



Human Insulin,INS ELISA Kit

Product Code	CSB-E05069h
Abbreviation	INS
Protein Biological Process 1	Metabolism
Uniprot No.	P01308
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	10 μ IU/ml-160 μ IU/ml
Sensitivity	2 μ IU/ml
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Metabolism
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 600 nm or 630 nm. An incubator can provide stable incubation conditions up to 37°C$\pm$5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	INS
Tag Info	quantitative
Protein Description	Sandwich
Component	An assay plate --- The 96-well plate is composed of 12 x 8 strip plates and can be dismountable. Six bottles of lyophilized standard --- Reconstitute one bottle of the standard with sample diluent at dilution series and draw the standard curve.



Biotin-antibody (100 x concentrate) 1 x 120 μ l --- Act as the detection antibody and need to be diluted before use.

HRP-avidin (100 x concentrate) 1 x 6 ml--- Catalyze the TMB substrate for color development and need to be diluted before use.

Biotin-antibody Diluent 1 x 15 ml --- Dilute the Biotin-antibody.

HRP-avidin Diluent 1 x 15 ml --- Dilute the HRP-avidin.

Sample Diluent 1 x 50 ml --- Reconstitute the standard and dilute the sample to an appropriate concentration.

Wash Buffer (20 x concentrate) 1 x 15 ml --- Wash away the unbound solution and non-specific substances.

Substrate A 1 x 7 ml --- Contain oxidant.

Substrate B 1 x 7 ml--- Contain TMB. TMB interacts with HRP, eliciting the solution turns blue.

Stop Solution 1 x 10 ml --- Add stop solution and stop the color development. The solution color immediately turns from blue to yellow.

Adhesive Strip (For 96 wells) 4 --- Cover the microtiter plate when incubation.

An instruction manual

Description

The human insulin/INS ELISA kit is used to detect and quantify the concentrations of INS in serum, plasma, cell culture supernates, and tissue homogenates. This kit exclusively recognizes human INS proteins. It adopts a sandwich ELISA technique in which an INS antibody/INS/biotinylated INS complex is formed and develops color reaction after the addition of TMB substrate solution. The intensity of the color is positively relevant to the levels of INS in the sample. This ELISA kit has been confirmed to have high sensitivity, strong specificity, premium precision, and lot-to-lot consistency. See the instructions for more details.

Insulin/INS is the predominant anabolic hormone, promoting carbon energy deposition in the body. Its secretion from beta cells is induced by glucose and Glucagon-like-peptide 1 (GLP-1). It is a critical regulator of glucose metabolism, playing a hypoglycaemic effect. Insulin-glucagon coordination is essential for glucose homeostasis. Insulin resistance and loss of beta-cell function are involved in the development of type 2 diabetes mellitus (T2DM).

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