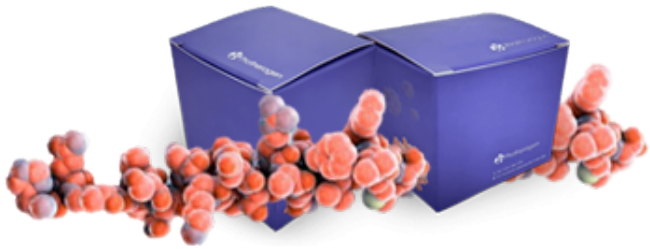
Protheragen
Obesity



Donkey Uncoupling Protein 3 (UCP3) ELISA kit

Cat. No.:	0126WXX-2070
Assay Type:	Quantitative ELISA
Target Species:	Donkey
Assay Target:	UCP3
Size:	1 kit

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

Product Overview

Description	Donkey Uncoupling Protein 3 (UCP3) ELISA kit is an ELISA-based *in vitro* r esearch tool designed specifically for the quantitative detection of UCP3 in don key samples. The kit is highly sensitive and easy to use.
Assay Principle	The ELISA analytical biochemical technique is based on UCP3 antibody-UCP3 antige n interactions (immunosorbency) and an HRP colorimetric detection system to dete ct UCP3 antigen targets in samples.
Background	UCP3 is a key member of the UCP family, functioning as a transporter located in the inner mitochondrial membrane. Its primary role is to create a proton leakage pathway, allowing protons to bypass the ATP synthase and thereby decouple the o xidative phosphorylation process. This decoupling results in energy that would o therwise be used for ATP synthesis being dissipated as heat rather than stored i n chemical bonds. In obesity research, UCP3 serves as a key regulator of thermog enesis and systemic energy balance, exhibiting high expression primarily in skel etal muscle. Studies indicate that elevated UCP3 levels may contribute to increa sed basal metabolic rate, enhanced fatty acid oxidation, and resistance to weigh t gain, positioning it as a potential therapeutic target for obesity treatment a nd improved insulin sensitivity.
Synonyms	SLC25A9; Mitochondrial uncoupling protein 3; UCP 3; Solute carrier family 25 mem ber 9; Uncoupling protein 3; mitochondrial
Formula Weight	22,874 Da

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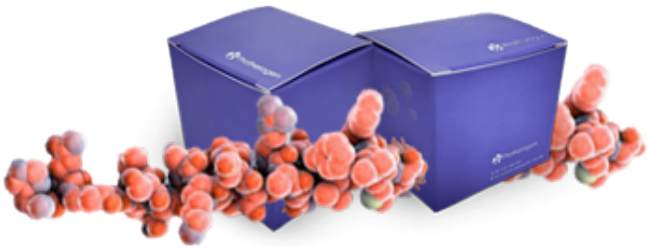

Applications	Donkey Uncoupling Protein 3 (UCP3) ELISA kit is used to quantify UCP3 in donkey samples, providing data to support research in a wide range of areas, including metabolism, mitochondrial function, oxidative stress, exercise physiology, energ y balance, obesity, and others.
Research Area	Metabolism; Mitochondrial function; Oxidative stress; Exercise physiology and en ergy balance; Obesity

Specification

Sample Type	Donkey samples
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at 2-8°C.

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