

## Product datasheet

# Recombinant human Cathepsin K protein (Active) ab157067

[3 References](#) [2 Images](#)

### Description

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<b>Product name</b>	Recombinant human Cathepsin K protein (Active)
<b>Biological activity</b>	≥ 1.5 U/mg protein. Activity is lot specific.  One unit is defined as the amount of enzyme that will hydrolyze 1 μmol Z-Phe-Arg-AMC substrate per min. at 37°C.
<b>Purity</b>	> 95 % SDS-PAGE. ab157067 was purified as full-length proenzyme, then auto-activated at low pH.
<b>Expression system</b>	Baculovirus infected insect cells
<b>Accession</b>	<b><u>P43235</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MWGLKVL LLP VVSFALYPEE ILDTHWELWK KTHRKQYNNK VDEISRRLIW EKNLKYISIH NLEASLGVHT YELAMNHLGD MTSEEVVQKM TGLKVPLSHS RSNDLYIPE WEGRAPDSVD YRKKGYVTPV KNQGQCGSCW AFSSVGALEG QLKKKTGKLL NLSPQNLVDC VSENDGCGGG YMTNAFQYVQ KNRGIDSEDA YPYVGQEESC MYNPTGKAAK CRGYREIPEG NEKALKRAVA RVGPVSVAID ASLTSFQFYS KGVYYDESCN SDNLNHAVLA VGYGIQKGNK HWIKNSWGE NWGNKGYILM ARNKNNACGI ANLASFPKM
<b>Predicted molecular weight</b>	26 kDa
<b>Amino acids</b>	1 to 329

### Specifications

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Our **Abpromise guarantee** covers the use of **ab157067** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** Functional Studies

SDS-PAGE

**Form** Liquid

### Preparation and Storage

**Stability and Storage** Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.

Constituents: 0.41% Sodium acetate, 0.08% (R\*,R\*)-1,4-Dimercaptobutan-2,3-diol, 0.015% EDTA, 0.29% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

### General Info

**Function** Closely involved in osteoclastic bone resorption and may participate partially in the disorder of bone remodeling. Displays potent endoprotease activity against fibrinogen at acid pH. May play an important role in extracellular matrix degradation.

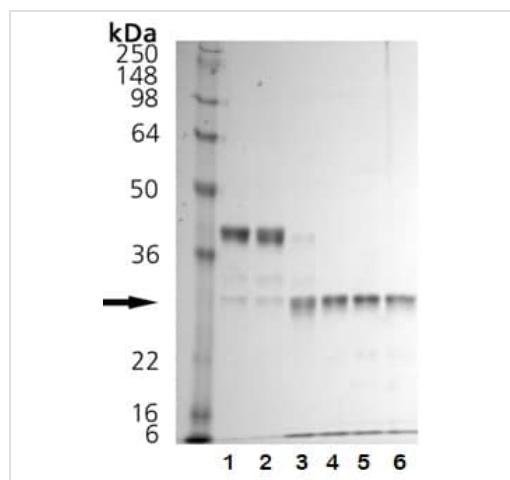
**Tissue specificity** Predominantly expressed in osteoclasts (bones).

**Involvement in disease** Defects in CTSK are the cause of pycnodysostosis (PKND) [MIM:265800]. PKND is an autosomal recessive osteochondrodysplasia characterized by osteosclerosis and short stature.

**Sequence similarities** Belongs to the peptidase C1 family.

**Cellular localization** Lysosome.

### Images



Each lane contains 1 ug of total protein during time-course activation at low pH.

Lane 1: Pre-Activation.

Lane 2: 0 min

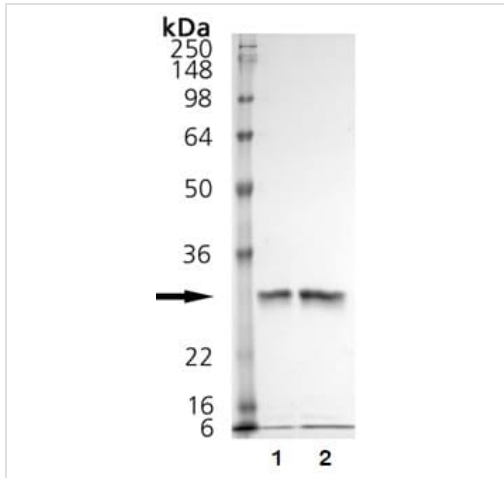
Lane 3: 1 hour

Lane 4: 2 hours

Lane 5: 3 hours

Lane 6: 4 hours

Functional Studies - Recombinant human Cathepsin K protein (ab157067)



ab157067 on SDS-PAGE.

Lane 1: 1 ug.

Lane 2: 2 ug.

SDS-PAGE - Recombinant human Cathepsin K protein (ab157067)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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