



Mouse insulin (INS) ELISA kit (0.1-40 U/mL)

Cat. No.:	0126WXX-602
Assay Type:	Quantitative sandwich ELISA
Target Species:	Mouse
Assay Target:	INS
Size:	48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	Mouse insulin (INS) ELISA kit (0.1-40 U/mL) is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of INS in mice samples with a range of 0.1-40 U/mL and a minimum detectable dose (sensitivity) of 0.049 U/mL. The kit is highly sensitive and easy to use.
Assay Principle	This kit is an ELISA utilizing a microplate pre-coated with a mouse INS capture antibody. Target INS in the sample binds to the immobilized antibody, followed by the binding of a biotinylated mouse INS detection antibody and streptavidin-HRP. After incubation and a washing step, a substrate solution is introduced to produce color in direct proportion to the amount of mouse INS. The reaction is halted with an acidic stop solution, and the absorbance is measured at 450 nm.
Background	INS is a hormone composed of an A chain and a B chain linked by two disulfide bonds. Secreted by the pancreas, it functions as a key regulator of metabolism within the body. Its primary role is to lower blood glucose levels by promoting glucose uptake into cells. INS is fundamentally linked to obesity through its role in energy metabolism and its relationship with insulin resistance. By targeting the insulin receptor signaling pathway and the diverse metabolic processes it regulates, researchers can develop novel anti-obesity therapies.
Synonyms	Pancreatic insulin
Formula Weight	21,537 Da



Applications

Mouse insulin (INS) ELISA kit (0.1-40 U/mL) is used to quantify INS in serum, plasma, cell culture supernatant, cell lysates, and tissue homogenates of mouse, providing data to support research in a wide range of areas, including metabolic pathway, endocrinology, hormone metabolism, obesity, etc.

Research Area

Metabolic pathway; Endocrinology; Hormone metabolism; Obesity

Specification

Sample Type

Serum; Plasma; Cell culture supernatants; Cell lysates; Tissue homogenates

Detection Range

0.1-40 U/mL

Sensitivity

0.049 U/mL

Cross-reactivity

No significant cross-reactivity or interference was observed.

Storage

Store at 2-8°C.