

### Anti-Cathepsin D antibody [EPR3057Y] ab75852

リコンビナント **RabMAb**

★★★★★ **11 Abreviews** **94 References** 画像数 11

#### 製品の概要

製品名	Anti-Cathepsin D antibody [EPR3057Y]
製品の詳細	Rabbit monoclonal [EPR3057Y] to Cathepsin D
由来種	Rabbit
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P, IHC-Fr
種交差性	<b>交差種:</b> Mouse, Human
免疫原	Synthetic peptide within Human Cathepsin D aa 350 to the C-terminus (C terminal). The exact sequence is proprietary.
ポジティブ・コントロール	WB: MCF7, A431, SK-BR-3 and HepG2 whole cell lysate ( <b>ab7900</b> ) and mouse brain tissue lysate. IHC-P: Human breast carcinoma and liver tissues. ICC/IF: MCF7 cells. IP: SK-BR-3 cell lysate. Flow Cyt (intra): HepG2 cells. IHC-Fr: Hu liver tissue sections.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
バッファー	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol, 0.05% BSA</p>
精製度	Protein A purified

ポリモノ	モノクローナル
クローン名	EPR3057Y
アイソタイプ	IgG

## アプリケーション

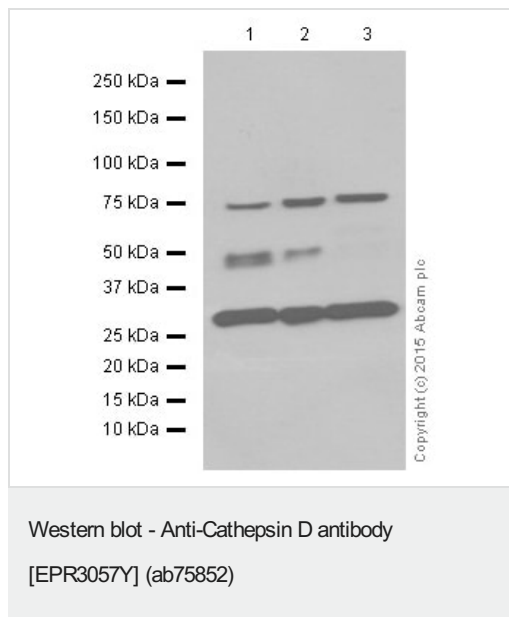
**The Abpromise guarantee** Abpromise保証は、次のテスト済みアプリケーションにおけるab75852の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF	★★★★★ (1)	1/100 - 1/1000.
WB	★★★★★ (8)	1/2000 - 1/10000. Predicted molecular weight: 46 kDa.
IP		1/10 - 1/20.
IHC-P	★★★★★ (1)	1/100 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols</u></b> .
IHC-Fr	★★★★★ (1)	1/1000.

## ターゲット情報

機能	Acid protease active in intracellular protein breakdown. Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.
組織特異性	Expressed in the aorta extracellular space (at protein level).
関連疾患	Ceroid lipofuscinosis, neuronal, 10
配列類似性	Belongs to the peptidase A1 family. Contains 1 peptidase A1 domain.
翻訳後修飾	N- and O-glycosylated.
細胞内局在	Lysosome. Melanosome. Secreted, extracellular space. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. In aortic samples, detected as an extracellular protein loosely bound to the matrix (PubMed:20551380).

## 画像



**All lanes :** Anti-Cathepsin D antibody [EPR3057Y] (ab75852) at 1/5000 dilution (purified)

**Lane 1 :** MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

**Lane 2 :** SK-BR-3 (Human mammary gland adenocarcinoma cell line) whole cell lysate

**Lane 3 :** HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

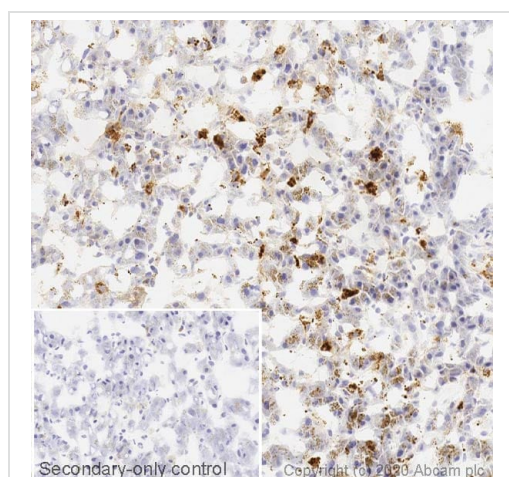
### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

