



Porcine insulin (INS) ELISA kit (3.12-100 mIU/L)

Cat. No.:	0126WXX-609
Assay Type:	Quantitative sandwich ELISA
Target Species:	Porcine
Assay Target:	INS
Size:	48T; 96T

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

Product Overview

Description	Porcine insulin (INS) ELISA kit (3.12-100 mIU/L) is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of INS in porcine samples with a range of 3.12-100 mIU/L and a minimum detectable dose (sensitivity) of 1.0 mIU/L. The kit is highly sensitive and easy to use.
Assay Principle	This assay utilizes purified porcine INS antibodies to create a solid-phase capture system. Samples are added along with an HRP-labeled INS detection antibody to form an antibody-antigen-antibody-enzyme complex. After thorough washing, a TMB substrate solution is added, which turns blue under HRP catalysis. The reaction is terminated with sulphuric acid, and the O.D. at 450 nm is measured to determine the insulin concentration by comparison with a standard curve.
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	11,981 Da



Applications

Porcine insulin (INS) ELISA kit (3.12-100 mIU/L) is used to quantify INS in serum, plasma, tissue homogenates, feces, urine, and body fluids of porcine, 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; Tissue homogenate; Feces; Urine; Body fluids
Detection Range	3.12-100 mIU/L
Sensitivity	1.0 mIU/L
Precision (Intra-assay)	CV<15%
Precision (Inter-assay)	CV<15%
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at 2-8°C.