



Mouse meprin A subunit alpha (MEP1A) ELISA kit (62.5-4000 pg/mL)

Cat. No.:	0126WXX-1042
Assay Type:	Quantitative sandwich ELISA
Target Species:	Mouse
Assay Target:	MEP1A
Size:	24T; 48T; 96T

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

Product Overview

Description

Mouse meprin A subunit alpha (MEP1A) ELISA kit (62.5-4000 pg/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of MEP1A in mice samples with a range of 62.5-4000 pg/mL and a minimum detectable dose (sensitivity) of <26.4 pg/mL. The kit is highly sensitive and easy to use.

Assay Principle

The principle applied in this kit is the sandwich enzyme immunoassay. The microtiter plate is pre-sensitized with an antibody specific to MEP1A. Standards or samples are added to the appropriate wells with a biotin-conjugated detection antibody specific for MEP1A. Next, avidin-conjugated HRP is added to each well and incubated. Following the addition of TMB substrate, only wells containing the MEP1A-biotin-avidin complex will exhibit a colorimetric change. The reaction is halted by a sulphuric acid solution, and the color shift is measured at 450 nm $\pm$ 10 nm. The concentration of MEP1A in the specimens is calculated by mapping the O. D. values against 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	84,419 Da
Applications	Mouse meprin A subunit alpha (MEP1A) ELISA kit (62.5-4000 pg/mL) is used to quantify MEP1A in serum, plasma, tissue homogenates, and other biological fluids of mouse, providing data to support research in a wide range of areas, including metabolism, etc.
Research Area	Metabolism

Specification

Sample Type	Serum; Plasma; Tissue homogenates; Other biological fluids
Detection Range	62.5-4000 pg/mL
Sensitivity	<26.4 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 -20°C (standard, detection reagent A, detection reagent B, 96-well strip plate) and 4°C (others).