



Rat pyruvate dehydrogenase E1 component subunit beta; mitochondrial (PDHB) ELISA kit

Cat. No.:	0126WXX-1251
Assay Type:	Quantitative ELISA
Target Species:	Rat
Assay Target:	PDHB
Size:	48T; 96T

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

Product Overview

Description	Rat pyruvate dehydrogenase E1 component subunit beta; mitochondrial (PDHB) ELISA kit is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of PDHB in rat samples. The kit is highly sensitive and easy to use.
Assay Principle	The ELISA analytical biochemical technique is based on PDHB antibody-PDHB antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect PDHB antigen targets in samples.
Background	PDHB is a key catalytic subunit of the pyruvate dehydrogenase complex (PDHC) in the mitochondrial matrix. This complex catalyzes the oxidative decarboxylation of pyruvate to produce acetyl-CoA, thereby directing glycolytic products into the tricarboxylic acid (TCA) cycle. This represents the core rate-limiting step in glucose metabolism. PDHB regulates cellular substrate selection between lipid and glucose oxidation, which is crucial for maintaining energy balance. Research indicates it plays a key role in conditions such as obesity.
Synonyms	PDHBD; PHE1B; E1beta; PDHE1B; PDHE1-B
Formula Weight	38,982 Da
Applications	Rat pyruvate dehydrogenase E1 component subunit beta, mitochondrial (PDHB) ELISA kit is used to quantify PDHB in rat samples, providing data to support research in a wide range of areas, including mitochondrial function and energy metabolism, signal transduction, obesity, and others.



Research Area

Mitochondrial function and energy metabolism; Metabolism; Signal transduction; Obesity

Specification

Sample Type

Rat samples

Cross-reactivity

No significant cross-reactivity or interference was observed.

Storage

Store at 2-8°C.