

# Recombinant Mouse Cathepsin D/CTSD Protein (His Tag)

Catalog Number:PKSM040848



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

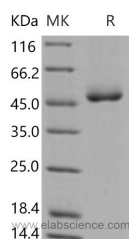
## Description

<b>Synonyms</b>	Cathepsin D; CTSD;CPSD
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Leu 410
<b>Accession</b>	NP_034113.1
<b>Calculated Molecular Weight</b>	44.4 kDa
<b>Tag</b>	C-His

## Properties

<b>Purity</b>	> 96 % as determined by SDS-PAGE
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Data



## Background

Cathepsin D (CTSD), a well known lysosomal aspartyl protease and belongs to the peptidase C1 family, which is a normal and major component of lysosomes, and is found in almost all cells and tissues of mammals. Its mostly described function is intracellular catabolism in lysosomal compartments, other physiological effect include hormone and antigen processing. Cathepsin D has a specificity similar to but narrower than that of pepsin A. Cathepsin D plays an important role in the degradation of proteins, the generation of bioactive proteins, antigen processing, etc. Among different role in cell physiology, a new function of this enzyme is examined. Cathepsin D is an important regulator of apoptotic pathways in cells. It acts at different stage of intrinsic and extrinsic pathway of apoptosis. In addition, CTSD secreted from human prostate carcinoma cells are responsible for the generation of angiostatin, a potent endogenous inhibitor of angiogenesis, suggesting its contribution to the prevention of tumor growth and angiogenesis-dependent growth of metastases.

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