

Product datasheet

Mouse Cathepsin D ELISA Kit ab239420

Recombinant SimpleStep ELISA[®]

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Overview

Product name Mouse Cathepsin D ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
serum	8			4.1%

Sample type

Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type

Sandwich (quantitative)

Sensitivity

775 pg/ml

Range

4.22 ng/ml - 270 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	109	% - %
Hep Plasma	94	% - %
EDTA Plasma	104	% - %
Cit plasma	109	% - %

Assay time

1h 30m

Assay duration

One step assay

Species reactivity

Reacts with: Mouse

Product overview

Mouse Cathepsin D ELISA Kit (ab239420) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Cathepsin D protein in cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA[®] technology. Quantitate Mouse Cathepsin D with 775 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse Cathepsin D Capture Antibody	1 x 600µl
10X Mouse Cathepsin D Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
Mouse Cathepsin D Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function Acid protease active in intracellular protein breakdown. Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

Tissue specificity Expressed in the aorta extracellular space (at protein level).

Involvement in disease Ceroid lipofuscinosis, neuronal, 10

Sequence similarities Belongs to the peptidase A1 family.
Contains 1 peptidase A1 domain.

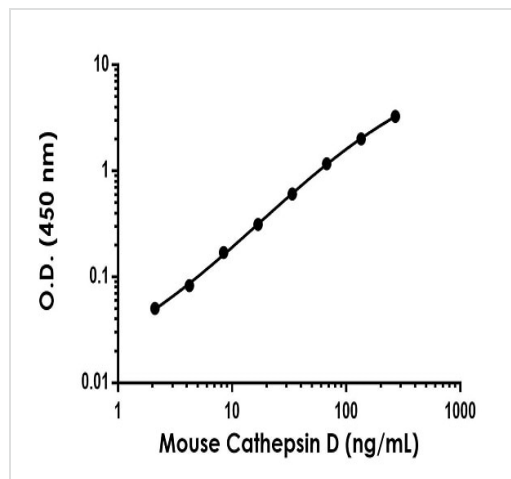
Post-translational N- and O-glycosylated.

modifications

Cellular localization

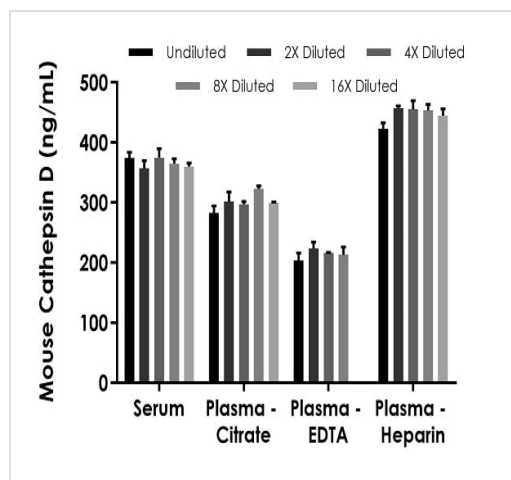
Lysosome. Melanosome. Secreted, extracellular space. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. In aortic samples, detected as an extracellular protein loosely bound to the matrix (PubMed:20551380).

Images



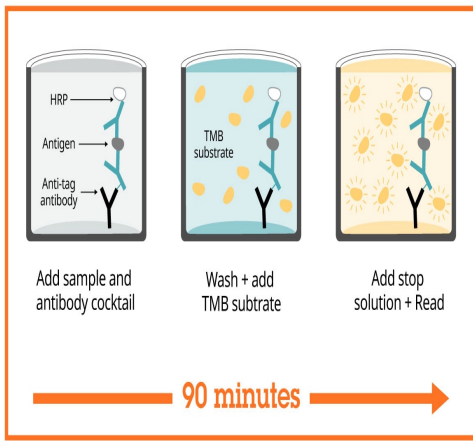
The Cathepsin D standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse Cathepsin D standard curve in Sample Diluent NS.



The concentrations of Cathepsin D were measured in duplicate, interpolated from the Cathepsin D standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 25%, plasma (EDTA) 25%, and plasma (Heparin) 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Cathepsin D concentration was determined to be 366.2 ng/mL in serum, 300.8 ng/mL in plasma (citrate), 213.9 ng/mL in plasma (EDTA), and 446.9 ng/mL in plasma (Heparin).

Interpolated concentrations of native Cathepsin D in mouse serum and plasma samples.



Sandwich ELISA - Mouse Cathepsin D ELISA Kit
(ab239420)

SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Powered by
recombinant antibodies

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Sandwich ELISA - Mouse Cathepsin D ELISA Kit
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To learn more about the advantages of recombinant antibodies see [here](#).

Get more done with SimpleStep ELISA



Easy to use
Single-wash 90-minute protocol



Flexible
Matched antibody pairs available



Precision antibodies
High sensitivity, specificity and reproducibility



Scalable
Now in 10-pack and 384-well formats

Sandwich ELISA - Mouse Cathepsin D ELISA Kit
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To learn more about the advantages of SimpleStep ELISA[®] kits see [here](#).

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