abcam

Product datasheet

Anti-Cystatin C antibody [EPR4413] - BSA and Azide free ab217569

KO VALIDATED Recombinant RabMAb

9 Images

Overview

Product name	Anti-Cystatin C antibody [EPR4413] - BSA and Azide free
Description	Rabbit monoclonal [EPR4413] to Cystatin C - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB **Unsuitable for:** Flow Cyt,ICC/IF or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Cystatin C aa 1-150. The exact sequence is proprietary.
Positive control	WB: Human testis, Caco2, U20S, HeLa, HepG2, and U87-MG lysates, rat heart tissue lysate and mouse thymus tissue lysate. IHC-P: Human brain and kidney tissue, mouse kidney tissue and rat kidney tissue.
General notes	ab217569 is the carrier-free version of **ab109508**. 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 cell-based 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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4413
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab217569 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

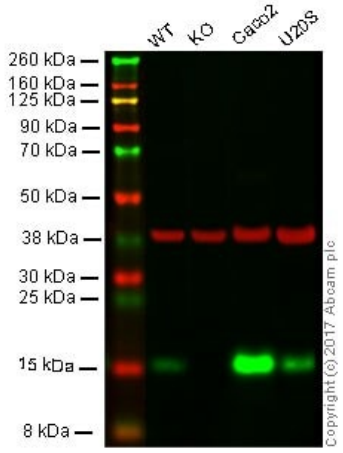
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 13 kDa (predicted molecular weight: 15 kDa).

Application notes Is unsuitable for Flow Cyt,ICC/IF or IP.

Target

Function	As an inhibitor of cysteine proteinases, this protein is thought to serve an important physiological role as a local regulator of this enzyme activity.
Tissue specificity	Expressed in submandibular and sublingual saliva but not in parotid saliva (at protein level). Expressed in various body fluids, such as the cerebrospinal fluid and plasma. Expressed in highest levels in the epididymis, vas deferens, brain, thymus, and ovary and the lowest in the submandibular gland.
Involvement in disease	Amyloidosis 6 Macular degeneration, age-related, 11
Sequence similarities	Belongs to the cystatin family.
Post-translational modifications	The Thr-25 variant is O-glycosylated with a core 1 or possibly core 8 glycan. The signal peptide of the O-glycosylated Thr-25 variant is cleaved between Ala-20 and Val-21.
Cellular localization	Secreted.

Images



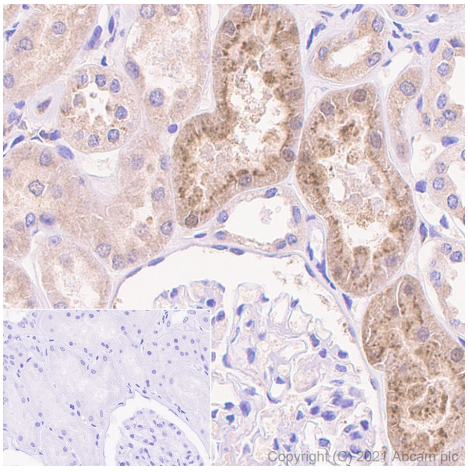
Western blot - Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

This data was developed using **ab109508**, the same antibody clone in a different buffer formulation.

Lane 1: Wild type HAP1 whole cell lysate (20 µg)
Lane 2: CST3 knockout HAP1 whole cell lysate (20 µg)
Lane 3: Caco2 whole cell lysate (20 µg)
Lane 4: U20S whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - **ab109508** observed at 15 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab109508 was shown to specifically react with CST3 when CST3 knockout samples were used. Wild-type and CST3 knockout samples were subjected to SDS-PAGE. Ab109508 and **ab9484** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 10000 dilution and 1/10000 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 1/10000 dilution for 1 hour at room temperature before imaging.

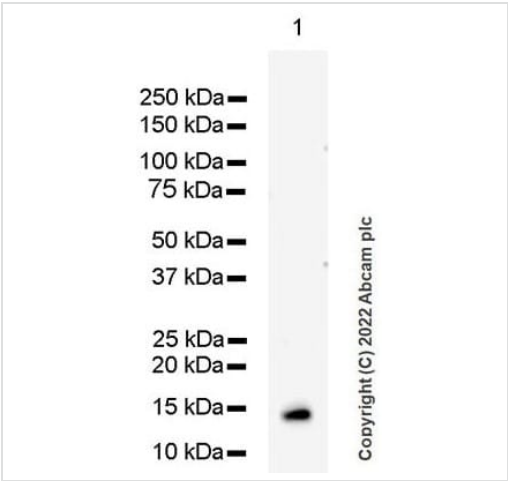


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

Immunohistochemistry analysis of paraffin-embedded human kidney tissue sections labelling Cystatin C with **ab109508** at 1/8000 dilution. The section was incubated with **ab109508** for 30 mins at room temperature. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Positive staining on human kidney tissue. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using **ab109508**, the same antibody clone in a different buffer formulation.



Western blot - Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

Anti-Cystatin C antibody [EPR4413] (**ab109508**) at 1/10000 dilution + Mouse thymus tissue lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 15 kDa

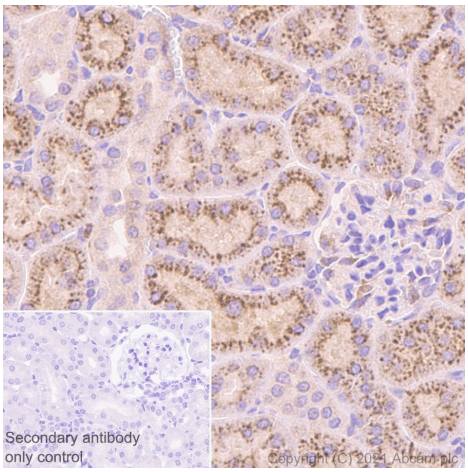
Observed band size: 13 kDa

Exposure time: 3 minutes

Blocking buffer and concentration : 5% NFDM/TBST

Diluting buffer and concentration : 5% NFDM/TBST

This data was developed using **ab109508**, the same antibody clone in a different buffer formulation.

