



Mouse Cystatin C,Cys-C ELISA Kit

Product Code	CSB-E08386m
Abbreviation	CST3
Protein Biological Process 1	Cardiovascular
Target Name	cystatin C
Uniprot No.	P21460
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	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates
Detection Range	2.5 ng/mL-160 ng/mL
Sensitivity	0.819 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

CUSABIO's mouse cystatin C (Cys-C) ELISA kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of mouse Cys-C in serum, plasma, or tissue homogenates. This assay uses the sandwich enzyme immunoassay technique in combination with the enzyme-substrate chromogenic reaction to quantify the analyte in the sample. The color develops positively to the amount of Cys-C in samples. The color intensity is measured at 450 nm via a microplate reader.

Cys-C (CST3) is a nonglycosylated protein produced at a constant degree in all nucleated cells and spontaneously crosses the glomerular membrane, being reabsorbed and broken down in the proximal tubular cells of the kidney, without extrarenal elimination. Compared to serum creatinine, Cys-C is thought to be a



more accurate measure of kidney function because its levels do not depend on muscle mass, age, and gender, and are not influenced by inflammatory disorders or malignancy. Assessment of Cys-C levels could be valued in the early prediction of renal dysfunction as they increase faster than creatinine levels as the GFR declines. Additionally, Cys-C shows the potential to be an earlier marker for acute kidney injury, a superior marker of kidney transplant function, as well as cardiovascular disease (CVD) risk and transplant failure.

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.

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