Cystatin B/CSTB Protein, Human (His)

Cat. No.:	HY-P72965
Synonyms:	Cystatin B; CSTB; Stefin B; EPM1
Species:	Human
Source:	E. coli
Accession:	Q76LA1 (M2-F98)
Gene ID:	1476
Molecular Weight:	Approximately 15 kDa

PROPERTIES

AA Sequence	M C G A P S A T Q P A T A E T Q H I A D Q V R S Q L E E K E N K K F P V F K A V S F K S Q V V A G T N Y F I K V H V G D E D F V H L R V F Q S L P H E N K P L T L S N Y Q T N K A K H D E L T Y F
Biological Activity	Measured by its ability to inhibit papain cleavage of a fluorogenic peptide substrate Z-FR-AMC. The IC_{50} value is < 30 nM.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 μm filtered solution of 50 mM Tris, 50 mM NaCl, pH 8.0 or 50 mM Tris-HCL, 300 mM NaCl, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Cystatin B/CSTB Protein functions as an intracellular thiol protease inhibitor. Cystatin B/CSTB protein is able to form a dimer stabilized by noncovalent forces, inhibiting papain and cathepsins l, h and b. Cystatin B/CSTB protein is thought to play a role in protecting against the proteases leaking from lysosomes. Evidence indicates that mutations in Cystatin B/CSTB gene are responsible for the primary defects in patients with progressive myoclonic epilepsy (EPM1). The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2 cystatins and kininogens.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA