

Datasheet for ABIN6720096

**Cathepsin B ELISA Kit**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 kit
Target:	Cathepsin B (CTSB)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156 pg/mL - 10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

## Product Details

Purpose:	Sandwich ELISA for Quantitative Detection of Antigen
Sample Type:	Cell Culture Supernatant, Plasma (EDTA - heparin), Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Characteristics:	<p>Synonyms: aAmyloid precursor protein secretase, APP secretase, APPS, CATB_HUMAN, Cathepsin B heavy chain, Cathepsin B1, CPSB, CTSB, Cysteine protease</p> <p>Background: Cathepsin B is an enzymatic protein belonging to the peptidase or protease families. In humans, it is coded by the CTSB gene.<sup>1, 2</sup> And this gene is mapped to chromosome 8p22.3 The protein encoded by this gene is a lysosomal cysteine proteinase composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. It is a member of the peptidase C1 family. Cathepsin B was once suspected as a candidate protease participating in the conversion of beta-amyloid precursor protein into the amyloid</p>

## Product Details

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plaques found in Alzheimer's disease patients. However, this function is now known to be mediated by BACE1 protease. It is now thought that cathepsin B can degrade beta-amyloid precursor protein into harmless fragments. Thus, it is conceivable cathepsin B may play a pivotal role in the natural defense against Alzheimer's disease.<sup>4</sup> Overexpression of cathepsin B has been associated with esophageal adenocarcinoma and other tumors. At least five transcript variants encoding the same protein have been found for this gene. The standard product used in this kit is recombinant human Cathepsin B with the molecular mass of 37KDa.

Gene Name: CTSB

Production: Natural and recombinant human Cathepsin B. There is no detectable cross-reactivity with other relevant proteins.

Standard: Expression system for standard: NSO, Immunogen sequence: R18-I339

## Target Details

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Target: Cathepsin B (CTSB)

Alternative Name: Cathepsin B ([CTSB Products](#))

Gene ID: 1508

NCBI Accession: [NP\\_001899](#)

UniProt: [P07858](#)

Pathways: [Activation of Innate immune Response, Toll-Like Receptors Cascades](#)

## Application Details

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Application Notes: Application Note: Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human Cathepsin B standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma (heparin, EDTA) to each empty well. It is recommended that each human Cathepsin B standard solution and each sample be measured in duplicate.

Blood Product Anticoagulant: Heparin Sodium

ELISA Dilution: 156pg/mL-10000pg/mL

Sample Volume: 100 µL

Plate: Pre-coated

## Application Details

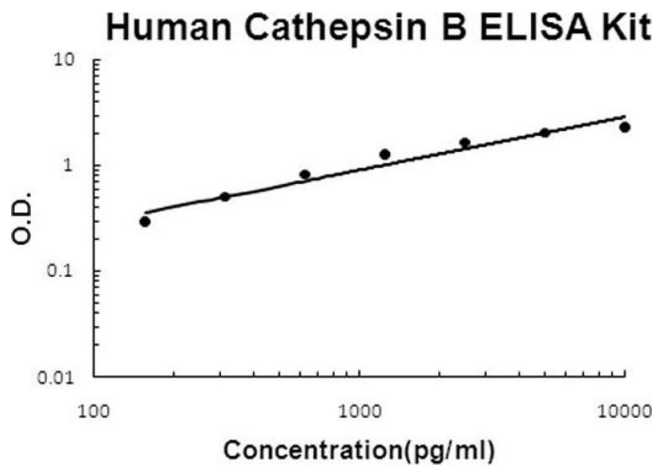
Restrictions: For Research Use only

## Handling

Storage: RT, 4 °C, -20 °C

Storage Comment: Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

## Images



### ELISA

**Image 1.** Human Cathepsin B Accusignal ELISA Kit Human Cathepsin B AccuSignal ELISA Kit standard curve. Assay Range: 156pg/ml-10000pg/ml. Sensitivity: <5pg/ml.