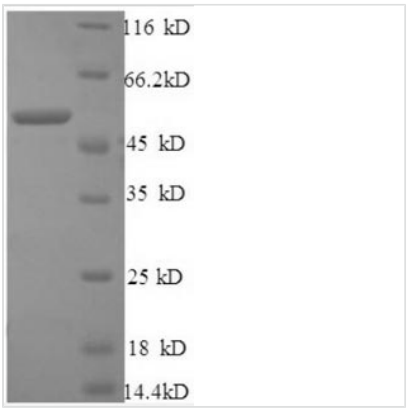
Recombinant Human Cathepsin B (CTSB), partial

Product Code	CSB-EP006185HU1
Relevance	Thiol protease which is believed to participate in intracellular degradation and turnover of proteins. Has also been implicated in tumor invasion and metastasis.
Abbreviation	Recombinant Human CTSB protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P07858
Alias	APP secretase ;APPSCathepsin B1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ASFDAREQWPQCPTIKEIRDQGSCGSCWAFGAVEAISDRICIHTNAHVSVEVS AEDLLTCCGSMCGDGCNGGYPAEAWNFWTRKGLVSGGLYESHVGCRPYSIP PCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYKQDKHYGYNSYSVSNSEK DIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGGHAIRILGWGVENG TPYWLVANSWNTDWGDNGFFKILRGQDHCGIESEVVAGIPRTD
Research Area	Neuroscience
Source	E.coli
Target Names	CTSB
Expression Region	82-333aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged
Mol. Weight	54.6kDa
Protein Length	Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The process of expressing the recombinant human CTSB protein in the E.coli requires the recombinant DNA gene formed by the integration of encoding gene for the 82-333aa of the human CTSB protein and N-terminal GST tag sequence, the expression vector that the recombinant DNA gene inserts into, the E.coli that provided the necessary macromolecules and components for transcription and translation of the cloned expression vector. After isolation and purification, this N-terminal GST-tagged recombinant CTSB protein was obtained. This recombinant CTSB protein is characterized by high purity (>90%, SDS-PAGE). This CTSB protein ran along the gel to the band of approximately 55 kDa molecular weight.

CTSB is a gene providing instruction of making a protein named Cathepsin B (also abbreviated as APPS) in human and belong to peptidase C1 family. Generally, APPS is lowly expressed in normal tissues and mainly exists in lysosomes. When extracellular proteins such as plasma protein, hormones and phagocytosed bacteria enter the cell, they are hydrolyzed by proteolytic enzymes in the lysosome and digested inside the cell, thereby maintaining a precise balance between protein synthesis and degradation, and at the same time with other proteins in the lysosome The hydrolases together mediate the non-Caspase apoptotic pathway.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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