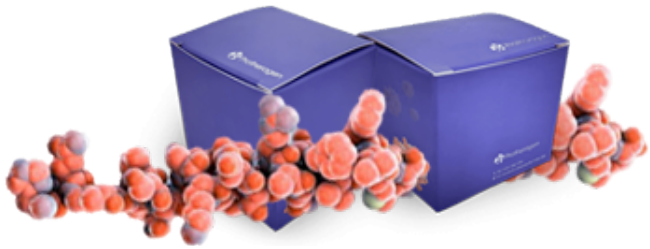
Protheragen
Obesity



Human adrenocorticotropic hormone (ACTH) ELISA kit (12.35-1000 pg/mL, <5.47 pg/mL)

Cat. No.:	OB0525WXX-177
Assay Type:	Quantitative competitive ELISA
Target Species:	Human
Assay Target:	ACTH
Size:	24T; 48T; 96T

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

Product Overview

Description	Human adrenocorticotropic hormone (ACTH) ELISA kit (12.35-1000 pg/mL, <5.47 pg/mL) is a ready-to-use ELISA kit for analyzing human ACTH levels with a detection range of 12.35-1000 pg/mL. Its sensitivity is less than 5.47 pg/mL.
Assay Principle	The assay utilizes a competitive inhibition enzyme immunoassay technique. Monoclonal antibodies specific for ACTH are pre-coated on microtiter plates. Biotin-labeled ACTH and unlabeled ACTH (standards or samples) undergo a competitive inhibition reaction with the pre-coated ACTH-specific antibody. After incubation, unbound conjugates are washed away. Next, avidin bound to HRP is added to each microtiter plate well and incubated. The amount of bound HRP is inversely proportional to the concentration of ACTH in the sample. Upon addition of the substrate solution, the intensity of color development is inversely proportional to the concentration of ACTH in the sample.
Background	ACTH stimulates the adrenal glands to release cortisol. Defects in POMC may be associated with susceptibility to obesity (OBESITY). It is a condition characterized by an increase in body weight beyond the limitations of skeletal and physical requirements, as a result of excessive accumulation of body fat. Defects in POMC are the cause of pro-opiomelanocortinin deficiency (POMCD). Affected individuals present early-onset obesity, adrenal insufficiency, and red hair.
Synonyms	ACTH; Corticotropin; Adrenocorticotropin; Adrenocorticotropic hormone; Pomc1; Pomc-1; Beta-LPH; AlphaMSH; beta-MSH; Gamma-LPH; Alpha-MSH; Gamma-MSH
Formula Weight	26,707 Da
Applications	Human adrenocorticotropic hormone (ACTH) ELISA kit (12.35-1000 pg/mL, <5.47 pg/mL) is designed for the *in vitro* quantitative analysis of ACTH levels in human serum, plasma, tissue homogenates, cell lysates, cell culture supernates, and other biological fluid samples.

Address: 101-4 Colin Dr, Holbrook, NY 11741, USA
Phone: 1-631-506-1393
info@obesityscientific.com

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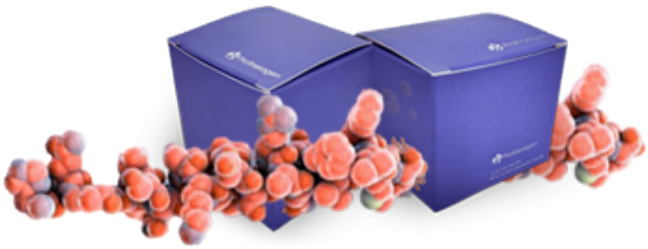

Research Area	Hormone research; Metabolites; Signaling pathway; Glucose homeostasis; Regulatio n of appetite; Obesity

Specification

Sample Type	Serum; Plasma; Tissue homogenates; Cell lysates; Cell culture supernates; Other biological fluids
Detection Range	12.35-1000 pg/mL
Sensitivity	<5.47 pg/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.

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