Human Cystatin C,Cys-C ELISA Kit

Product Code	CSB-E08384h
Abbreviation	CST3
Protein Biological Process 1	Cardiovascular
Target Name	cystatin C
Uniprot No.	P01034
Alias	ARMD11, MGC117328, OTTHUMP00000164181|OTTHUMP00000164182|bA218C14.4 (cystatin C)|cystatin 3|gamma-trace|neuroendocrine basic polypeptide|post-gamma-globulin
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, urine, saliva, tissue homogenates
Detection Range	7.8 ng/mL-500 ng/mL
Sensitivity	5.824 ng/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	Cardiovascular
Gene Names	CST3
Tag Info	quantitative
Protein Description	Sandwich
Description	The human Cystatin C (CysC) ELISA Kit is suitable for qualitatively determining human CysC levels from samples including serum, plasma, urine, saliva, or tissue homogenates. It uses the Sandwich-ELISA mechanism in combination with the enzyme-substrate chromogenic reaction to measure the NGF content in the sample. The color intensity is positively correlated with CysC content in the sample. The CysC concentration can be calculated according to the standard curve. This kit is tested with high sensitivity, strong specificity, good linearity, high precision and recovery, as well as lot-to-lot consistency. Human CysC, also called CST3, is a relatively stable protein in serum and heparinized plasma. Serum CysC concentration is the potential to be a convenient measure of glomerular filtration rate (GFR) because it is freely

filtered at the level of the glomerulus and virtually all are resorbed and metabolized by the proximal tubular cells. Serum CysC level is a marker of renal function that has been proposed as potentially superior to serum creatinine level for evaluating renal function due to its generation by most nucleated cells at a constant rate. The production of CysC is not affected by age, gender, or muscle mass.

Target Details

The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired this inhibitory activity. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2 cystatins and the kininogens. The type 2 cystatin proteins are a class of cysteine proteinase inhibitors found in a variety of human fluids and secretions, where they appear to provide protective functions. The cystatin locus on chromosome 20 contains the majority of the type 2 cystatin genes and pseudogenes. This gene is located in the cystatin locus and encodes the most abundant extracellular inhibitor of cysteine proteases, which is found in high concentrations in biological fluids and is expressed in virtually all organs of the body. A mutation in this gene has been associated with amyloid angiopathy. Expression of this protein in vascular wall smooth muscle cells is severely reduced in both atherosclerotic and aneurysmal aortic lesions, establishing its role in vascular disease.

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.

	Intra-Assay Precision			Inter-Assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	20	20	20
Mean(ng/ml)	62.513	65.062	65.417	60.084	65.47	59.475
SD	0.073	0.076	0.067	0.083	0.063	0.064
CV(%)	7.150	7.330	6.474	8.379	6.128	6.492

Linearity

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

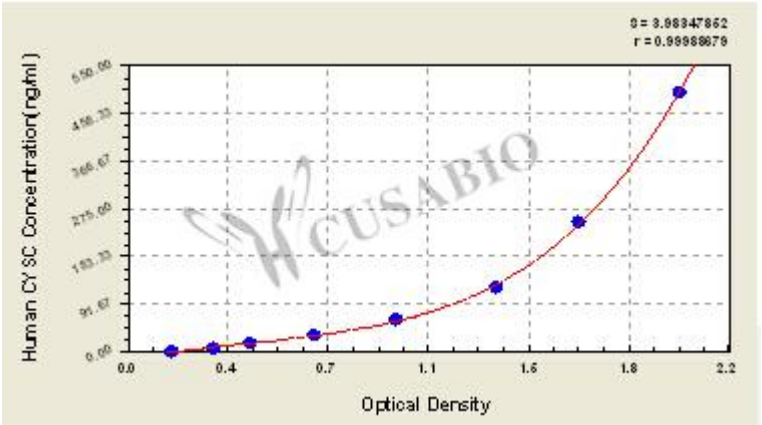
	Sample	Serum(n=4)
1:5	Average %	90
	Range %	86-95
1:10	Average %	95
	Range %	91-103
1:20	Average %	94
	Range %	87-99
1:40	Average %	97
	Range %	93-104

	Sample	Saliva (n=4)
1:2	Average %	92
	Range %	86-107
1:4	Average %	97
	Range %	91-105
1:8	Average %	90
	Range %	83-97
1:16	Average %	91
	Range %	88-96

	Sample	Urine(n=4)
1:1	Average %	91
	Range %	87-107
1:2	Average %	98
	Range %	92-111
1:4	Average %	93
	Range %	85-99
1:8	Average %	96
	Range %	92-105

Typical

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



ng/ml	OD1	OD2	Average	Corrected
0	0.172	0.175	0.174	
7.81	0.326	0.324	0.325	0.151
15.63	0.450	0.464	0.457	0.283
31.25	0.694	0.677	0.686	0.512
62.5	0.940	1.027	0.984	0.810
125	1.332	1.352	1.342	1.168
250	1.635	1.647	1.641	1.467
500	1.985	2.012	1.999	1.825

Msds

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