

# Anti-Cathepsin K antibody [3F9] ab37259

**32 References**    **画像数 3**

### 製品の概要

製品名	Anti-Cathepsin K antibody [3F9]
製品の詳細	Mouse monoclonal [3F9] to Cathepsin K
由来種	Mouse
アプリケーション	<b>適用あり:</b> WB, IHC-P, Flow Cyt
種交差性	<b>交差種:</b> 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).
エピトープ	The monoclonal antibody ab37259 (clone 3F9) reacts with an epitope located between aa 115-329: APDSVDYRKKGYVTPNQGCSCWAFSSVGALEGQLKKKTGKLLNLSPQNLVDCVSENDG C GGGYMTNAFQYVQKNRGIDSEDAYPYVGQEESCMYNPTGKAAKCRGYREIPEGNEKALKRA VARVGPVSVAIDASLTSFQFSKGVYDESCNSDNLNHAVALVGYGIQKGNKHWIKNSWGE NWGNKGYILMARNKNNACGIANLASFPKM
特記事項	<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&amp;As</p>

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.
バッファー	Constituents: 0.58% Sodium chloride, 0.134% PBS
精製度	Protein G purified

特記事項(精製)	Purified from tissue culture supernatant.
ポリ/モノ	モノクローナル
クローン名	3F9
アイソタイプ	IgG2b

## アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab37259の使用に適用されます

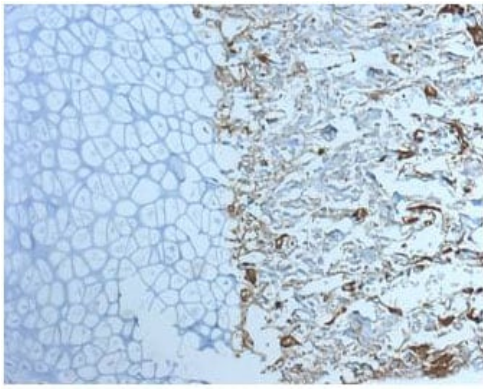
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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 <sup>6</sup> cells. <b>ab170192</b> - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

## ターゲット情報

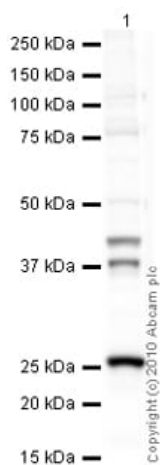
機能	Closely involved in osteoclastic bone resorption and may participate partially in the disorder of bone remodeling. Displays potent endoprotease activity against fibrinogen at acid pH. May play an important role in extracellular matrix degradation.
組織特異性	Predominantly expressed in osteoclasts (bones).
関連疾患	Defects in CTSK are the cause of pycnodysostosis (PKND) [MIM:265800]. PKND is an autosomal recessive osteochondrodysplasia characterized by osteosclerosis and short stature.
配列類似性	Belongs to the peptidase C1 family.
細胞内局在	Lysosome.

## 画像



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.

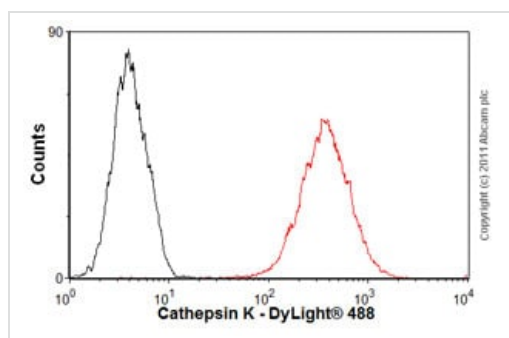
**Predicted band size:** 37 kDa

**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/1x10<sup>6</sup> 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/1x10<sup>6</sup> 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.

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