

# Mouse Cathepsin E / CTSE Protein (His Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 50564-M08H

## General Information

### Gene Name Synonym:

A430072O03Rik; C920004C08Rik; CatE; CE

### Protein Construction:

A DNA sequence encoding the extracellular domain of mouse CTSE (NP\_031825.2) (Met 1-Pro 397) was expressed, with a polyhistidine tag at the C-terminus.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Gln 19

### Molecular Mass:

The secreted recombinant mouse CTSE (pro form) consists of 390 amino acids and has a predicted molecular mass of 42.4 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rmCTSE is approximately 45-48 kDa due to glycosylation.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

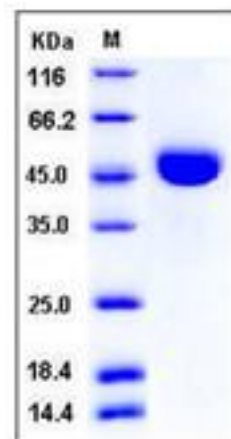
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Cathepsin E Protein (CTSE Protein) is a member of the peptidase C1 family that is a gastric aspartic protease that functions as a disulfide-linked homodimer. Cathepsin E Protein (CTSE Protein) is predominantly present in the cells of immune system and is frequently implicated in antigen processing via the MHC class II pathway which however does not appear to be involved in the digestion of dietary protein. The protein has a specificity similar to that of pepsin and pepsin. Cathepsin E Protein (CTSE Protein) is found in highest concentration in the surface of epithelial mucus-producing cells of the stomach and also been found in more than half of the gastric cancers. It appears, therefore, to be an oncofetal antigen.

## References

1.Zaidi N, *et al.* (2008) Emerging functional roles of cathepsin E. *Biochem Biophys Res Commun.* 377(2) : 327-30. 2.Zaidi N, *et al.* (2008) Cathepsin E: a mini review. *Biochem Biophys Res Commun.* 367(3) :517-22. 3.Azuma T, *et al.* (1989) Human gastric cathepsin E Predicted sequence, localization to chromosome 1, and sequence homology with other aspartic proteinases. *The journal of biological chemistry.* 264: 16748-53.

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