abcam

Product datasheet

Anti-Cathepsin L/V/K/H antibody [EPR8011] ab133641

יעלאעבע RabMAb

★★★★★ 6 Abreviews 15 References 画像数 16

製品の概要

製品名 Anti-Cathepsin L/V/K/H antibody [EPR8011]

製品の詳細 Rabbit monoclonal [EPR8011] to Cathepsin L/V/K/H

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, WB, IHC-P, Flow Cyt (Intra), ELISA

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide within Human Cathepsin L/V/K/H aa 100-200. The exact sequence is

proprietary.

Database link: P07711

ポジティブ・コントロール WB: A549, HCT-116, NIH/3T3, PC-12 and HepG2 whole cell lysate (ab7900). IHC-P: Human

kidney tissue. ICC/IF: HepG2 cells.

特記事項 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**.

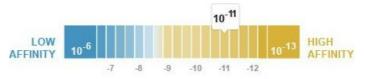
製品の特性

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.

解離定数(KD値) $K_D = 4.40 \times 10^{-11} M$



Learn more about K_D

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル **ウローン名** EPR8011

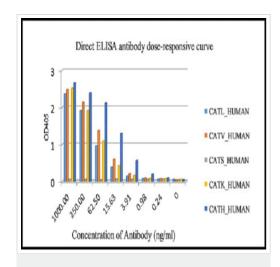
アイソタイプ lgG

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ab133641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
ICC/IF	★★★★ ★ <u>(2)</u>	1/100.
WB	★★★★★ (3)	1/10000. Predicted molecular weight: 38 kDa. For unpurified use at 1/1000 - 1/10000.
IHC-P	★★★★ (1)	1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. For unpurified use at 1/50 - 1/100.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ELISA		Use at an assay dependent concentration.

画像



ELISA - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

Antigen: CATL_HUMAN, CATV_HUMAN, CATS_HUMAN,

CATK_HUMAN, CATH_HUMAN

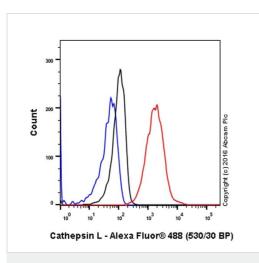
Antigen concentration: 1000ng/ml

Primary antibody concentration range: 0~1000ng/ml

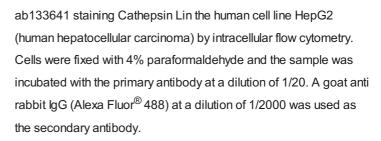
Secondary antibody: Alkaline Phosphatase-conjugated AffiniPure

Goat Anti-Rabbit IgG(H+L)

Secondary antibody concentration: 1/2500

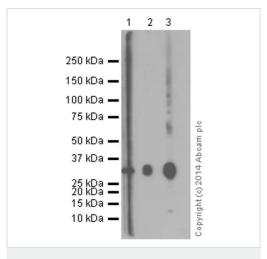


Flow Cytometry (Intracellular) - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)



Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)



Western blot - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

Lane 1: Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) at 1/20 dilution

Lane 2 : Anti-Cathepsin L + V antibody [33/2] (<u>ab6314</u>) at 1/100 dilution

Lane 3: Anti-His tag at 1/10000 dilution

All lanes: Human Cathepsin L recombinant protein fraction

Secondary

Lanes 1 & 3: Peroxidase conjugated Goat Anti-Rabbit lgG, (H+L) at 1/1000 dilution

Lane 2: Rabbit anti-Mouse IgG at 1/2000 dilution

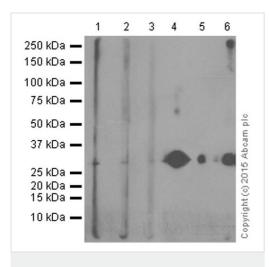
Predicted band size: 38 kDa

Blocking buffer and concentration:5% NFDM/TBST

Diluting buffer and concentration:5% NFDM/TBST

Observed MW:30

Exposure time:3 minutes



Western blot - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

Lane 1 : Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) at 1/20 dilution

Lane 2: Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) at 1/100 dilution

Lane 3: Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) at 1/500 dilution

Lane 4 : Anti-Cathepsin L + V antibody [33/2] (<u>ab6314</u>) at 1/100 dilution

Lane 5 : Anti-Cathepsin L + V antibody [33/2] (ab6314) at 1/1000 dilution

Lane 6: Anti-His tag at 1/10000 dilution

All lanes: Human Cathepsin V recombinant protein fraction

Secondary

Lanes 1-3: Peroxidase conjugated Goat Anti-Rabbit lgG, (H+L) at 1/1000 dilution

Lanes 4-5: Rabbit Anti-Mouse secondary ab at 1/2000 dilution **Lane 6:** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

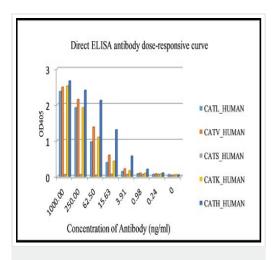
Predicted band size: 38 kDa

Blocking buffer and concentration:5% NFDM/TBST

Diluting buffer and concentration:5% NFDM/TBST

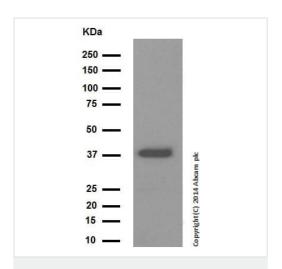
Observed MW:30

Exposure time:3 minutes



ELISA - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

Direct ELISA antigen dose-response curve using purified ab133641. Antigen concentration of 1000ng/mL. Alkaline Phosphatase conjugated AffiniPure goat anti-rabbit lgG(H+L) (1/2500) was used as the secondary antibody.



