

# Cathepsin L Inhibitor Assay Kit (Fluorometric) ab197012

[4 References](#) [1 Image](#)

### Overview

<b>Product name</b>	Cathepsin L Inhibitor Assay Kit (Fluorometric)
<b>Detection method</b>	Fluorescent
<b>Sample type</b>	Inhibitor compounds
<b>Assay type</b>	Quantitative
<b>Product overview</b>	Cathepsin L Inhibitor Screening Kit (Fluorometric) (197012) is an assay that uses the ability of active Cathepsin L to cleave the synthetic AFC-based peptide substrate to release AFC, which can be easily quantified using a fluorometer or fluorescence microplate reader. In the presence of a Cathepsin L inhibitor, the cleavage of this substrate is reduced/abolished resulting in decrease or total loss of the AFC fluorescence. This simple and high-throughput adaptable assay kit can be used to screen/study/characterize potential inhibitors of Cathepsin L.

<b>Notes</b>	<p>This product is manufactured by BioVision, an Abcam company and was previously called K161 Cathepsin L Inhibitor Screening Kit (Fluorometric). K161-100 is the same size as the 100 test size of ab197012.</p> <p>Cathepsin L (CTSL, EC 3.4.22.15) is a lysosomal cysteine protease that is implicated in protein degradation, arthritis, apoptosis, and cancer. Cathepsin L plays a major role in antigen processing, tumor invasion and metastasis, bone resorption, and turnover of intracellular and secreted proteins involved in growth regulation. Although commonly recognized as a lysosomal protease, cathepsin L is also secreted. This broad-spectrum protease is potent in degrading several extracellular proteins (laminins, fibronectin, collagens I and IV, elastin, and other structural proteins of basement membranes) as well as serum proteins and cytoplasmic and nuclear proteins.</p>
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<b>Platform</b>	Microplate reader
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### Properties

<b>Storage instructions</b>	Store at -20°C. Please refer to protocols.
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Components	100 tests
Cathepsin Inhibitor	1 x 20µl
Cathepsin L Activator	1 x 0.1ml

Components	100 tests
Cathepsin L Assay Buffer	1 x 15ml
Cathepsin L Substrate	1 x 0.2ml
DTT II	1 x 100µl
Human Cathepsin L	1 x 10µl

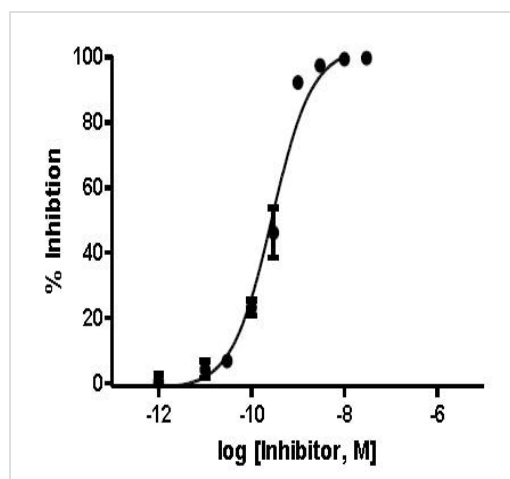
## Relevance

Cathepsin L is a lysosomal cysteine proteinase that plays a major role in intracellular protein catabolism. Its substrates include collagen and elastin, as well as alpha 1 protease inhibitor, a major controlling element of neutrophil elastase activity. Cathepsin L has been implicated in several pathologic processes, including rheumatoid arthritis, muscular dystrophy, Alzheimers, cancer, myofibril necrosis in myopathies and in myocardial ischemia, and in the renal tubular response to proteinuria. Cathepsin L, which is a member of the peptidase C1 family, is a dimer composed of disulfide linked heavy and light chains, both produced from a single protein precursor. At least two transcript variants encoding the same protein have been found for its gene.

## Cellular localization

Lysosome

## Images



Inhibition of Cathepsin L activity using CTSL (cathepsin L inhibitor) provided in the kit. Assay was performed following the kit protocol.

Inhibition of Cathepsin L activity by Cathepsin L inhibitor.

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