



Human ectonucleotide pyrophosphatase/phosphodiesterase-1 (ENPP1) ELISA kit (0.156-10 ng/mL, 0.061 ng/mL)

Cat. No.:	OB0625WXX-640
Assay Type:	Quantitative sandwich ELISA
Target Species:	Human
Assay Target:	ENPP1
Size:	24T; 48T; 96T

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

Product Overview

Description

Human ectonucleotide pyrophosphatase/phosphodiesterase-1 (ENPP1) ELISA kit (0.156-10 ng/mL, 0.061 ng/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of ENPP1 in human with a range of 0.156-10 ng/mL and a specificity of 0.061 ng/mL.

Assay Principle

The microtiter plates provided in this kit are pre-coated with an antibody specific for ENPP1. Standards or samples are then added to the corresponding microtiter plate wells along with the biotin-conjugated specific ENPP1 antibody. Avidin conjugated to horseradish peroxidase (HRP) is then added to each microtiter well and incubated. Upon addition of the TMB substrate solution, only wells containing ENPP1, biotin-conjugated antibody, and enzyme-conjugated avidin will show a color change. The enzyme-substrate reaction is terminated by the addition of sulfuric acid solution, and the color change is then measured spectrophotometrically at $450 \text{ nm} \pm 10 \text{ nm}$. The concentration of ENPP1 in the sample can then be determined by comparing the OD of the sample to a standard curve.

Background

ENPP1 is a member of the ENPP family, which has broad specificity and cleaves various substrates. It is primarily involved in ATP hydrolysis at the plasma membrane, playing a role in regulating pyrophosphate levels, bone mineralization, and soft tissue calcification.

Synonyms

Membrane component chromosome 6 surface marker 1; Alkaline phosphodiesterase I; Plasma-cell membrane glycoprotein PC-1; M6S1; NPP1; NPPS; PC-1; PCA1; PDNP1



Formula Weight	104,924 Da
Applications	Human ectonucleotide pyrophosphatase/phosphodiesterase-1 (ENPP1) ELISA kit (0.156-10 ng/mL, 0.061 ng/mL) is used to quantify ENPP1 in serum, plasma, tissue homogenates, cell lysates, cell culture supernates, and other biological fluid samples of human, providing data to support a wide range of studies.
Research Area	Bone mineralization and soft tissue calcification research; Obesity research

Specification

Sample Type	Serum; Plasma; Tissue homogenates; Cell lysates; Cell culture supernates; Other biological fluids
Detection Method	Enzyme and Kinase
Detection Range	0.156-10 ng/mL
Sensitivity	0.061 ng/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.