



Human small heterodimer partner (SHP) ELISA kit- Quantitative sandwich

Cat. No.:	0126WXX-1794
Assay Type:	Quantitative sandwich ELISA
Target Species:	Human
Assay Target:	SHP
Size:	24T; 48T; 96T

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

Product Overview

Description

Human small heterodimer partner (SHP) ELISA kit-Quantitative sandwich is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of SHP in human samples with a range of 0.156-10 ng/mL and a minimum detectable dose (sensitivity) of 0.054 ng/mL. The kit is highly sensitive and easy to use.

Assay Principle

The test principle applied in this kit is the sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Small SHP. Standards or samples are added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to SHP. Next, avidin conjugated to HRP is added to each microplate well and incubated. After the TMB substrate solution is added, only those wells that contain the SHP, biotin-conjugated antibody, and enzyme-conjugated avidin complex will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution, and the color change is measured spectrophotometrically at a wavelength of $450 \text{ nm} \pm 10 \text{ nm}$. The concentration of small SHP in the samples is then determined by comparing the O.D. of the samples to the standard curve.

**Background**

Small heterodimer partner (SHP, NR0B2) is a nuclear receptor that functions as a transcriptional corepressor, inhibiting the activity of other nuclear receptors and transcription factors by interfering with coactivator complexes. Through this regulation, SHP modulates metabolic pathways, including glucose and lipid metabolism. Dysregulation or defects in NR0B2 can impair energy balance and fat metabolism, contributing to the development of obesity.

Synonyms

NR0B2; SHP1; Nuclear receptor subfamily 0; Group B; Member 2; Orphan nuclear receptor SHP

Formula Weight

28,058 Da

Applications

Human small heterodimer partner (SHP) ELISA kit-Quantitative sandwich is used to quantify SHP in tissue homogenates and other biological fluids of humans, providing data to support research in a wide range of areas, including signal transduction, endocrinology, developmental science, hormone metabolism, obesity, and others.

Research Area

Signal transduction; Endocrinology; Developmental science; Hormone metabolism; Obesity

Specification

Sample Type

Tissue homogenates; Other biological fluids

Detection Range

0.156-10 ng/mL

Sensitivity

0.054 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.