

## Recombinant Full Length Human CTSB Protein, GST-tagged

Cat. No. CTSB-2331HF Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Human CTSB full-length ORF ( AAH10240, 21 a.a. - 339 a.a.) recombinant protein with GST-tag at N-terminal.

**Species** Human

**Source** In Vitro Cell Free System

**ProteinLength** 339 amino acids

**Description** 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. Multiple pseudogenes of this gene have been identified. [provided by RefSeq, Nov 2015]

**Molecular Mass** 60.72 kDa

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**AA Sequence**

PSFHPVSDELVNYVVKRNTTWQAGHNFYNVDMGYLKRLCGTFLGGPKPPQRVMFT  
 EDLKLPAFDAREQWPQCPTIKEIRDQGSCGSCWAFGAVEAISDRICHTNAHVSVE  
 VSAEDLLCCGSMCGDGCNGGYPAEAWNFWTRKGLVSGGLYESHVGC RPYSIPP  
 CEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYKQDKHYGNSYSVSNSEKDIMAE  
 IYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGGHAIRILGWGVENGTPYWLVAN  
 SWNTDWGDNGFFKILRGQDHCGIESEVVAGIPRTDQYWEKI

**Applications**

Enzyme-linked Immunoabsorbent Assay  
 Western Blot (Recombinant protein)  
 Antibody Production  
 Protein Array

**Notes** Best use within three months from the date of receipt of this protein.

**Storage** Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

**Storage Buffer** 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

## GENE INFORMATION

**Gene Name** [CTSB cathepsin B \[ Homo sapiens \]](#)

**Official Symbol** [CTSB](#)

**Synonyms** CTSB; cathepsin B; cathepsin B1; APP secretase; cysteine protease; amyloid precursor protein secretase; APPS; CPSB;

**Gene ID** [1508](#)

**mRNA Refseq** [NM\\_001908](#)

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**Protein Refseq**      [NP\\_001899](#)

**MIM**      [116810](#)

**UniProt ID**      [P07858](#)

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