Insulin ELISA kit

Highly sensitive Insulin ELISA kit enabling detection of insulin in serum, plasma, tissue culture media in just 3 hours.

The Insulin ELISA kit is a colorimetric immunometric immunoassay kit with results in 3 hours.

Insulin is peptide hormone made in the pancreas by beta cells. It promotes the uptake of glucose from the blood into tissues where it is stored in the form of glycogen and fat. Insulin also inhibits the production of glucose by the liver. By controlling glucose levels, insulin serves as the central regulator of fat and carbohydrate metabolism. The disease diabetes mellitus results when control of glucose levels is lost due to lack of insulin production (type 1 diabetes) or when sufferers develop an inability to respond to insulin (type 2 diabetes). Understanding a patient's insulin level helps to differentiate which form or diabetes may be present in patients presenting with diabetic symptoms.

Insulin immunoassays assist in identifying insulin resistance in type 2 diabetics and can indicate when insulin supplementation may be necessary in addition to oral medications. Insulin resistance has been linked to a variety of disease states including kidney damage and metabolic syndrome. Insulin immunoassays also help diagnose the presence of an insulin-producing tumor in the islet cells of the pancreas (insulinoma) and can also help determine the cause of low blood glucose (hypoglycemia). Beyond insulin's ability to induce widespread systemic effects, recent studies have demonstrated more localized insulin signaling with impacts on stem cell proliferation.

Citations: 5

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Ordering Information

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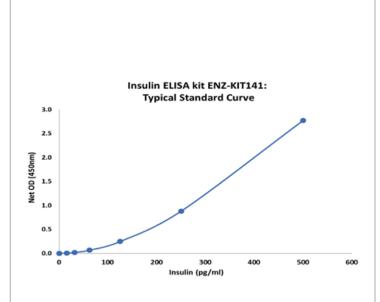
ENZ-KIT141-0001

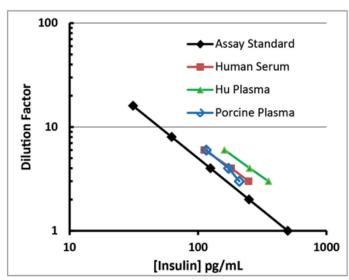
96 wells

Manuals, SDS & CofA

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- Highly sensitive measurement of insulin, detecting as little as 15.5 pg/mL
- Negligible cross reactivity with proinsulin
- High throughput format with results in 3 hours for up to 40 samples in duplicate
- Fully quantitative results that surpass semi-quantitative
 Western blot analysis







Handling & Storage

Long Term Storage +4°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Application Colorimetric detection, ELISA

Application Notes For the quantitative determination of insulin in serum,

plasma, and tissue culture media.

Assay Time 3 hours

Compatibility This product is compatible with the Absorbance 96 Plate

Reader.

Contents Microtiter plate, Assay Buffer 13, Standard, Wash Buffer

Concentrate, Antibody, Conjugate, Substrate, and Stop

Solution

Crossreactivity No cross-reactivity to similar family molecules (proinsulin).

Sensitivity 15.5 pg/ml (15.6-500 pg/ml)

Species Reactivity Human, Porcine

UniProt ID P01308

Wavelength 450 nm

Last modified: May 29, 2024

