



Sheep proinsulin (PI) ELISA kit

Cat. No.:	0126WXX-1294
Assay Type:	Quantitative ELISA
Target Species:	Sheep
Assay Target:	PI
Size:	48T; 96T

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

Product Overview

Description	Sheep proinsulin (PI) ELISA kit is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of PI in sheep samples. The kit is highly sensitive and easy to use.
Assay Principle	The ELISA analytical biochemical technique is based on PI antibody-PI antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect PI antigen targets in samples.
Background	Proinsulin is the precursor molecule of insulin, synthesized in pancreatic β cells and subsequently processed into mature insulin and C-peptide. It plays a critical role in glucose homeostasis by serving as an essential intermediate in insulin biosynthesis and secretion. Under normal physiological conditions, proinsulin is efficiently converted to insulin; however, impaired processing or increased proinsulin secretion reflects β -cell dysfunction. Elevated circulating proinsulin levels are commonly observed in obesity and insulin resistance, making proinsulin a key indicator of metabolic stress and a contributing factor to the development of obesity-associated type 2 diabetes.
Synonyms	INS; Pro-Insulin; Preproinsulin
Formula Weight	21,537 Da



Applications

Sheep proinsulin (PI) ELISA kit is used to quantify PI in serum, plasma, cell culture supernatants, body fluid, tissue homogenate of sheep, providing data to support research in a wide range of areas, including endocrinology, hormone metabolism, obesity, and others.

Research Area

Endocrinology; Hormone metabolism; Obesity

Specification

Sample Type

Serum; Plasma; Cell culture supernatants; Body fluid; Tissue homogenate

Cross-reactivity

No significant cross-reactivity or interference was observed.

Storage

Store at 2-8°C.