

# Anti-Cathepsin B antibody ab92955

敲除 验证

★★★★☆ [1 Abreviews](#) [3 References](#) [3 图像](#)

### 概述

产品名称	Anti-Cathepsin B抗体
描述	兔多克隆抗体to Cathepsin B
宿主	Rabbit
经测试应用	适用于: ICC/IF, WB
种属反应性	与反应: Human 预测可用于: Orangutan 
免疫原	Synthetic peptide corresponding to Human Cathepsin B aa 200-300. (Peptide available as <a href="#">ab103276</a> )
阳性对照	This antibody gave a positive signal in the following lysates: Human Liver Tissue; Human Kidney Tissue; Human Brain Tissue; Human Placenta Tissue; HepG2 Whole Cell; HEK293 Whole Cell Lysate.
常规说明	<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>

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

## 应用

**The Abpromise guarantee**      **Abpromise™** 承诺保证使用 ab92955 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
ICC/IF		Use a concentration of 1 µg/ml.
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 30, 25 kDa (predicted molecular weight: 38 kDa).

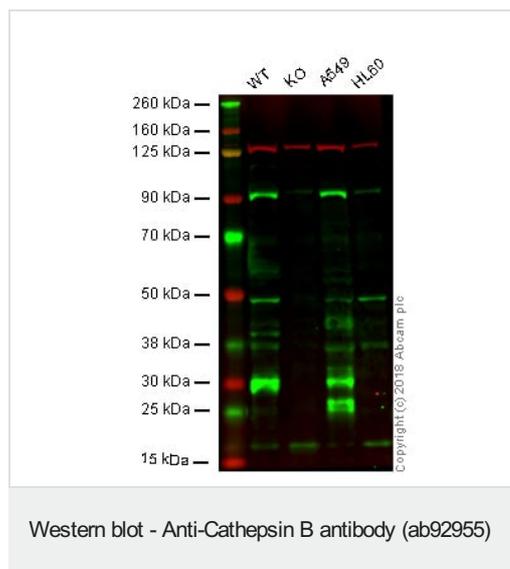
## 靶标

**功能**      Thiol protease which is believed to participate in intracellular degradation and turnover of proteins. Has also been implicated in tumor invasion and metastasis.

**序列相似性**      Belongs to the peptidase C1 family.

**细胞定位**      Lysosome. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## 图片



**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)

**Lane 2:** Cathepsin B knockout HAP1 whole cell lysate (20 µg)

**Lane 3:** A549 whole cell lysate (20 µg)

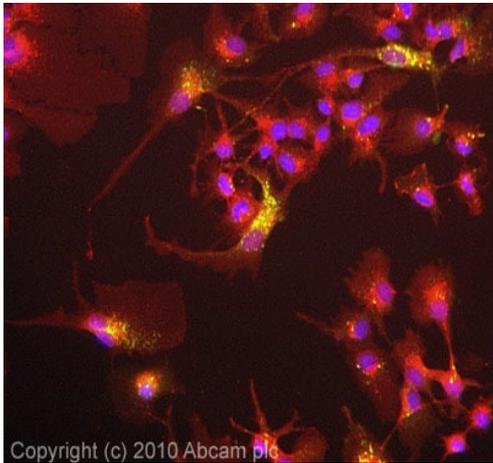
**Lane 4:** HL60 whole cell lysate (Negative Control) (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab92955 observed at 24-27-44 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab92955 was shown to recognize Cathepsin B in wild-type HAP1 cells as signal was lost at the expected MW in Cathepsin B knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and Cathepsin B knockout samples were subjected to SDS-PAGE. ab92955 and **ab18058** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye®

680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

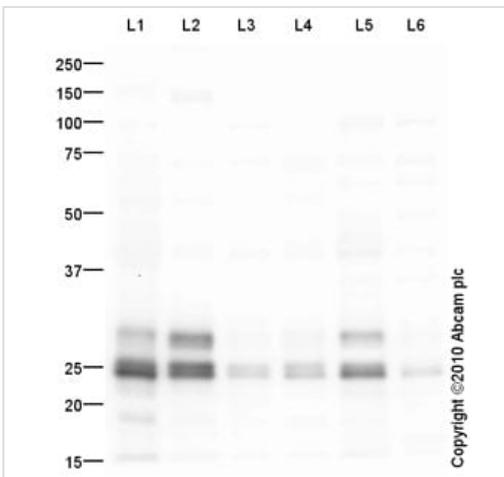
Pro-cathepsin B runs at approximately 44 kDa on SDS-PAGE. When it is proteolytically processed and glycosylated it forms a mature two-chain protein containing a heavy chain (running at 27 and 24 kDa) and a light chain (5 kDa)



Copyright (c) 2010 Abcam plc

Immunocytochemistry/ Immunofluorescence - Anti-Cathepsin B antibody (ab92955)

ICC/IF image of ab92955 stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab92955 at 1µg/ml overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti- rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Anti-Cathepsin B antibody (ab92955)

**All lanes :** Anti-Cathepsin B antibody (ab92955) at 1 µg/ml

**Lane 1 :** Human liver tissue lysate - total protein (**ab29889**)

**Lane 2 :** Human kidney tissue lysate - total protein (**ab30203**)

**Lane 3 :** Human brain tissue lysate - total protein (**ab29466**)

**Lane 4 :** Human placenta tissue lysate - total protein (**ab29745**)

**Lane 5 :** HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

**Lane 6 :** HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 38 kDa

**Observed band size:** 25,30 kDa

**Exposure time:** 30 seconds

We hypothesize that the 25 and 30 kDa bands represent the heavy chain and mature form of Cathepsin B, respectively. Abcam welcomes customer feedback.

**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