



## Rabbit leptin receptor (LEPR) ELISA kit (25-500 pg/mL)

<b>Cat. No.:</b>	0126WXX-976
<b>Assay Type:</b>	Quantitative competitive ELISA
<b>Target Species:</b>	Rabbit
<b>Assay Target:</b>	LEPR
<b>Size:</b>	48T; 96T

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

### Product Overview

#### Description

Rabbit leptin receptor (LEPR) ELISA kit (25-500 pg/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of LEPR in rabbit samples with a range of 25-500 pg/mL and a minimum detectable dose (sensitivity) of 1.0 pg/mL. The kit is highly sensitive and easy to use.

#### Assay Principle

This method utilizes a monoclonal anti-LEPR antibody and an LEPR-HRP conjugate. Samples and assay buffers are co-incubated with the HRP-conjugate in a pre-coated microplate for sixty minutes. In this system, endogenous LEPR and the enzyme-labeled conjugate compete for a finite number of antibody binding sites. After incubation, the plate is decanted and washed five times to remove unbound material. A substrate for the HRP enzyme is then added, producing a blue complex that shifts to yellow upon the addition of a stop solution. The resulting signal intensity, measured at 450 nm, is inversely proportional to the LEPR concentration. Quantitative results are interpolated from a standard curve relating O.D. to standard concentrations.

**Background**

LEPR, as a peptide hormone receptor, is responsible for receiving leptin signals. When leptin binds to LEPR, it initiates a series of intracellular cascades, including the positive regulation of the JAK-STAT signaling pathway and the positive regulation of the PI3K signaling pathway. These pathways are crucial for translating leptin signals into biological responses, such as appetite suppression and metabolic regulation. The relationship between LEPR and obesity is paramount. When leptin functions as the “satiety hormone,” LEPR acts as the “satiety switch” in the brain and other tissues. Without functional receptors, leptin signals cannot be received regardless of how high leptin concentrations become.

**Synonyms**

CD295; LEPR; OBR; LR

**Formula Weight**

96,042 Da

**Applications**

Rabbit leptin receptor (LEPR) ELISA kit (25-500 pg/mL) is used to quantify LEPR in serum, plasma, cell culture supernatants, body fluid, tissue homogenate of rabbit, providing data to support research in a wide range of areas, including signal transduction, CD & adhesion molecule, metabolic pathway, endocrinology, obesity, etc.

**Research Area**

Signal transduction; CD & Adhesion molecule; Metabolic pathway; Endocrinology; Obesity

## Specification

**Sample Type**

Serum; Plasma; Cell culture supernatants; Body fluid; Tissue homogenate

**Detection Range**

25-500 pg/mL

**Sensitivity**

1.0 pg/mL

**Cross-reactivity**

No significant cross-reactivity or interference was observed.

**Storage**

Store at 2-8°C.