



Rat meprin A subunit alpha (MEP1A) ELISA kit (0.156-10 ng/mL)

Cat. No.:	0126WXX-1045
Assay Type:	Quantitative sandwich ELISA
Target Species:	Rat
Assay Target:	MEP1A
Size:	48T; 96T

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

Product Overview

Description

Rat meprin A subunit alpha (MEP1A) ELISA kit (0.156-10 ng/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of MEP1A in rat samples with a range of 0.156-10 ng/mL and a minimum detectable dose (sensitivity) of 0.078 ng/mL. The kit is highly sensitive and easy to use.

Assay Principle

The microtiter plate provided in this kit is pre-coated with an antibody specific to MEP1A. Standards or samples are added to the designated microtiter plate wells with a biotin-conjugated polyclonal antibody preparation specific for MEP1A. Subsequently, avidin-conjugated HRP is added to each microplate well and incubated. A TMB substrate solution is then introduced to each well. Only those wells containing the MEP1A-biotin-avidin complex will exhibit a change in color. The enzyme-substrate reaction is terminated by a sulphuric acid solution, and the absorbance is measured at 450 nm \pm 2 nm. The concentration of MEP1A is determined by comparing the sample O.D. to the standard curve.

Background

MEP1A is a constituent subunit of the zinc-dependent metalloproteinase Meprin A, highly expressed primarily in the renal brush border and intestine. Its core function is as an endopeptidase that hydrolyzes peptide bonds, participating in protein digestion, processing specific peptides, and degrading the extracellular matrix (ECM). It is associated with glucose and insulin metabolism.

Synonyms

Endopeptidase-2; N-benzoyl-L-tyrosyl-P-amino-benzoic acid hydrolase subunit alpha; PABA peptide hydrolase; PPH alpha; PPHA



Formula Weight	85,123 Da
Applications	Rat meprin A subunit alpha (MEP1A) ELISA kit (0.156-10 ng/mL) is used to quantify MEP1A in serum, plasma, whole blood, tissue, saliva, urine, feces, and other fluids of rat, providing data to support research in a wide range of areas, including metabolism, etc.
Research Area	Metabolism

Specification

Sample Type	Serum; Plasma; Whole blood; Other fluid; Tissue; Saliva; Urine; Feces
Detection Range	0.156-10 ng/mL
Sensitivity	0.078 ng/mL
Precision (Intra-assay)	CV≤4.5%
Precision (Inter-assay)	CV≤8.6%
Cross-reactivity	No significant cross-reactivity or interference was observed.
Recovery	1.06
Storage	Store at -20°C.