# abcam

## Product datasheet

# Anti-Cathepsin K antibody ab231590

#### 6 Images

#### Overview

Product name Anti-Cathepsin K antibody

**Description** Rabbit polyclonal to Cathepsin K

Host species Rabbit

Tested applications

Suitable for: IHC-P, WB

Species reactivity

Reacts with: Human, Pig

Predicted to work with: Cynomolgus monkey, Rhesus monkey

Immunogen Recombinant fragment (His-T7-tag) corresponding to Human Cathepsin K aa 50 to the C-

terminus. Expressed in E.coli.

Database link: P43235

Run BLAST with
Run BLAST with

**Positive control** WB: Recombinant human CTSK protein; pig heart tissue. IHC-P: Human breast cancer, prostate

cancer, liver and lung cancer tissue.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.011% Proclin 300

Constituents: 55.77% Glycerol (glycerin, glycerine), 44.219% PBS

Purity Immunogen affinity purified

**Purification notes** Followed by Protein A affinity chromatography.

**Clonality** Polyclonal

1

**Isotype** IgG

## **Applications**

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab231590 in the following tested applications.

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

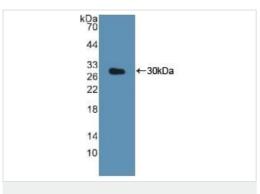
Application	Abreviews	Notes
IHC-P		Use a concentration of 5 - 20 µg/ml.
WB		Use a concentration of 1 - 5 μg/ml. Predicted molecular weight: 37 kDa.

## **Target**

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 osteclasts (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.	

# Images

**Cellular localization** 

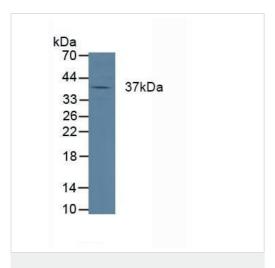


Lysosome.

Western blot - Anti-Cathepsin K antibody (ab231590)

Anti-Cathepsin K antibody (ab231590) at 3  $\mu$ g/ml + Recombinant human Cathepsin K protein

Predicted band size: 37 kDa



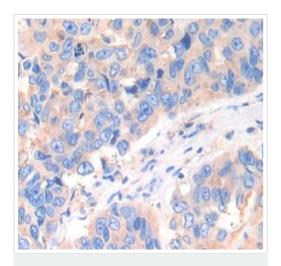
Western blot - Anti-Cathepsin K antibody (ab231590)

Anti-Cathepsin K antibody (ab231590) at 3 µg/ml + Pig heart tissue

## Secondary

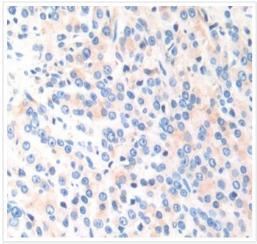
HRP-linked guinea pig anti-rabbit at 1/2000 dilution

Predicted band size: 37 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cathepsin K antibody (ab231590)

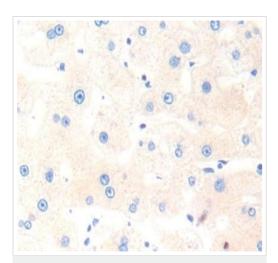
Formalin-fixed, paraffin-embedded human breast cancer tissue stained for Cathepsin K using ab231590 at 20  $\mu$ g/mL in immunohistochemical analysis. DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cathepsin K antibody

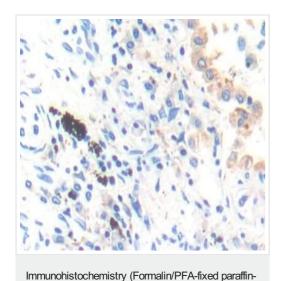
(ab231590)

Formalin-fixed, paraffin-embedded human prostate cancer tissue stained for Cathepsin K using ab231590 at 20  $\mu$ g/mL in immunohistochemical analysis. DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cathepsin K antibody (ab231590)

Formalin-fixed, paraffin-embedded human liver tissue stained for Cathepsin K using ab231590 at 20  $\mu g/mL$  in immunohistochemical analysis. DAB staining.



Formalin-fixed, paraffin-embedded human lung cancer tissue stained for Cathepsin K using ab231590 at 20  $\mu$ g/mL in immunohistochemical analysis. DAB staining.

(ab231590)

embedded sections) - Anti-Cathepsin K antibody

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

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