



Rat Cathepsin K,cath-K ELISA Kit

Product Code	CSB-E09439r
Abbreviation	CTSK
Target Name	cathepsin K
Uniprot No.	O35186
Alias	RP11-363I22.4, CTS02, CTSO, CTSO1, CTSO2, MGC23107, PKND, PYCD, cathepsin O1 cathepsin O2 cathepsin X
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	15.6 pg/mL-1000 pg/mL
Sensitivity	3.9 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	Ctsk
Tag Info	quantitative
Protein Description	Sandwich

Description

This Rat CTSK ELISA Kit was designed for the quantitative measurement of Rat CTSK protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 15.6 pg/mL-1000 pg/mL and the sensitivity is 3.9 pg/mL.

Target Details

This protein is a lysosomal cysteine proteinase involved in bone remodeling and resorption. This protein, which is a member of the peptidase C1 protein family, is predominantly expressed in osteoclasts. However, the encoded protein is also expressed in a significant fraction of human breast cancers, where it could contribute to tumor invasiveness. Mutations in this gene are the cause of pycnodysostosis, an autosomal recessive disease characterized by osteosclerosis and short stature. This gene may be subject to RNA editing.

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 cath-K 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)
1:1	Average %	104
	Range %	100-107
1:2	Average %	99
	Range %	95-103
1:4	Average %	85
	Range %	80-90
1:8	Average %	107
	Range %	103-110

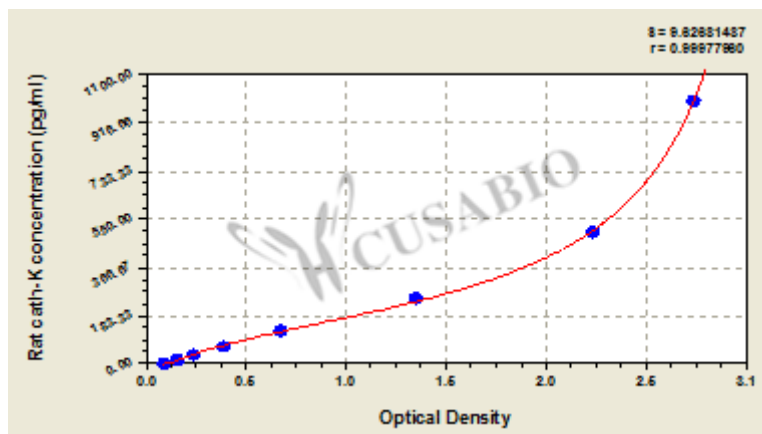
Recovery

The recovery of rat cath-K 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)	86	83-89
EDTA plasma (n=4)	95	90-100

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
1000	2.801	2.765	2.783	2.682
500	2.342	2.204	2.273	2.172
250	1.343	1.406	1.375	1.274
125	0.679	0.701	0.690	0.589
62.5	0.399	0.405	0.402	0.301
31.2	0.251	0.242	0.247	0.146
15.6	0.166	0.164	0.165	0.064
0	0.102	0.100	0.101	?



Msd

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