abcam

Product datasheet

Anti-Cathepsin D antibody [EPR3057Y] - BSA and Azide free ab207549



重组 RabMAb

3 References 9 图像

概述

产品名称 Anti-Cathepsin D抗体[EPR3057Y] - BSA and Azide free

描述 兔单克隆抗体[EPR3057Y] to Cathepsin D - BSA and Azide free

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), WB, IHC-Fr, ICC/IF, IP, IHC-P

种属反应性 与反应: Mouse. Human

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. 免疫原

阳性对照 WB: MCF7, A431, SK-BR-3 and HepG2 whole cell lysate (ab7900) 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.

常规说明 ab207549 is the carrier-free version of ab75852.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

存储溶液 pH: 7.2

Constituent: PBS

无载体 是

纯**度** Protein A purified

克隆 单克隆

克隆编号 EPR3057Y

同种型 lgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab207549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
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 28, 46 kDa (predicted molecular weight: 44 kDa). Please check the parent abID, <u>ab75882</u> , for more information on dilutions.
IHC-Fr		1/1000.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.

靶标

功能 Acid protease active in intracellular protein breakdown. Involved in the pathogenesis of several

diseases such as breast cancer and possibly Alzheimer disease.

组织**特异性** Expressed in the aorta extrcellular space (at protein level).

疾病相关 Ceroid lipofuscinosis, neuronal, 10

序列相似性

Belongs to the peptidase A1 family. Contains 1 peptidase A1 domain.

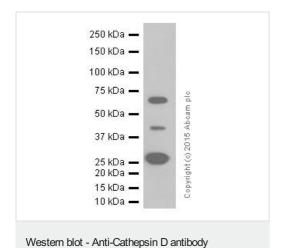
翻译后修饰

N- and O-glycosylated.

细胞定位

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).

图片



Anti-Cathepsin D antibody [EPR3057Y] - BSA and Azide free (ab207549) + SK-BR-3 (human mammary gland adenocarcinoma) whole cell lysate at 10 μg

Secondary

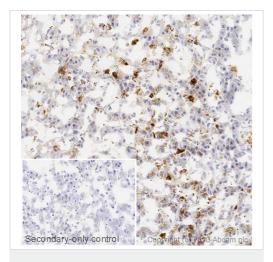
Goat Anti-Rabbit IgG H&L (HRP) (ab97051)

Predicted band size: 44 kDa **Observed band size:** 28, 46 kDa

Exposure time: 3 minutes

[EPR3057Y] - BSA and Azide free (ab207549)

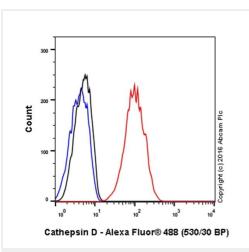
Blocking buffer and concentration: 5% NFDM/TBST Diluting buffer and concentration: 5% NFDM/TBST



Immunohistochemistry (Frozen sections) - Anti-Cathepsin D antibody [EPR3057Y] - BSA and Azide free (ab207549) This data was developed using the same antibody clone in a different buffer formulation (<u>ab75852</u>).

IHC image of Cathepsin D staining in a section of frozen normal human liver performed on a Leica BONDTM 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.

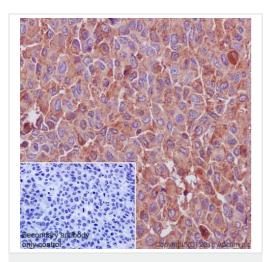
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Flow Cytometry (Intracellular) - Anti-Cathepsin D antibody [EPR3057Y] - BSA and Azide free (ab207549)

Intracellular Flow Cytometry analysis of HepG2 (human hepatocellular carcinoma) cells labeling Cathepsin D with purified **ab75852** at 1/20 dilution (10µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluorr[®] 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

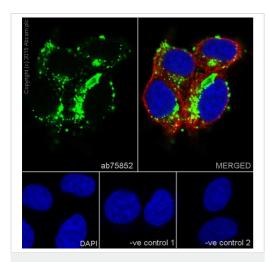
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75852).



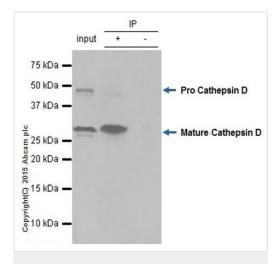
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cathepsin D antibody
[EPR3057Y] - BSA and Azide free (ab207549)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling Cathepsin D with purified ab75852 at a dilution of 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75852).



Immunocytochemistry/ Immunofluorescence - Anti-Cathepsin D antibody [EPR3057Y] - BSA and Azide free (ab207549)



Immunoprecipitation - Anti-Cathepsin D antibody [EPR3057Y] - BSA and Azide free (ab207549)



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

[EPR3057Y] - BSA and Azide free (ab207549)

Immunocytochemistry/Immunofluorescence analysis of MCF-7 cells labelling Cathepsin D with purified <u>ab75852</u> at 1/100. Cells were fixed with 100% methanol and permeabilized with 0.1% Triton X-100. <u>ab150077</u>, an Alexa Fluor[®] 488-conjugated goat anti-rabbit lgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. <u>ab7291</u>, a mouse anti-tubulin (1/1000) and <u>ab150120</u>, an Alexa Fluor[®] 594-conjugated goat anti-mouse lgG (1/1000) were also used.

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

Control 2: $\underline{ab7291}$ (1/1000) and secondary antibody, $\underline{ab150077}$, an Alexa Fluor® 488-conjugated goat anti-rabbit lgG (1/1000).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75852).

<u>ab75852</u> (purified) at 1/20 immunoprecipitating Cathepsin D in SK-BR-3 whole cell lysate.

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

Lane 2 (+): <u>ab75852</u> + SK-BR-3 whole cell lysate (10µg).

Lane 3 (-): Rabbit monoclonal $\lg G$ (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 buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75852).

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75852).

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



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

[EPR3057Y] - BSA and Azide free (ab207549)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75852).

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





Long-term and scalable supply Recombinant





Success from the first experiment
Confirmed specificity

Ethical standards compliant Animal-free production

Anti-Cathepsin D antibody [EPR3057Y] - BSA and Azide free (ab207549)

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

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