

Product datasheet

Recombinant human Cathepsin K protein ab157067

2 Images

Overview

Product name	Recombinant human Cathepsin K protein
Protein length	Full length protein

Description

Nature	Recombinant
Source	Insect cells
Amino Acid Sequence	
Accession	P43235
Species	Human

Sequence	<p>MWGLKVL LLP VVSFALYPEE ILDTHWELWK KTHRKQYNNK VDEISRRLIW EKNLKYISIH NLEASLGVHT YELAMNHLGD MTSEEVVQKM TGLKVPLSHS RSNDTYIPE WEGRAPDSVD YRKKGYVTPV KNQGQCGSCW AFSSVGALEG QLKKKTGKLL NLSPQNLVDC VSENDGCGGG YMTNAFQYVQ KNRGIDSEDA YPYVGQEESC MYNPTGKAAK CRGYREIPEG NEKALKRAVA RVGPVSVAID ASLTSFQFYS KGVYYDESCN SDNLNHAVLA VGYGIQKGNK HWIINKSWGE NWSGNKGYILM ARNKNNACGI ANLASFPKM</p>
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Specifications

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.

Biological activity	=1500 mU/mg protein. One unit is defined as the amount of enzyme that will hydrolyze 1µmol Z-Phe-Arg-AMC substrate per min. at 37°C in 50mM sodium acetate, pH 5.5, containing 2.5mM EDTA, 0.01% Triton X-100 and 1mM DTT.
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Applications	Functional Studies SDS-PAGE
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Purity	>95% by SDS-PAGE . ab157067 was purified as full-length proenzyme, then auto-activated at low pH.
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Form	Liquid
Additional notes	Handling: Keep on dry ice.

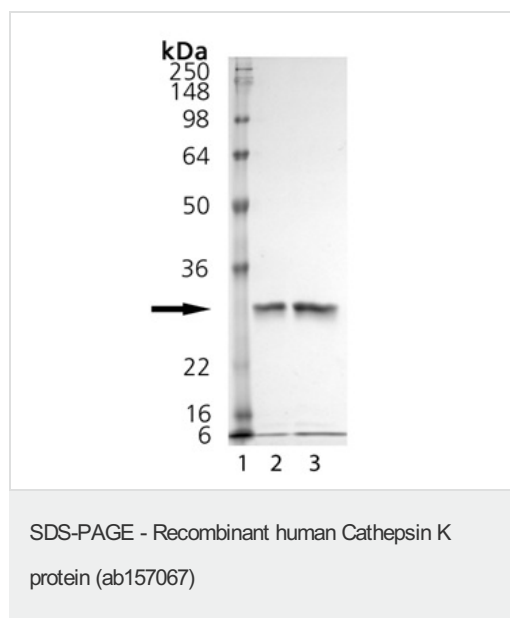
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 5.50 Constituents: 0.4% Sodium acetate, 0.08% DTT, 0.015% EDTA, 0.29% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
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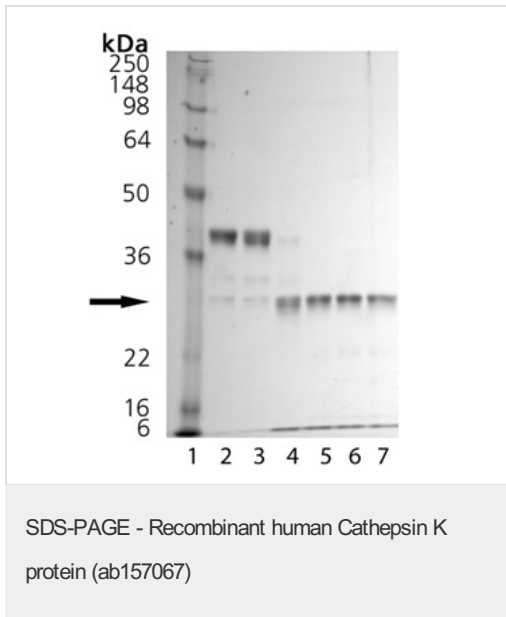
General Info

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



SDS-PAGE Analysis.
Lane 1: MW Marker
Lane 2: 1 µg ab157067
Lane 3: 2 µg ab157067



Activation of ProCathepsin K.

Lanes 2-7 each contain 1 µg of total protein during time-course activation at low pH.

Lane 2: pre-activation

Lane 3: 0 min

Lane 4: 1 hr

Lane 5: 2 hrs

Lane 6: 3 hrs

Lane 7: 4 hrs

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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