



## Mouse adrenocorticotrophic hormone (ACTH) ELISA kit (0.312-20 ng/mL)

<b>Cat. No.:</b>	OB0525WXX-180
<b>Assay Type:</b>	Quantitative sandwich ELISA
<b>Target Species:</b>	Mouse
<b>Assay Target:</b>	ACTH
<b>Size:</b>	48T; 96T

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

### Product Overview

#### Description

Mouse adrenocorticotrophic hormone (ACTH) ELISA kit (0.312-20 ng/mL) is a ready-to-use ELISA kit for analyzing mouse ACTH levels with a detection range of 0.312- 20 ng/mL and a sensitivity of 0.126 ng/mL.

#### Assay Principle

The microtiter plates provided in this kit are pre-coated with specific ACE anti body, and standards or samples are then added to the appropriate microtiter plate wells along with the biotin-conjugated specific ACE antibody preparation. Avidin conjugated to HRP is then added to each microplate well and incubated. Only wells containing ACE, biotin-conjugated antibody, and enzyme-conjugated avidin will show a color change upon addition of TMB substrate solution. The enzyme-substrate reaction is terminated by the addition of sulfuric acid solution, and the color change is measured spectrophotometrically at 450 nm  $\pm$  10 nm. The concentration of ACE in the sample is then determined by comparing the OD of the sample with the standard curve.

#### 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-opiomelanocortin deficiency (POMCD). Affected individuals present early-onset obesity, adrenal insufficiency, and red hair.



<b>Synonyms</b>	ACTH; Corticotropin; Adrenocorticotropin; Adrenocorticotropic hormone; Pomc1; Pomc-1; Beta-LPH; AlphaMSH; beta-MSH; Gamma-LPH; Alpha-MSH; Gamma-MSH
<b>Formula Weight</b>	26,707 Da
<b>Applications</b>	Mouse adrenocorticotropic hormone (ACTH) ELISA kit (0.312-20 ng/mL) is designed for the <i>in vitro</i> quantitative analysis of ACTH levels in mouse serum, plasma, tissue homogenates, cell lysates, cell culture supernates, and other biological fluid samples.
<b>Research Area</b>	Hormone research; Metabolites; Signaling pathway; Glucose homeostasis; Regulation of appetite; Obesity

## Specification

<b>Sample Type</b>	Mouse serum; Plasma; Tissue homogenates; Cell lysates; Cell culture supernates; Other biological fluids
<b>Detection Range</b>	0.312-20 ng/mL
<b>Sensitivity</b>	0.126 ng/mL
<b>Precision (Intra-assay)</b>	CV<10%
<b>Precision (Inter-assay)</b>	CV<12%
<b>Cross-reactivity</b>	No significant cross-reactivity or interference was observed.
<b>Storage</b>	Store at 4°C (TMB substrate, wash buffer, stop solution) and -20°C (other reagents).