Best Tools for immunology Research

Insulin (ABT-INS) IHC kit

Catalog No :	IHCM6121
Reactivity :	Human;Mouse;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 :	The antibody can specifically recognize human Insulin protein.
Source :	Mouse, Monoclonal/IgG2b, kappa
Purification :	The antibody was affinity-purified from 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

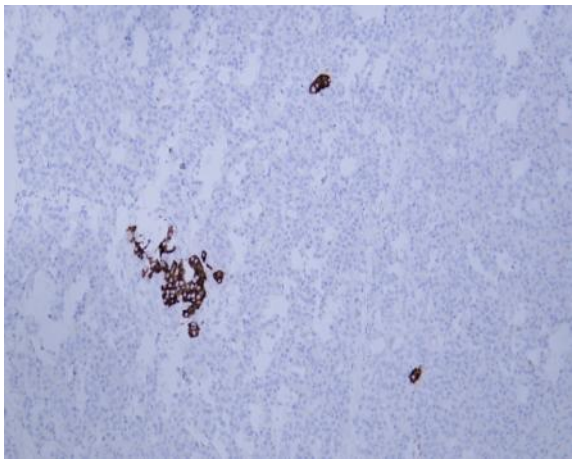
Background : After removal of the precursor signal peptide, proinsulin is post-translationally cleaved into three peptides: the B chain and A chain peptides, which are covalently linked via two disulfide bonds to form insulin, and C-peptide. Binding of insulin to the insulin receptor (INSR) stimulates 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

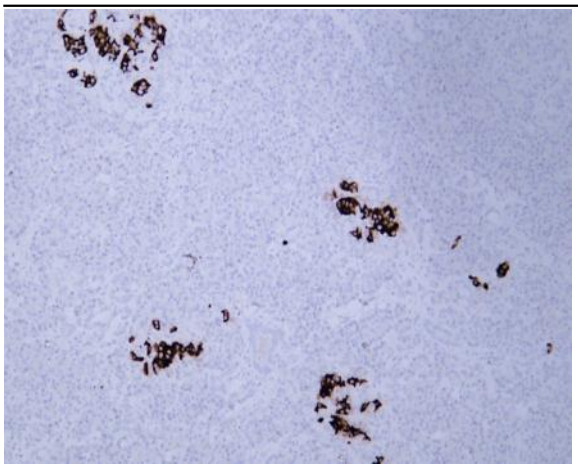
Subcellular Location : Cytoplasmic

Expression : Blood,Liver,Muscle,Pancreas,

Products Images



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



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