

Cystatin C(Cys C)

Cat: C6180

Specification: 10mg

Storage: Store at 4°C, or store for a long time at -20°C or -80°C after repacking

Product Information

Source: Genetically Recombinant Expression

Molecular Weight: Approximately 13 kDa (SDS-PAGE Detection)

Purity: ≥90% (SDS-PAGE Detection)

Storage Buffer: PBS Buffer, pH 7.4

Introduction

Cys C is a cysteine protease inhibitor, also known as γ -microglobulin and γ -post-globulin, which is widely present in nucleated cells and body fluids of various tissues. It is a low molecular weight, basic, non-glycosylated protein with a molecular weight of 13.3KD and consists of 122 amino acid residues. It can be produced by all nucleated cells in the body at a constant rate. Cystatin C in the circulation is only cleared by glomerular filtration, and is an endogenous marker that reflects changes in glomerular filtration rate. It is also reabsorbed in the proximal convoluted tubule, but is completely metabolized and decomposed after reabsorption, It does not return blood, so its blood concentration is determined by glomerular filtration, independent of any external factors such as gender, age, and diet. It is an ideal homologous marker that reflects changes in glomerular filtration rate.

Under normal circumstances, the concentration of Cys C in serum and plasma ranges from 0.51 to 1.09 mg/L (reference range). When renal function is impaired, the concentration of Cys C in the blood varies with changes in glomerular filtration rate. In cases of renal failure, the glomerular filtration rate decreases, leading to an increase in the concentration of Cys C in the blood by more than 10 times. On the other hand, if the glomerular filtration rate is normal but the renal tubular function is impaired, it will hinder the absorption and rapid decomposition of Cys C in the renal tubules, resulting in an increase in the concentration of Cys C in urine by more than 100 times.

The Cys C produced by our company is a genetically engineered product with high immunogenicity. It can be used to immunize animals to produce Cys C antibodies, which serve as the core raw material for Cys C detection kits. Additionally, Cys C itself can also be used as a calibration, quality control, and reference material for related kits and experimental testing.

Note

It cannot be used for human experiments.