

Anti-Cathepsin K antibody [3F9] ab37259

32 References **3 图像**

概述

产品名称	Anti-Cathepsin K抗体[3F9]
描述	小鼠单克隆抗体[3F9] to Cathepsin K
宿主	Mouse
经测试应用	适用于: WB, IHC-P, Flow Cyt
种属反应性	与反应: Mouse, Human
免疫原	Recombinant fusion protein, corresponding to amino acids 115-329 of Human Cathepsin K. The protein contains at the N-terminal end a His tag (6x) and 6 additional amino acid residues (MRGSHHHHHHGS).
表位	The monoclonal antibody ab37259 (clone 3F9) reacts with an epitope located between aa 115-329: APDSVDYRKKGYVTPNQGCSCWAFSSVGALEGQLKKKTGKLLNLSPQNLVDCVSENDG C GGGYMTNAFQYVQKNRGIDSEAYPYVGQEESCMYNPTGKAAKCRGYREIPEGNEKALKRA VARVGPVSVAIDASLTSFQFSKGVYDESCNSDNLNHAVALVGYGIQKGNKHWIKNSWGE NWGNKGYILMARNKNNACGIANLASFPKM
常规说明	<p>This product was changed from ascites to tissue culture supernatant on 22nd December 2017. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team</p> <p>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.</p> <p>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</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.
存储溶液	Constituents: 0.58% Sodium chloride, 0.134% PBS
纯度	Protein G purified

纯化说明	Purified from tissue culture supernatant.
克隆	单克隆
克隆编号	3F9
同种型	IgG2b

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab37259于以下的经测试应用

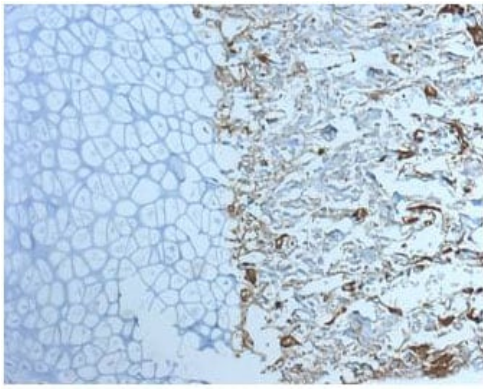
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 37, 40 kDa (predicted molecular weight: 37 kDa).
IHC-P		Use at an assay dependent concentration.
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

靶标

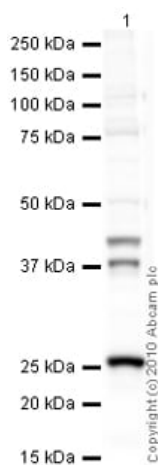
功能	Closely involved in osteoclastic bone resorption and may participate partially in the disorder of bone remodeling. Displays potent endoprotease activity against fibrinogen at acid pH. May play an important role in extracellular matrix degradation.
组织特异性	Predominantly expressed in osteoclasts (bones).
疾病相关	Defects in CTSK are the cause of pycnodysostosis (PKND) [MIM:265800]. PKND is an autosomal recessive osteochondrodysplasia characterized by osteosclerosis and short stature.
序列相似性	Belongs to the peptidase C1 family.
细胞定位	Lysosome.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cathepsin K antibody [3F9] (ab37259)

Bone from mouse foot (bone marrow with osteoclasts (positive)). IHC-P image was obtained after deparaffinization, antigen retrieval with 0.1 M EDTA (6-8 min, 72 C), drying of slide before staining (10 min, 62 C), and subsequent staining with primary antibody (1/100) in 1% horse serum (1 h, 37 C).



Western blot - Anti-Cathepsin K antibody [3F9] (ab37259)

Anti-Cathepsin K antibody [3F9] (ab37259) at 1 µg/ml + Human bone tumor tissue lysate - total protein ([ab29359](#)) at 10 µg

Secondary

Goat polyclonal Secondary Antibody to Mouse IgG - H&L (HRP), pre-adsorbed at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

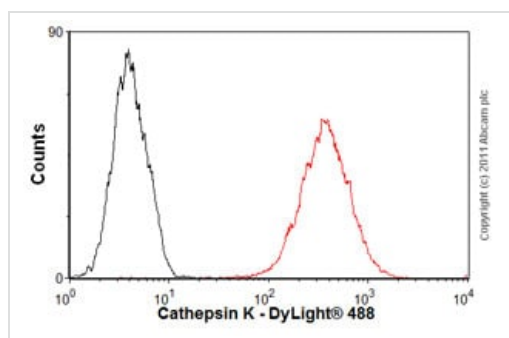
Predicted band size: 37 kDa

Observed band size: 37,40 kDa

Additional bands at: 26 kDa (possible cleavage fragment)

Exposure time: 1 minute

Cathepsin K contains a potential glycosylation site (SwissProt) which may explain its migration at a higher molecular weight than predicted, seen at 40 kDa. The band observed at 25 kDa could potentially be a cleaved form of Cathepsin K due to the presence of both a 15 amino acid signal prptide and a 99 amino acid propeptide. Cathepsin K in its mature form has an expected molecular weight of 25 kDa.



Flow Cytometry - Anti-Cathepsin K antibody [3F9]
(ab37259)

Overlay histogram showing U2OS cells stained with ab37259 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab37259, 1 µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (**ab91366**, 2 µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in U2OS cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors