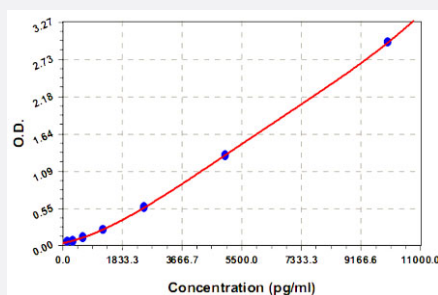


CTSB (Human) ELISA Kit

Catalog # KA0552 Size 1 Kit

Applications



The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.

Specification

Product Description	CTSB (Human) ELISA Kit is a sandwich enzyme immunoassay for the quantitative measurement of human CTSB.
Suitable Sample	Cell Culture Supernatant, Cell Lysates, Plasma (EDTA, heparin) and Serum
Sample Volume	100 uL
Label	HRP-conjugated
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	156 to 10000 pg/mL
Reactivity	Human
Regulation Status	For research use only (RUO)
Storage Instruction	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles.

Applications

- Quantification

Gene Info — CTSB

Entrez GeneID [1508](#)

Gene Name CTSB

Gene Alias APPS, CPSB

Gene Description cathepsin B

Omim ID [116810](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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 also known as amyloid precursor protein secretase and is involved in the proteolytic processing of amyloid precursor protein (APP). Incomplete proteolytic processing of APP has been suggested to be a causative factor in Alzheimer disease, the most common cause of dementia. Overexpression of the encoded protein, which is a member of the peptidase C1 family, has been associated with esophageal adenocarcinoma and other tumors. At least five transcript variants encoding the same protein have been found for this gene. [provided by RefSeq]

Other Designations APP secretase|OTTHUMP00000116009|amyloid precursor protein secretase|cathepsin B1|cysteine protease|preprocathepsin B

Publication Reference

- [Modulation of Cystatin F in Human Macrophages Impacts Cathepsin-Driven Killing of Multidrug-Resistant Mycobacterium tuberculosis.](#)

Manoj Mandal, David Pires, Maria João Catalão, José Miguel Azevedo-Pereira, Elsa Anes.

Microorganisms 2023 Jul; 11(7):1861.

Application: ELISA, Human, Human monocyte-derived macrophages

- [Antiamyloidogenic and neuroprotective functions of cathepsin B: implications for Alzheimer's disease.](#)

Mueller-Steiner S, Zhou Y, Arai H, Roberson ED, Sun B, Chen J, Wang X, Yu G, Esposito L, Mucke L, Gan L.

Neuron 2006 Sep; 51(6).

- [Human gastric adenocarcinoma cathepsin B: isolation and sequencing of full-length cDNAs and polymorphisms of the gene.](#)

Cao L, Taggart RT, Berquin IM, Moin K, Fong D, Sloane BF.

Gene 1994 Feb; 139(2):163.

- [Nucleotide and predicted amino acid sequences of cloned human and mouse preprocathepsin B cDNAs.](#)

Chan SJ, San Segundo B, McCormick MB, Steiner DF.

PNAS 1986 Oct; 83(20):7721.

Pathway

- [Antigen processing and presentation](#)
- [Lysosome](#)

Disease

- [Adenocarcinoma](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Pancreatitis](#)
- [Prostatic Neoplasms](#)
- [Urinary Bladder Neoplasms](#)