

Recombinant Rat Cystatin C / CST3 Protein (His tag)**Cat.NO.: TP07439**

3th Edition

Synonyms:Aa1249;Ab1-341;Ab2-196;Ac1-114;Ac1262;Ac2-069;Ba2-693

Description:Cystatin C, also known as Cystatin-3 (CST3) is a secreted type 2 cysteine protease inhibitor synthesized in all nucleated cells, has been proposed as a replacement for serum creatinine for the assessment of renal function, particularly to detect small reductions in glomerular filtration rate. The mature, active form of human cystatin C is a single non-glycosylated polypeptide chain consisting of 120 amino acid residues, with a molecular mass of 13,343-13,359 Da, and containing four characteristic disulfide-paired cysteine residues. Cystatin C is a low-molecular-weight protein which has been proposed as a marker of renal function that could replace creatinine. Indeed, the concentration of Cystatin C is mainly determined by glomerular filtration and is particularly of interest in clinical settings where the relationship between creatinine production and muscle mass impairs the clinical performance of creatinine. Since the last decade, numerous studies have evaluated its potential use in measuring renal function in various populations. More recently, other potential developments for its clinical use have emerged. In almost all the clinical studies, Cystatin C demonstrated a better diagnostic accuracy than serum creatinine in discriminating normal from impaired kidney function, but controversial results have been obtained by comparing this protein with other indices of kidney disease, especially serum creatinine-based equations, such as early atherosclerosis, Alzheimer's dementia, vascular aneurysms, hyperhomocysteinaemia and other neurodegenerative diseases. Cystatin C could be a useful clinical tool to identify HIV-infected persons. In addition, its expression is up-regulated in malignance of certain tumor progression.

Form:PBS**Molecular Weight:**14.7 kDa**Sequences:**Met 1-Ala 140**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.