

Datasheet for KOA0632

Rat Cystatin C ELISA Kit**Overview**

Description:	Rat Cystatin C AccuSignal ELISA Kit - KOA0632
Item No.:	KOA0632
Size:	1 Kit
Applications:	ELISA
Reactivity:	Rat
Range:	312 pg/ml - 20,000 pg/ml

Product Details

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 mice, 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:	ARMD11, bA218C14.4 (cystatin C), Cst3, Cystatin-3, Cystatin-C, CYTC_HUMAN, Gamma-trace, Neuroendocrine basic polypeptide, Post-gamma-globulin
Detection Kit Type:	ELISA Kit
Detection Range:	312 pg/ml - 20,000 pg/ml
Sensitivity:	<10 pg/ml

Target Details

Gene Name:	CST3
Reactivity:	Rat

Immunogen:	Expression system for standard: NSO; Immunogen sequence: M1-A140
Purity/Specificity:	Natural and recombinant rat Cystatin C. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P14841• NCBI - NP_036969.1• GenelD - 25307• KOA0632 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 20,000pg/ml, 10,000pg/ml, 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 312pg/ml rat Cystatin C standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates, serum, plasma(heparin, EDTA) or urine to each empty well. It is recommended that each rat Cystatin C standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

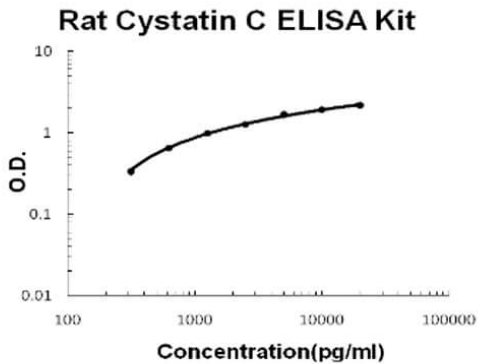
Formulation

Anticoagulant:	Heparin Sodium
-----------------------	----------------

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.
Expiration:	See kit insert for complete instructions.

Images

**ELISA**

Rat Cystatin C AccuSignal ELISA Kit standard curve. Assay Range: 312pg/ml-20,000pg/ml. Sensitivity: <10pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.