently linked via two disulfide bonds to form insulin, and C-peptide. Binding of insulin to the insulin receptor (INSR) stimulates glucose uptake. A multitude of mutant alleles with phenotypic effects have been identified. There is a read-through gene, INS-IGF2, which overlaps with this gene at the 5' region and with the IGF2 gene at the 3' region. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2010],disease:Defects in INS are the cause of familial hyperproinsulinemia [MIM:176730].,function:Insulin decreases blood glucose concentration. It increases cell permeability to monosaccharides, amino acids and fatty acids. It accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver.,function:Preptin undergoes glucose-mediated co-secretion with insulin, and acts as physiological amplifier of glucose-mediated insulin secretion. Exhibits osteogenic properties by increasing osteoblast mitogenic activity through phosphoactivation of MAPK1 and MAPK3.,function:The insulin-like growth factors possess growth-promoting activity. In vitro, they are potent mitogens for cultured cells. IGF-II is influenced by placental lactogen and may play a role in fetal development.,mass spectrometry: PubMed:12586351; PubMed:15359740,online information:Clinical information on Eli Lilly insulin products,online information:Insulin entry,online information:Insulin-like growth factor 2 entry,online information:Protein of the 20th century - Issue 9 of April 2001,pharmaceutical:Available under the names Humulin or Humalog (Eli Lilly) and Novolin (Novo Nordisk). Used in the treatment of diabetes. Humalog is an insulin analog with 52-Lys-Pro-53 instead of 52-Pro-Lys-53.,similarity:Belongs to the insulin family.,subunit:Heterodimer of a B chain and an A chain linked by two disulfide bonds.,