Datasheet for ABIN921087

CST3 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CST3
Binding Specificity:	AA 1-140
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	312-20000 pg/mL
Minimum Detection Limit:	312 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse Cystatin C
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: M1-A140
Specificity:	Expression system for standard: NSO Immunogen sequence: M1-A140
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
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:	CST3
Alternative Name:	CST3 (CST3 Products)
Background:	Protein Function: As an inhibitor of cysteine proteinases, this protein is thought to serve an important physiological role as a local regulator of this enzyme activity. Background: Cystatin C or cystatin 3(formerly gamma trace, post-gamma-globulin or neuroendocrine basic polypeptide), a protein encoded by the CST3 gene, was originally described as a constituent of normal cerebrospinal fluid(CSF) and of urine from patients with renal failure. Cystatin 3 has a low molecular weight(approximately 13.3 kilodaltons), and it is removed from the bloodstream by glomerular filtration in the kidneys. In mouses, all cells with a nucleus(cell core containing the DNA) produce cystatin C as a chain of 120 amino acids. It is found in virtually all tissues and bodily fluids. Cystatin C, which belongs to the type II cystatin gene family, is a potent inhibitor of lysosomal proteinases(enzymes from a special subunit of the cell that break down proteins) and probably one of the most important extracellular inhibitors of cysteine proteases(it prevents the breakdown of proteins outside the cell by a specific type of protein degrading enzymes). Moreover, cystatin C is involved in network reorganization in the epileptic dentate gyrus. Synonyms: Cystatin-C,Cystatin-3,Cst3, Full Gene Name: Cystatin-C Cellular Localisation: Secreted.
Gene ID:	13010
UniProt:	P21460

Application Details

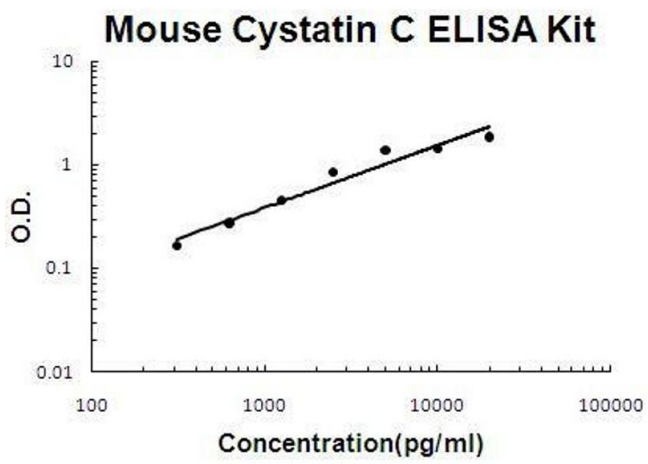
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Plate:	Pre-coated

Application Details

Protocol:	mouse Cystatin C ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Cystatin C has been precoated onto 96-well plates. Standards(NSO, M1-A140) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Cystatin C is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase 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 mouse Cystatin C amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 20000pg/mL, 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL mouse Cystatin C 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 mouse cell culture supernates, serum, plasma(heparin, EDTA) or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse Cystatin C standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(ng/ml): 3.05, Standard deviation: 0.131, CV(%): 4.3 • Sample 2: n=16, Mean(ng/ml): 6.26, Standard deviation: 0.194, CV(%): 3.1 • Sample 3: n=16, Mean(ng/ml): 13.16, Standard deviation: 0.474, CV(%): 3.6, • Sample 1: n=24, Mean(ng/ml): 3.12, Standard deviation: 0.212, CV(%): 6.8 • Sample 2: n=24, Mean(ng/ml): 6.37, Standard deviation: 0.376, CV(%): 5.9 • Sample 3: n=24, Mean(ng/ml): 13.66, Standard deviation: 0.861, CV(%): 6.3
Restrictions:	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. Mouse Cystatin C PicoKine ELISA Kit standard curve