

Product datasheet for AR52017PU-S

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Cystatin-B (1-98, His-tag) Human Protein

Product data:

Product Type: Recombinant Proteins

Description: Cystatin-B (1-98, His-tag) human protein, 10 μg

Species: Human
Expression Host: E. coli

Expression cDNA Clone MGSSHHHHHH SSGLVPRGSH MMCGAPSATQ PATAETQHIA DQVRSQLEEK ENKKFPVFKA

or AA Sequence: VSFKSQVVAG TNYFIKVHVG DEDFVHLRVF QSLPHENKPL TLSNYQTNKA KHDELTYF

Tag: His-tag

Predicted MW: 13 kDa

Concentration: lot specific

Purity: >95% by SDS - PAGE

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 50 mM NaCl

Bioactivity: Specific: 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 25C.

Endotoxin: < 1.0 EU per 1 microgram of protein (determined by LAL method)

Preparation: Liquid purified protein

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeg: NP 000091

Locus ID: 1476

UniProt ID: <u>P04080</u>, <u>Q76LA1</u>

Cytogenetics: 21q22.3

Synonyms: CPI-B; CST6; EPM1; EPM1A; PME; STFB; ULD

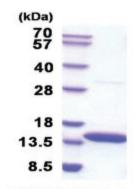




Summary:

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. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2 cystatins and kininogens. This gene encodes a stefin that functions as an intracellular thiol protease inhibitor. The protein is able to form a dimer stabilized by noncovalent forces, inhibiting papain and cathepsins I, h and b. The protein is thought to play a role in protecting against the proteases leaking from lysosomes. Evidence indicates that mutations in this gene are responsible for the primary defects in patients with progressive myoclonic epilepsy (EPM1). One type of mutation responsible for EPM1 is the expansion in the promoter region of this gene of a CCCCGCCCCGCG repeat from 2-3 copies to 30-78 copies. [provided by RefSeq, Jul 2016]

Product images:



15% SDS-PAGE (3ug)