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Cathepsin L ELISA Kit





Overview

Quantity:	96 tests
Target:	Cathepsin L (CTSL1)
Binding Specificity:	AA 113-333
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Cathepsin L
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: E113-V333
Specificity:	NSO, E113-V333
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<10pg/mL

Product Details

Material not included:

Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

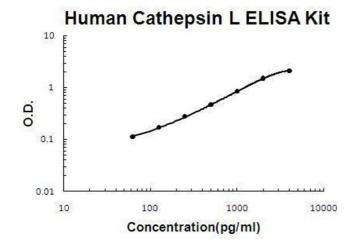
Target:	Cathepsin L (CTSL1)
Alternative Name:	CTSL (CTSL1 Products)
Background:	Protein Function: Important for the overall degradation of proteins in lysosomes.
	Background: Cathepsin L is an important lysosomal endopeptidase enzyme which is involved in
	the initiation of protein degradation. It also shows the most potent collagenolytic and
	elastinolytic activity in vitro of any of the cathepsins. The gene is mapped to 9q21-q22. It is a
	member of the Peptidase C1 family, which play an important role in diverse processes including
	normal lysosome mediated protein turnover, antigen and proprotein processing, and apoptosis
	Cathepsin L has been reported in many organisms including fish, birds and mammals.
	Synonyms: Cathepsin L1,3.4.22.15,Cathepsin L,Major excreted protein,MEP,Cathepsin L1 heavy
	chain,Cathepsin L1 light chain,CTSL,CTSL1,
	Full Gene Name: Cathepsin L1
	Cellular Localisation: Lysosome.
Gene ID:	1514
UniProt:	P07711
Pathways:	Activation of Innate immune Response, Toll-Like Receptors Cascades
Application Details	
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
	assay was recommended for both standard and sample testing.
Plate:	Pre-coated
Protocol:	human Cathepsin L ELISA Kit was based on standard sandwich enzyme-linked immune-sorber
	assay technology. A monoclonal antibody from mouse specific for Cathepsin L has been
	precoated onto 96-well plates. Standards(NSO, E113-V333) and test samples are added to the
	wells, a biotinylated detection polyclonal antibody from goat specific for Cathepsin L is added
	subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase

Application Details

Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP
substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to
produce a blue color product that changed into yellow after adding acidic stop solution. The
density of yellow is proportional to the human Cathepsin L amount of sample captured in plate.
Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL,
125pg/mL, 62.5pg/mL human Cathepsin L 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. See "Sample Dilution Guideline" above for details. It is recommended that
each human Cathepsin L standard solution and each sample be measured in duplicate.
 Sample 1: n=16, Mean(pg/ml): 477, Standard deviation: 27.7, CV(%): 5.8
 Sample 2: n=16, Mean(pg/ml): 1541, Standard deviation: 92.46, CV(%): 6
 Sample 3: n=16, Mean(pg/ml): 2626, Standard deviation: 128.7, CV(%): 4.9,
 Sample 1: n=24, Mean(pg/ml): 527, Standard deviation: 32.15, CV(%): 6.1
 Sample 2: n=24, Mean(pg/ml): 1712, Standard deviation: 114.7, CV(%): 6.7
• Sample 3: n=24, Mean(pg/ml): 3015, Standard deviation: 168.84, CV(%): 5.6
For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months



ELISA

Image 1. Human Cathepsin L PicoKine ELISA Kit standard curve