**Predicted band size:** 46 kDa

**Observed band size:** 28,43,46 kDa

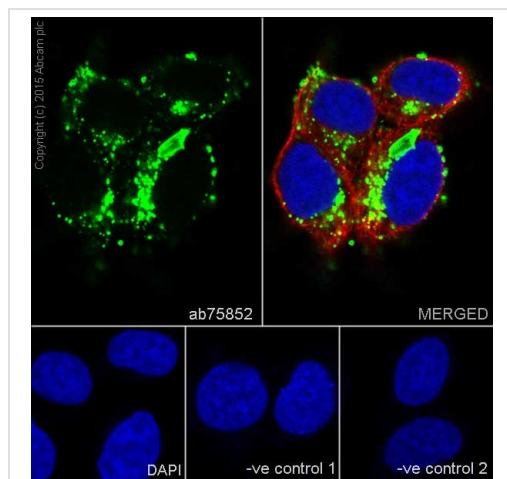
**Blocking/Dilution buffer:** 5% NFDM /TBST.



Immunohistochemistry (Frozen sections) - Anti-Cathepsin D antibody [EPR3057Y] (ab75852)

IHC image of Cathepsin D staining in a section of frozen normal human liver performed on a Leica BOND™ system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab75852, 1/1000 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



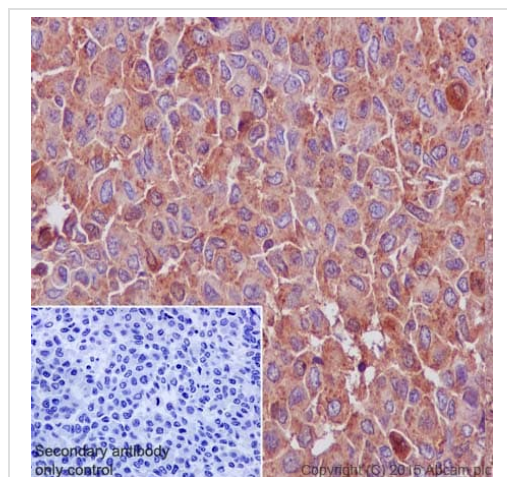
Immunocytochemistry/ Immunofluorescence - Anti-Cathepsin D antibody [EPR3057Y] (ab75852)

Immunocytochemistry/Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma cell line) cells labeling Cathepsin D with purified ab75852 at 1/100.

Cells were fixed with 100% methanol and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

**Control 1:** primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000).

**Control 2:** **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).

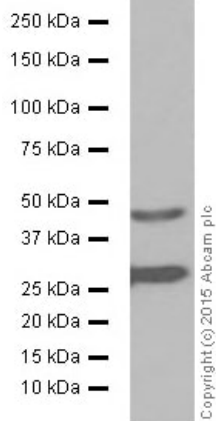


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cathepsin D antibody [EPR3057Y] (ab75852)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labeling Cathepsin D with purified ab75852 at a dilution of 1/100.

Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, an HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500).

**Negative control** using PBS instead of primary antibody. Counterstained with hematoxylin.



Western blot - Anti-Cathepsin D antibody  
[EPR3057Y] (ab75852)

Anti-Cathepsin D antibody [EPR3057Y] (ab75852) at 1/5000 dilution (purified) + Mouse brain tissue lysate at 20 µg

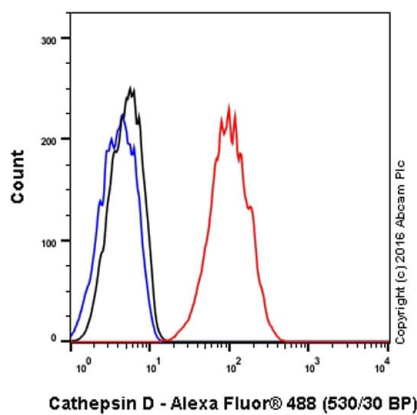
### Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

