

## Product datasheet for **CF813046**

### Stefin B (CSTB) Mouse Monoclonal Antibody [Clone ID: OTI1E8]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1E8
Applications:	IHC, WB
Recommended Dilution:	WB 1:500, IHC 1:500
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 1-98 of human CSTB (NP_000091) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	11 kDa
Gene Name:	cystatin B
Database Link:	<a href="#">NP_000091</a> <a href="#">Entrez Gene 1476 Human P04080</a>



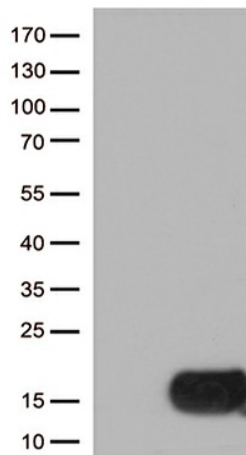
[View online »](#)

**Background:**

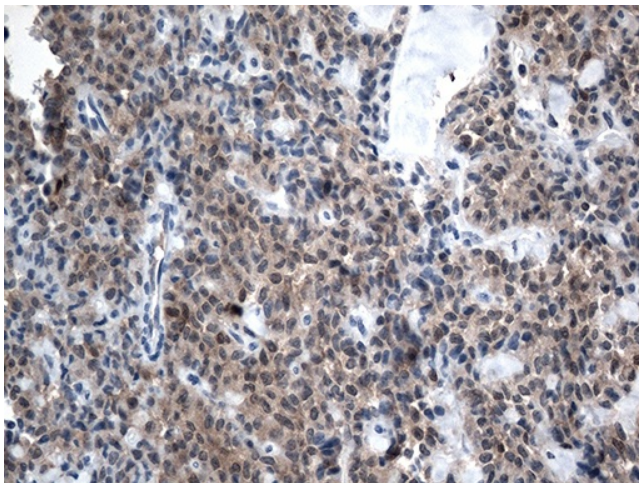
The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired this inhibitory activity. There are three inhibitory families in the superfamily, including the type 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 CCCCCCCCGCG repeat from 2-3 copies to 30-78 copies. [provided by RefSeq, Jul 2016]

**Synonyms:**

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

**Product images:**

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CSTB ([RC203872], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CSTB (1:500). Positive lysates [LY424918] (100ug) and [LC424918] (20ug) can be purchased separately from OriGene.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-CSTB mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA813046]) (1:500)