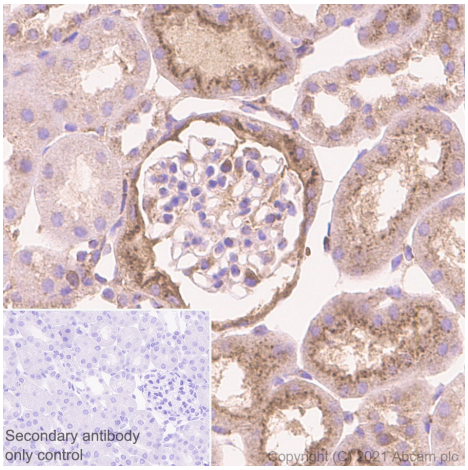


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

Immunohistochemistry analysis of paraffin-embedded rat kidney tissue sections labelling Cystatin C with **ab109508** at 1/8000 dilution. The section was incubated with **ab109508** for 30 mins at room temperature. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Positive staining on rat kidney tissue. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using **ab109508**, the same antibody clone in a different buffer formulation.

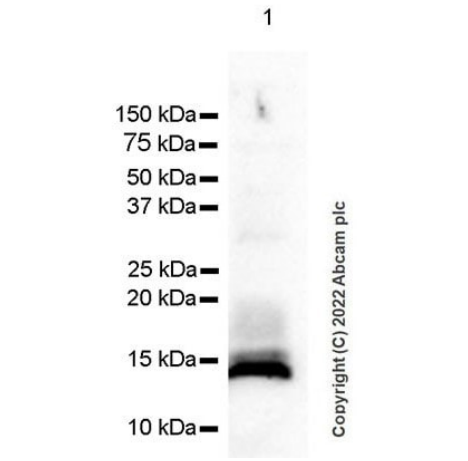


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

Immunohistochemistry analysis of paraffin-embedded mouse kidney tissue sections labelling Cystatin C with **ab109508** at 1/8000 dilution. The section was incubated with **ab109508** for 30 mins at room temperature. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Positive staining on mouse kidney tissue. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using **ab109508**, the same antibody clone in a different buffer formulation.



Western blot - Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

Anti-Cystatin C antibody [EPR4413] (**ab109508**) at 1/10000 dilution + Rat heart tissue lysate at 20 µg

Secondary

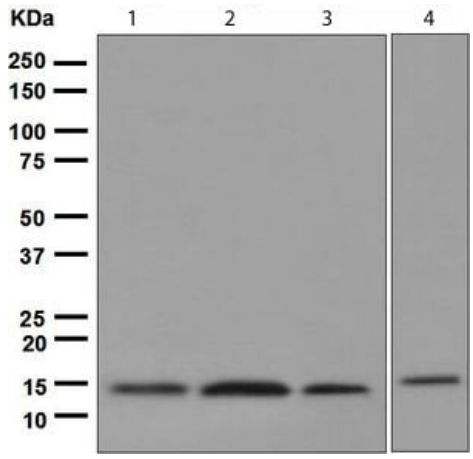
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 15 kDa
Observed band size: 13 kDa

Exposure time: 80 seconds

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

This data was developed using **ab109508**, the same antibody clone in a different buffer formulation.



Western blot - Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

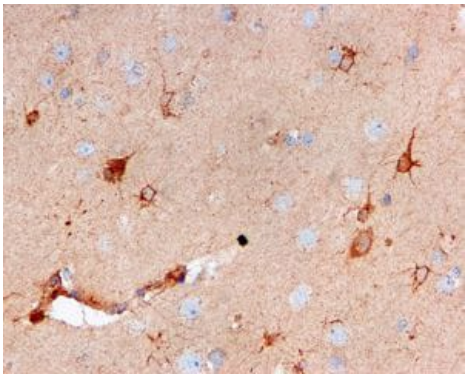
All lanes : Anti-Cystatin C antibody [EPR4413] (**ab109508**) at 1/10000 dilution

Lane 1 : Human testis lysate
Lane 2 : HeLa cell lysate
Lane 3 : HepG2 cell lysate
Lane 4 : U87-MG cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 15 kDa
Observed band size: 13 kDa

This data was developed using **ab109508**, the same antibody clone in a different buffer formulation.

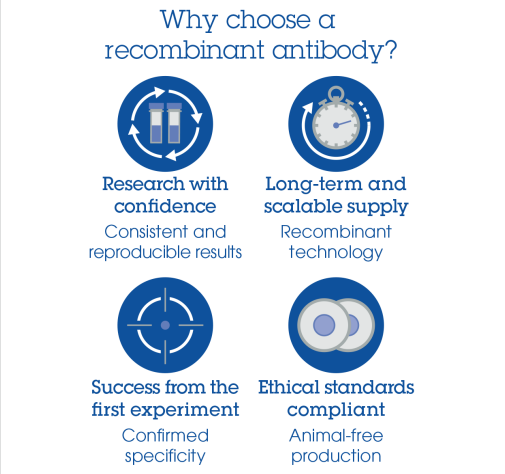


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

Immunohistochemical analysis of paraffin-embedded Human brain tissue using **ab109508** at adilution of 1/250.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109508**).

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



Anti-Cystatin C antibody [EPR4413] - BSA and Azide free (ab217569)

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