

Purified Low Endotoxin Mouse Anti-human/pig/cow Insulin Antibody *IN-05, monoclonal*Catalog number: V1031570
Unit size: 0.1 mg**Product Details**

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	Lot specific (please consult certificate of analysis for given lot)
Formulation	Low endotoxin azide free Phosphate-buffered saline (PBS, pH 7.2), 0.2 µm filter sterilized. Endotoxin level is less than 0.01 EU/µg of the protein, as determined by the LAL test., 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human, pig, cow
Class	Primary
Clonality	Monoclonal
Host	Mouse
Immunogen	Insulin
Clone	IN-05
Conjugate	Purified Low Endotoxin

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with Purified Low Endotoxin under optimal conditions
Application	ELISA, RIA, IHC(P), ICC, FUNC

Applications

Insulin is a protein with a molecular weight of 12 kDa, expressed in the extracellular region, transport vesicle and extracellular space of cells. In humans, insulin is thought to be essential to organismal processes, in particular, fatty acid homeostasis, endoplasmic reticulum to Golgi vesicle-mediated transport and wound healing. Insulin binds to insulin receptor, identical protein and protease, and moreover, is an integral part of DNA-templated transcription, and protein localization to plasma membrane. Insulin is the subject of comprehensive study because of the fact that it is involved with the negative regulation of oxidative stress-induced intrinsic apoptotic signaling pathway, G protein-coupled receptor signaling pathway and insulin receptor signaling pathway, and also, has been associated with critical functions such as hormone activity. It acts to positively regulate MAPK cascade, protein autophosphorylation and phosphatidylinositol 3-kinase signaling on the other hand also is a repressor of proteolysis, gluconeogenesis and glycogen catabolic process. Insulin is clinically significant because abnormalities in its function have been thought to be involved with diseases like insulin-dependent diabetes mellitus 2 (IDDM2), hyperproinsulinemia (HPRI) and permanent neonatal diabetes mellitus (PNDM).