

Product datasheet for **TP720340M**

Cathepsin B (CTSB) (NM_001908) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human cathepsin B (CTSB), transcript variant 1
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	Arg18-Ile339 is expressed with a 6His tag at the C-terminus.
Tag:	C-6xHis
Predicted MW:	36.9 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
Endotoxin:	< 0.1 EU per µg protein as determined by LAL test
Storage:	Store at -80°C.
Stability:	Stable for at least 3 months from date of receipt under proper storage and handling conditions.
RefSeq:	NP_001899
Locus ID:	1508
UniProt ID:	P07858 , A0A024R374
Cytogenetics:	8p23.1
Synonyms:	APPS; CPSB; RECEUP



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Summary:

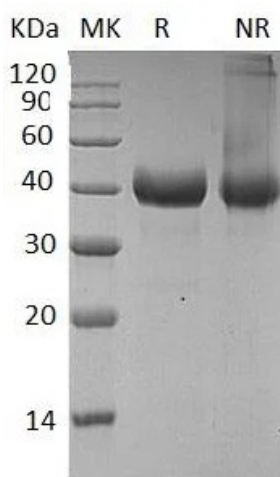
This gene encodes a member of the C1 family of peptidases. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate multiple protein products. These products include the cathepsin B 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 staining of SDS-PAGE MK: Molecular weight marker R: Sample in reducing conditions NR: Sample in non-reducing conditions