Western blot - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

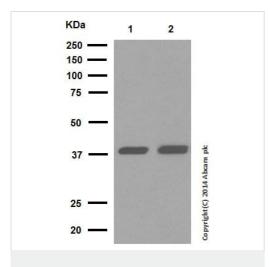
Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) at 1/20000 dilution (purified) + HepG2 cell lysate at 20 μ g

Secondary

Peroxidase conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 38 kDa **Observed band size:** 38 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

All lanes : Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) at 1/10000 dilution (purified)

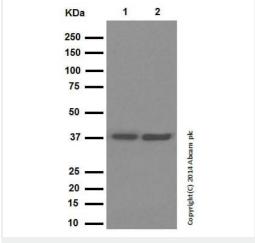
Lane 1 : HCT-116 cell lysate
Lane 2 : A549 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Peroxidase conjugated goat anti-rabbit lgG (H+L) at 1/1000 dilution

Predicted band size: 38 kDa **Observed band size:** 38 kDa



Western blot - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) Blocking and dilution buffer: 5% NFDM/TBST.

All lanes : Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) at 1/20000 dilution (purified)

Lane 1 : NIH/3T3 cell lysate
Lane 2 : PC-12 cell lysate

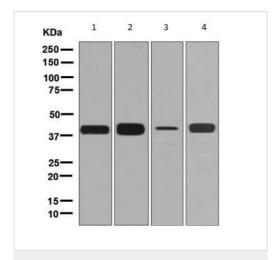
Lysates/proteins at 20 µg per lane.

Secondary

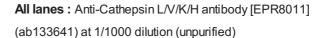
All lanes : Peroxidase conjugated goat anti-rabbit lgG (H+L) at 1/1000 dilution

Predicted band size: 38 kDa **Observed band size:** 38 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)



Lane 1 : A549 cell lysate

Lane 2 : HCT-116 cell lysate

Lane 3 : NIH/3T3 cell lysate

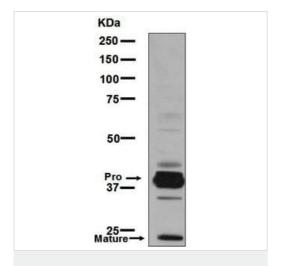
Lane 4 : PC-12 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 38 kDa



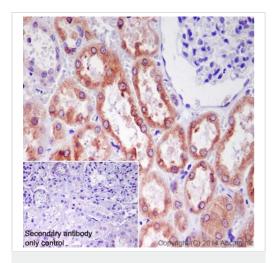
Western blot - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641) at 1/1000 dilution (unpurified) + HepG2 cell lysate at 10 µg

Secondary

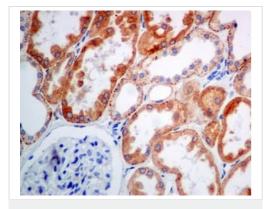
HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 38 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

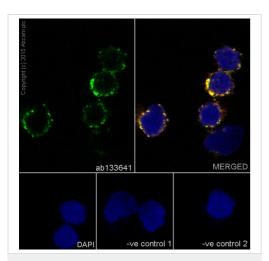
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling Cathepsin L with purified ab133641 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling Cathepsin L with unpurified ab133641 at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

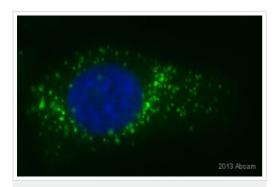


Immunocytochemistry/ Immunofluorescence - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

Immunocytochemistry/Immunofluorescence analysis of HT-29 cells labelling Cathepsin L with purified ab133641 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 lgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/500) and ab150120, an Alexa Fluor[®] 594-conjugated goat antimouse lgG (1/500) were also used.

Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500).

Control 2: $\underline{ab7291}$ (1/1000) and secondary antibody, $\underline{ab150077}$, an Alexa Fluor[®] 488-conjugated goat anti-rabbit lgG (1/500).



Immunocytochemistry/ Immunofluorescence - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

This image is courtesy of an Abreview submitted by Alina Macovei

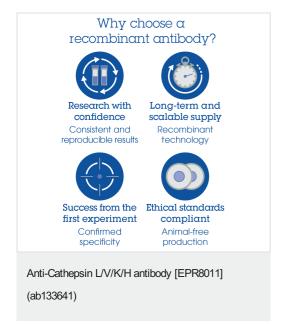
Unpurified ab133641 staining Cathepsin L in Human HepaRG cell by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 1% milk for 30 minutes at room temperature. Samples were incubated with primary antibody (1/1000) for 30 minutes. An Alexa Fluor[®] 488-conjugated Donkey anti-rabbit IgG polyclonal (1/400) was used as the secondary antibody.

Cathepsin L1 Probe Conc EPR8011 ___ 99 nM 4.0 33 nM 3.5 Surface Density (ng/mm²) 11 nM 3.0 2.5 2.0 Fit Summary 1.5 kof [1/(sec-M)] = (1.54 ± 0.02) E5 koff [1/sec] = (6.8 ± 0.3) E-6 Kd [M] = (4.4 ± 0.2) E-11 1.0 0.5 0.0 Fit RMSE [ng/mm²] = 1.9 E-1 Median Baseline Noise [ng/mm²] = 6.7 E-2 Median Association Signal [ng/mm²] = 2.6 E0 Median Associ. Endpoint SNR = 2.7 E1 RMSE / Noise = 2.8 E0 -0.5 -30 0 30 60 90 135 Time (min)

OI-RD Scanning - Anti-Cathepsin L/V/K/H antibody [EPR8011] (ab133641)

Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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