

## 32-13176: CST3 Mouse, Active

**Application :** Functional Assay

**Alternative Name :** Cystatin-C, Cystatin-3, Cst3, CST3

### Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

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.

CST3 Mouse produced in Sf9 Insect cells is a single, glycosylated polypeptide chain containing 126 amino acids (21-140 a.a.) and having a molecular mass of 14.2kDa (Molecular size on SDS-PAGE will appear at approximately 13.5-18kDa). CST3 is expressed with a 6 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 95% as determined by SDS-PAGE.

**Content :** CST3 protein solution (1mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** ATPKQGPRML GAPEEADANE EGVRRALDFA VSEYNKGSND AYHSRAIQVV RARKQLVAGV  
NYFLDVEMGR TTCTKSQTNL TDCPFHDQPH LMRKALCSFQ IYSVPWKGTH SLTKFSCNA HHHHHH

### Application Note

The IC50 value is < 1.0nM. The inhibitory function of Cystatin 3 on protease activity of papain was measured by a fluorometric assay using Z-FR-AMC at pH 7.5 at 25°C.