

Product datasheet for **AR03002PU-S**

Cystatin-B Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Cystatin-B human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MMCGAPSATQ PATAETQHIA DQVRSQLEEK ENKKFPVFKA VSFKSQVWAG TNYFIKVHVG DEDFVHLRVF QSLPHENKPL TLSNYQTNKA KHDELTYF
Predicted MW:	13 kDa
Concentration:	lot specific
Purity:	>98% by SDS PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein by using conventional chromatography Buffer System: 20 mM Tris pH 8.0, 50 mM NaCl
Endotoxin:	< 1.0 EU per 1 microgram of protein (determined by LAL method)
Preparation:	Liquid purified protein by using conventional chromatography
Protein Description:	Recombinant Human CSTB, fused to His-tag, was expressed in <i>E.coli</i> .
Note:	NCBI Accession No.: NP_000091
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_000091
Locus ID:	1476
UniProt ID:	P04080 , Q76LA1
Cytogenetics:	21q22.3
Synonyms:	CPI-B; CST6; EPM1; EPM1A; PME; STFB; ULD



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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 CCCC GCCCGCG repeat from 2-3 copies to 30-78 copies. [provided by RefSeq, Jul 2016]

Product images: