



Rat Cathepsin L1(CTSL1) ELISA kit

Product Code	CSB-EL006193RA
Abbreviation	CTSL1
Target Name	cathepsin L1
Uniprot No.	P07154
Alias	CATL, CTSL, FLJ31037, MEP, cathepsin L major excreted protein
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	6.25 pg/mL-400 pg/mL
Sensitivity	1.56 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Signal Transduction
Gene Names	Ctsl
Tag Info	quantitative
Protein Description	Sandwich

Description

This Rat CTSL1 ELISA Kit was designed for the quantitative measurement of Rat CTSL1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 6.25 pg/mL-400 pg/mL and the sensitivity is 1.56 pg/mL.

Target Details

This protein 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. The encoded protein has been implicated in several pathologic processes, including myofibril necrosis in myopathies and in myocardial ischemia, and in the renal tubular response to proteinuria. This protein, 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 this gene.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%
 Three samples of known concentration were tested twenty times on one plate to assess.

**Inter-assay Precision (Precision between assays): CV%<10%**

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat CTSL1 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
	Average %	93
1:1	Range %	90-95
	Average %	89
1:2	Range %	85-93
	Average %	106
1:4	Range %	103-109
	Average %	107
1:8	Range %	103-110

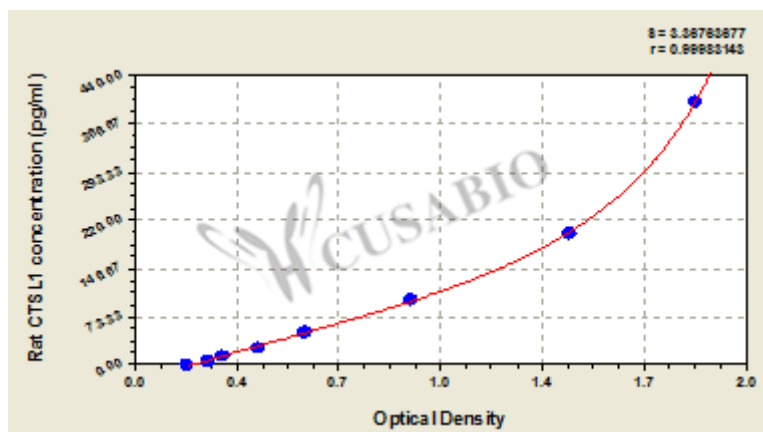
Recovery

The recovery of rat CTSL1 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	85	81-89
EDTA plasma (n=4)	87	83-90

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
400	1.916	1.843	1.880	1.698
200	1.452	1.465	1.459	1.277
100	0.925	0.932	0.929	0.747
50	0.572	0.581	0.577	0.395
25	0.406	0.436	0.421	0.239
12.5	0.305	0.300	0.303	0.121
6.25	0.256	0.249	0.253	0.071
0	0.181	0.183	0.182	?

Msds

```
{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS_CSB-EL006193RA.pdf",
    "filename": "MSDS"
  }
}
```