



Chicken insulin (INS) ELISA kit (123.5-10000 pg/mL)

Cat. No.:	0126WXX-544
Assay Type:	Quantitative competitive ELISA
Target Species:	Chicken
Assay Target:	INS
Size:	24T; 48T; 96T

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

Product Overview

Description

Chicken insulin (INS) ELISA kit (123.5-10000 pg/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of INS in chicken samples with a range of 123.5-10000 pg/mL and a minimum detectable dose (sensitivity) of 50.7pg/mL. The kit is highly sensitive and easy to use.

Assay Principle

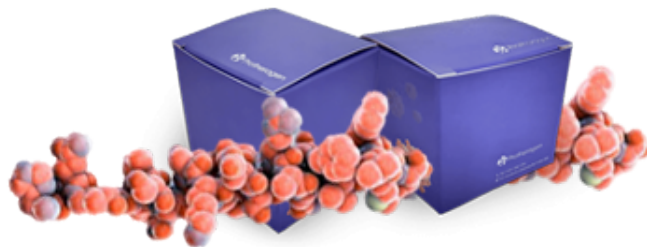
This assay utilizes a competitive inhibition enzyme immunoassay approach. A microplate is pre-coated with a monoclonal antibody specific to INS. Biotin-labeled INS and unlabeled INS from standards or samples compete for binding to the immobilized antibody. After incubation, unbound conjugates are removed by washing. An avidin conjugated to HRP is then added and incubated, and the amount of bound HRP is inversely proportional to the INS concentration in the sample. Following the addition of the substrate, the resulting color intensity is inversely related to the INS concentration.

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

**Applications**

Chicken insulin (INS) ELISA kit (123.5-10000 pg/mL) is used to quantify INS in serum, plasma, tissue homogenates, and cell lysates, cell culture supernatants, and other biological fluids of chicken, 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 homogenates; Cell lysates; Cell culture supernatants; Other biological fluids
Detection Range	123.5-10000 pg/mL
Sensitivity	50.7pg/mL
Precision (Intra-assay)	CV<10%
Precision (Inter-assay)	CV<12%
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at 2-8°C.