# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-98aa

**UniProt No.** P04080

NCBI Accession No. NP\_000091

### **Alternative Names**

CystatinB, Cystatin B, CSTB, Stefin B, PME, CST6, CystatinB CHROW21, CPI B, CYTB, EPM1, Liver thiol proteinase inhibitor, STFB.

## **PRODUCT SPECIFICATION**

Molecular Weight

13 kDa (118aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 50mM NaCl

**Purity** > 95% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

**Tag** His-Tag

Application SDS-PAGE

#### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

#### Description

CSTB, also known as Cystatin B is an anti-protease implicated in myoclonus epilepsy, a degenerative disease of the central nervous system. The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps



never acquired this inhibitory activity. This protein is able to form a dimer stabilized by noncovalent forces and is thought to play a role in protecting against the proteases leaking from lysosomes. In cells, CSTB is located in the lysosomes and the cytoplasm, but also in the nucleus. Recombinant CSTB, fused to His-tag, was expressed in E. coli and purified by using conventional chromatography techniques.

#### Amino acid Sequence

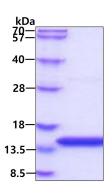
<MGSSHHHHHH SSGLVPRGSH> MMCGAPSATQ PATAETQHIA DQVRSQLEEK ENKKFPVFKA VSFKSQVVAG TNYFIKVHVG DEDFVHLRVF QSLPHENKPL TLSNYQTNKA KHDELTYF

#### **General References**

Turk V, et al (1991) FEBS Lett. 285 (2): 213-9. Jarvinen M, et al, (1988) Acta Histochem. 82 (1): 5-18

### DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

