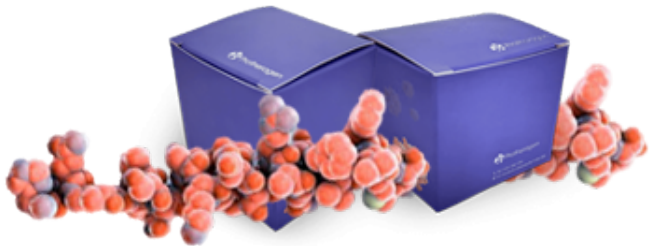
Protheragen
Obesity



Porcine proinsulin (PI) ELISA kit (5.0-100 pmoL/L)

Cat. No.:	0126WXX-1291
Assay Type:	Quantitative ELISA
Target Species:	Porcine
Assay Target:	PI
Size:	48T; 96T

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

Product Overview

Description	Porcine proinsulin (PI) ELISA kit (5.0-100 pmoL/L) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of PI in porcine samples with a range of 5.0-100 pmoL/L and a minimum detectable dose (s ensitivity) of 1.0 pmoL/L. The kit is highly sensitive and easy to use.
Assay Principle	The ELISA analytical biochemical technique is based on PI antibody-PI antigen in teractions (immunosorbency) and an HRP colorimetric detection system to detect P I antigen targets in samples.
Background	Proinsulin is the precursor molecule of insulin, synthesized in pancreatic β cel ls and subsequently processed into mature insulin and C-peptide. It plays a crit ical role in glucose homeostasis by serving as an essential intermediate in insu lin biosynthesis and secretion. Under normal physiological conditions, proinsuli n is efficiently converted to insulin; however, impaired processing or increased proinsulin secretion reflects β-cell dysfunction. Elevated circulating proinsul in levels are commonly observed in obesity and insulin resistance, making proins ulin a key indicator of metabolic stress and a contributing factor to the develo pment of obesity-associated type 2 diabetes.
Synonyms	INS; Pro-Insulin; Preproinsulin
Formula Weight	21,537 Da

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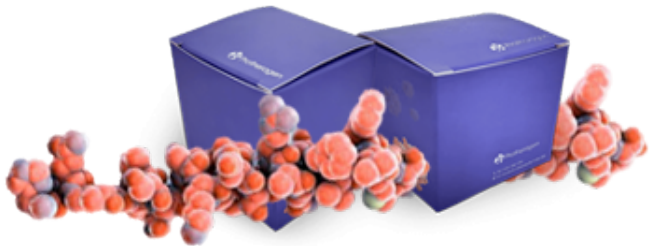

Applications	Porcine proinsulin (PI) ELISA kit (5.0-100 pmoL/L) is used to quantify PI in ser um, plasma, cell culture supernatants, body fluid, tissue homogenate of porcine, providing data to support research in a wide range of areas, including endocrin ology, hormone metabolism, obesity, and others.
Research Area	Endocrinology; Hormone metabolism; Obesity

Specification

Sample Type	Serum; Plasma; Cell culture supernatants; Body fluid; Tissue homogenate
Detection Range	5.0-100 pmoL/L
Sensitivity	1.0 pmoL/L
Cross-reactivity	No significant cross-reactivity or interference was observed.
Recovery	94-103%
Storage	Store at 2-8°C.

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