

## 32-13182: CSTB Human, Active

**Application :** Functional Assay

**Alternative Name :** Cystatin-B, Stefin-B, Liver thiol proteinase inhibitor, CPI-B, CSTB, CST6, EPM1, PME, STFB

### Description

Source: E.coli.

Sterile Filtered colorless solution.

Cystatin B or CSTB, is an protein (anti-protease) that is suspected to be involved in myoclonus epilepsy. As part of the encompasses proteins family, it has many cystatin-like sequences. Part of the cystatin superfamily are cysteine protease inhibitors; part don't have the ability. CSTB can create a dimer that is stable because of noncovalent bonds and has a crucial part in shielding from lysosomal proteases leaking. Cystatin B can be found in the lysosomes, nucleus & the cytoplasm in cells.

CSTB Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 118 amino acids (1-98 a.a.) and having a molecular mass of 13kDa.CSTB is fused to a 20 amino acid His tag at N-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** The CSTB solution (1mg/1ml) contains 50mM NaCl and 20mM Tris-HCl buffer (pH 8.0).

**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 :** MGSSHHHHHH SSGLVPRGSH MMCGAPSATQ PATAETQHIA DQVRSQLEEK ENKKFPVFKA  
VSFKSQVVAG TNYFIKVHVG DEDFVHLRVF QSLPHENKPL TLSNYQTNKA KHDELTYF

### Application Note

The IC50 value is < 3.0nM. The inhibitory function of Cystatin B on protease activity of papain was measured by a fluorometric assay using Z-FR-AMC at pH 7.5 at 25±0.5°C.