



Chicken carboxypeptidase E (CPE) ELISA kit (0.625-40 ng/mL)

Cat. No.:	OB0625WXX-402
Assay Type:	Quantitative sandwich ELISA
Target Species:	Chicken
Assay Target:	CPE
Size:	24T; 48T; 96T

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

Product Overview

Description

Chicken carboxypeptidase E (CPE) ELISA kit (0.625-40 ng/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of CPE in chicken with a range of 0.625-40 ng/mL and a specificity of 0.375 ng/mL.

Assay Principle

The micro ELISA plates in this kit are pre-coated with an antibody specific for CPE. Standards or samples are added to the appropriate micro ELISA plate wells and bound to the specific antibody. A biotinylated detection antibody specific for CPE and avidin-horseradish peroxidase (HRP) conjugate are then added sequentially to each microplate well and incubated. Free components are washed away. Substrate solution is added to each well. Only wells containing CPE, biotinylated detection antibody, and avidin-HRP conjugate will appear blue. Upon addition of sulfuric acid solution, the enzyme-substrate reaction terminates, and the color changes to yellow. Optical density (OD) is measured spectrophotometrically at $450 \text{ nm} \pm 2 \text{ nm}$. The OD value is proportional to the concentration of CPE. The concentration of CPE in the sample is calculated by comparing the OD value of the sample with the standard curve.



Background	CPE is a peripheral membrane protein that cleaves C-terminal amino acid residues and participates in the biosynthesis of peptide hormones and neurotransmitters. This protein specifically binds to proteins in the regulated secretory pathway, including prohormones, but does not bind to constitutively secreted proteins. Studies have found that mutations in the gene are related to obesity and Type 2 diabetes.
Synonyms	CPH; Enkephalin convertase; Carboxypeptidase H; Prohormone-processing carboxypeptidase; EC 3.4.17.10
EC NO.	3.4.17.10
Formula Weight	49,886 Da
Applications	Chicken carboxypeptidase E (CPE) ELISA kit (0.625-40 ng/mL) is used to quantify CPE in serum, plasma, and biological fluid samples of chicken, providing data to support a wide range of studies.
Research Area	Metabolism; Signal regulation; Obesity research

Specification

Sample Type	Serum; Plasma; Biological fluids
Detection Range	0.625-40 ng/mL
Sensitivity	0.375 ng/mL
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at 4°C.