Human Cathepsin D ELISA Kit ab119586

Overview

Product name: Human Cathepsin D ELISA Kit
Detection method: Colorimetric
Sample type: Cell culture supernatant, Serum, Plasma, Other biological fluids, Tissue Extracts
Assay type: Sandwich (quantitative)
Sensitivity: < 10 pg/ml
Range: 156 pg/ml - 10000 pg/ml
Assay duration: Multiple steps standard assay
Species reactivity: Reacts with: Human

Product overview

Abcam’s Human Cathepsin D in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the accurate quantitative measurement of Human Cathepsin D in cell culture supernatants, serum and plasma (heparin, EDTA).

A Cathepsin D specific mouse monoclonal antibody has been precoated onto 96-well plates. Standards and test samples are added to the wells and incubated. A biotinylated detection polyclonal antibody from goat, specific for Cathepsin D is then added followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. TMB is then used to visualize the HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the Human Cathepsin D amount of sample captured in plate.

Platform

Microplate

Properties

Storage instructions: Store at -20°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>Identifier</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC Diluent Buffer</td>
<td>Blue Cap</td>
<td>1 x 12ml</td>
</tr>
<tr>
<td>Antibody Diluent Buffer</td>
<td>Green Cap</td>
<td>1 x 12ml</td>
</tr>
<tr>
<td>Anti-Human Cathepsin D antibody Microplate (12 x 8 wells)</td>
<td></td>
<td>1 unit</td>
</tr>
</tbody>
</table>
Function

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

Involvement in disease

Defects in CTSD are the cause of neuronal ceroid lipofuscinosis type 10 (CLN10) [MIM:610127]; also known as neuronal ceroid lipofuscinosis due to cathepsin D deficiency. A form of neuronal ceroid lipofuscinosis with onset at birth or early childhood. Neuronal ceroid lipofuscinoses are progressive neurodegenerative, lysosomal storage diseases characterized by intracellular accumulation of autofluorescent liposomal material, and clinically by seizures, dementia, visual loss, and/or cerebral atrophy.

Sequence similarities

Belongs to the peptidase A1 family.

Cellular localization

Lysosome. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images

Cathepsin D measured in biological fluids and cell culture medium with background signal subtracted (duplicates +/- SD). We recommend to test the human plasma, serum and urine samples in the range of 1:20-1:500, the saliva in the range of 1:100-1:1000 and the cell culture supernatants 1:1-1:1000.
Representative Standard Curve using ab119586.

Typical Standard Curve

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors