

32-3621: CST3 Active Recombinant Protein(Discontinued)

Alternative Name : Cystatin-C, Cystatin-3, Neuroendocrine basic polypeptide, Gamma-trace, Post-gamma-globulin, CST3, MGC117328.

Description

Source : HEK. Cystatin-C Human Recombinant produced in HEK cells is a non-glycosylated monomer, having a molecular weight of approximately 13kDa. The Cystatin-C is purified by proprietary chromatographic techniques. Cystatins are a superfamily of cysteine proteinase inhibitors found in both plants and animals. They comprise a group of proteinase inhibitors, widely distributed in tissues and body fluids, and form tight complexes with cysteine proteases such as cathepsin B, H, L and S. Cystatin C, a secreted molecule of this family, is of interest from biochemical, medicine and evolutionary points of view. Cystatin C, with molecular weight of 13260 Da, is composed of 120 amino acids, lacks carbohydrate and has two disulfide bridges located near the carboxyl terminus. Cystatin C is increased in patients with malignant diseases, and is related to the insufficiency of renal function and appears to be a better marker than creatinine. On the other hand, low levels of cystatin C involve cause the breakdown of the elastic laminae and, subsequently, the atherosclerosis and abdominal aortic aneurysm.

Product Info

Amount : 10 µg
Purification : Greater than 95% as observed by SDS-PAGE.
Content : The Cystatin-C was lyophilized from 1mg/ml in 1xPBS.
Storage condition : Lyophilized Cystatin-C although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Cystatin-C should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Application Note

It is recommended to reconstitute the lyophilized Cystatin-C in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. The inhibitory function of Cystatin-C on papain's protease activity was measured by a colorimetric assay using L-BAPA as substrate. IC₅₀ value was measured at 5-20 µg/ml (0.3-1.5 µM) with a range of 1.56-50 µg/ml Cystatin-C in presence of 0.55 µM papain and 0.44 µM L-BAPA. The activity is typically 0.3-1.5 µM IC₅₀.

