



Mouse cathepsin S (CTSS) ELISA kit (31.2-2000 pg/mL, 12.2 pg/mL)

Cat. No.:	OB0625WXX-532
Assay Type:	Quantitative sandwich ELISA
Target Species:	Mouse
Assay Target:	CTSS
Size:	24T; 48T; 96T

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

Product Overview

Description

Mouse cathepsin S (CTSS) ELISA kit (31.2-2000 pg/mL, 12.2 pg/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of CTSS in mouse with a range of 31.2-2000 pg/mL and a specificity of 12.2 pg/mL.

Assay Principle

The microtiter plates provided in this kit are pre-coated with an antibody specific to CTSS. Standards or samples are then added to the appropriate microtiter plate wells along with a biotin-conjugated antibody specific for CTSS. Avidin conjugated to horseradish peroxidase (HRP) is then added to each microtiter plate well and incubated. Upon addition of TMB substrate solution, only the wells containing CTSS, 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 measured spectrophotometrically at 450 nm \pm 10 nm. The concentration of CTSS in the sample is then determined by comparing the OD of the sample to a standard curve.

Background

CTSS is an important member of the cysteine protease family. As a potent mammalian elastase, it can degrade various extracellular components, including fibronectin, laminin, elastin, and collagen. CTSS is abnormally expressed in various disease states, such as obesity and atherosclerosis, which makes it a biomarker and a potential therapeutic target. Studies have found that CTSS inhibitors may be a possible strategy for treating obesity.

Synonyms

CTS-S; EC 3.4.22.27



EC NO.	3.4.22.27
Formula Weight	31,626 Da
Applications	Mouse cathepsin S (CTSS) ELISA kit (31.2-2000 pg/mL, 12.2 pg/mL) is used to quantify CTSS in serum, plasma, tissue homogenates, and other biological fluid samples of mouse, providing data to support a wide range of studies.
Research Area	Obesity research; Immune response; Signaling pathway; Protein degradation

Specification

Sample Type	Serum; Plasma; Tissue homogenates; Other biological fluids
Detection Range	31.2-2000 pg/mL
Sensitivity	12.2 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 2-8°C.