

## Insulin (ABT-INS) mouse mAb (Ready to Use)

Catalog No: YM6121R

**Reactivity:** Human; Mouse; predicted: Rat)

**Applications:** IHC

Target: Insulin

**Fields:** >>MAPK signaling pathway;>>Ras signaling pathway;>>Rap1 signaling

pathway;>>cGMP-PKG signaling pathway;>>HIF-1 signaling pathway;>>FoxO

signaling pathway;>>Phospholipase D signaling pathway;>>Oocyte

meiosis;>>Autophagy - animal;>>mTOR signaling pathway;>>PI3K-Akt signaling

pathway;>>AMPK signaling pathway;>>Longevity regulating

pathway;>>Longevity regulating pathway - multiple species;>>Regulation of actin

cytoskeleton;>>Insulin signaling pathway;>>Insulin secretion;>>Ovarian steroidogenesis;>>Progesterone-mediated oocyte maturation;>>Prolactin signaling pathway;>>Regulation of lipolysis in adipocytes;>>Type II diabetes mellitus;>>Insulin resistance;>>Non-alcoholic fatty liver disease;>>Type I diabetes mellitus;>>Maturity onset diabetes of the young;>>Aldosterone-

regulated sodium reabsorption;>>Alzheimer disease;>>Prostate

cancer;>>Diabetic cardiomyopathy

Gene Name: INS

Protein Name: Insulin [Cleaved into: Insulin B chain; Insulin A chain]

Human Gene Id: 3630

**Human Swiss Prot** 

No:

P01308

**Immunogen:** Synthesized peptide derived from human Insulin AA range: 25-110

**Specificity:** This antibody detects endogenous levels of human Insulin. Heat-induced

epitope retrieval (HIER) Citrate buffer of pH6.0 was highly recommended as

antigen repair method in paraffin section

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Mouse, Monoclonal/IgG2b, Kappa

1/3



**Dilution:** Ready to use for IHC

**Purification:** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

**Storage Stability:** 2°C to 8°C/1 year

**Cell Pathway:** Oocyte meiosis;Regulation of autophagy;mTOR;Regulates Actin and

Cytoskeleton;Insulin Receptor;Progesterone-mediated oocyte maturation;Type II

diabetes mellitus; Type I diabetes mellitus; Maturity onset

**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],

**Function:** 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;

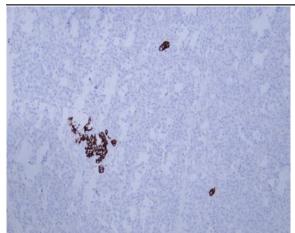
PubMed:15359740, online information: Clinical information on Eli Lilly insu

Subcellular Location:

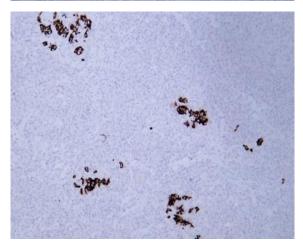
Cytoplasmic

**Expression:** Blood, Liver, Muscle, Pancreas,

**Products Images** 



Human pancreas tissue was stained with Anti-Insulin (ABT-INS) Antibody



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