

Product datasheet for **TP322463SE**

Cathepsin B (CTSB) (NM_147782) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Homo sapiens cathepsin B (CTSB), transcript variant 4, secretory expressed in HEK293T cells, 20ug
Species:	Human
Expression Host:	HEK293T
Expression cDNA	>RC222463 representing NM_147782
Clone or AA Sequence:	Red=Cloning site Green=Tags(s)

MWQLWASLCCLLVLANARSRPSFHPLSDELVNYVNRNTTWQAGHNFYVNDMSYLKRLCGTFLGGPKPPQ
RVMFTEDLKLPAFDAREQWPQCPTIKEIRDQGSCGSCWAFGAVEAISDRICHTNAHVSVEVSAEDLLT
CCGSMCGDGCNGGYPAEAWNFWRKGLVSGGLYESHVGCPRYSIPPCEHHVNGSRPPCTGEGDTPKCSKI
CEPGYSPTYKQDKHYGYNYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGHAI
RILGWGVENGPYWLANSWNTDWDNGFFKILRGQDHCIESEVAGIPRTDQYWEKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	39.5 kDa
Concentration:	>50 ug/mL as determined by microplate Bradford method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25mM Tris-HCl, pH7.3, 100mM glycine, 10% glycerol
Note:	For culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for at least 1 year from receipt of products under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_680092
Locus ID:	1508
UniProt ID:	P07858 , A0A024R374



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RefSeq Size: 3871

Cytogenetics: 8p23.1

RefSeq ORF: 1017

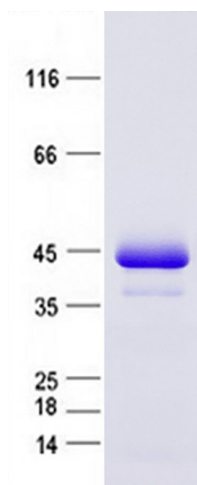
Synonyms: APPS; CPSB; RECEUP

Summary: This gene encodes a member of the C1 family of peptidases. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate multiple protein products. These products include the cathepsin B light and heavy chains, which can dimerize to form the double chain form of the enzyme. This enzyme is a lysosomal cysteine protease with both endopeptidase and exopeptidase activity that may play a role in protein turnover. It is also known as amyloid precursor protein secretase and is involved in the proteolytic processing of amyloid precursor protein (APP). Incomplete proteolytic processing of APP has been suggested to be a causative factor in Alzheimer's disease, the most common cause of dementia. Overexpression of the encoded protein has been associated with esophageal adenocarcinoma and other tumors. Both Cathepsin B and Cathepsin L are involved in the cleavage of the spike protein from the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) upon its entry to the human host cell. Multiple pseudogenes of this gene have been identified. [provided by RefSeq, Sep 2020]

Protein Families: Druggable Genome, Protease

Protein Pathways: Antigen processing and presentation, Lysosome

Product images:



Coomassie blue staining of purified CTSB protein (Cat #TP322463SE). The protein was produced from mammalian cells transfected with CTSB cDNA clone (Cat #[RC222463]).