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Product datasheet for AR52017PU-N

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

Product data:

Product Type:	Recombinant Proteins
Description:	Cystatin-B (1-98, His-tag) human protein, 50 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MMCGAPSATQ PATAETQHIA DQVRSQLEEK ENKKFPVFKA 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.
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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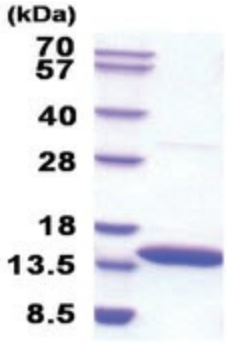
Summary: The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired this inhibitory activity. There are three inhibitory families in the superfamily, including 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 l, 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)