

## Product datasheet for PH303872

### Stefin B (CSTB) (NM\_000100) Human Mass Spec Standard

#### Product data:

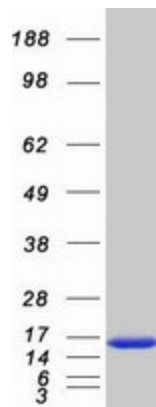
Product Type:	Mass Spec Standards
Description:	CSTB MS Standard C13 and N15-labeled recombinant protein (NP_000091)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC203872
Predicted MW:	11.1 kDa
Protein Sequence:	>RC203872 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)  MMCGAPSATQPATAETQHIADQVRSQLEEKENKKFPVFKAVSFKSQVVAGTNYFIKVHVGDDEFVHLRVF QSLPHENKPLTLSNYQTNKAKHDELTYF  <b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_000091</a>
RefSeq Size:	940
RefSeq ORF:	294
Synonyms:	CPI-B; CST6; EPM1; EPM1A; PME; STFB; ULD
Locus ID:	1476
UniProt ID:	<a href="#">P04080</a> , <a href="#">Q76LA1</a>
Cytogenetics:	21q22.3



[View online »](#)

**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:**

Coomassie blue staining of purified CSTB protein (Cat# [TP303872]). The protein was produced from HEK293T cells transfected with CSTB cDNA clone (Cat# [RC203872]) using MegaTran 2.0 (Cat# [TT210002]).