**Predicted band size:** 46 kDa

**Observed band size:** 28,43 kDa

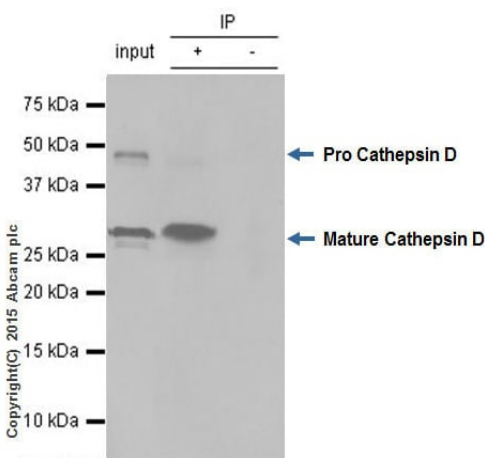
**Blocking/Dilution buffer:** 5% NFDM /TBST.



Flow Cytometry (Intracellular) - Anti-Cathepsin D antibody [EPR3057Y] (ab75852)

Intracellular Flow Cytometry analysis of HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Cathepsin D with purified ab75852 at 1/20 dilution (10µg/ml) (red).

Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Immunoprecipitation - Anti-Cathepsin D antibody  
[EPR3057Y] (ab75852)

ab75852 (purified) at 1/20 immunoprecipitating Cathepsin D in SK-BR-3 (Human mammary gland adenocarcinoma cell line) whole cell lysate.

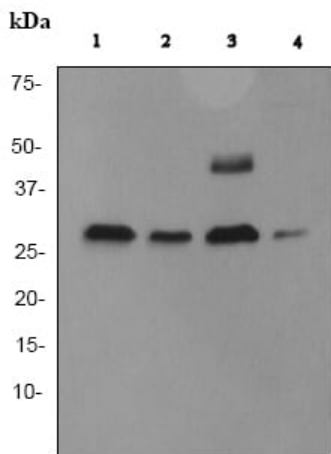
**Lane 1** (input): SK-BR-3 whole cell lysate (10µg)

**Lane 2 (+):** ab75852 + SK-BR-3 whole cell lysate (10µg).

**Lane 3 (-):** Rabbit monoclonal IgG ([ab172730](#)) instead of ab75852 in SK-BR-3 whole cell lysate.

For western blotting, VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/10,000 dilution.

**Blocking/Dilution buffer and concentration:** 5% NFDM/TBST.



Western blot - Anti-Cathepsin D antibody  
[EPR3057Y] (ab75852)

**All lanes :** Anti-Cathepsin D antibody [EPR3057Y] (ab75852) at 1/10000 dilution (unpurified)

**Lane 1 :** MCF7 (Human breast adenocarcinoma cell line) cell lysate

**Lane 2 :** A431 (Human epidermoid carcinoma cell line) cell lysate

**Lane 3 :** SK-BR-3 (Human mammary gland adenocarcinoma cell line) cell lysate

**Lane 4 :** HepG2 (Human liver hepatocellular carcinoma cell line) cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

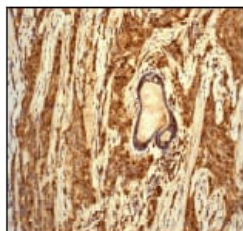
**All lanes :** HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size:** 46 kDa

**Observed band size:** 46 kDa

**Additional bands at:** 28 kDa (possible cleavage fragment)

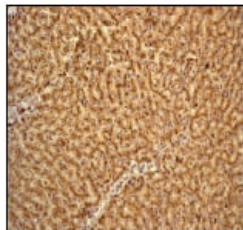
Bands at 28kDa are the Cathepsin D heavy chain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cathepsin D antibody  
[EPR3057Y] (ab75852)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labeling Cathepsin D with unpurified ab75852 at a dilution of 1/500.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cathepsin D antibody [EPR3057Y] (ab75852)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labeling Cathepsin D with unpurified ab75852 at a dilution of 1/500.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Cathepsin D antibody [EPR3057Y] (ab75852)

**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.co.jp/abpromise> or contact our technical team.

### Terms and conditions

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