# abcam

### Product datasheet

## Anti-Cystatin-B antibody [EPR3931] ab92449





## 5 Images

#### Overview

**Product name** Anti-Cystatin-B antibody [EPR3931]

**Description** Rabbit monoclonal [EPR3931] to Cystatin-B

**Host species** Rabbit

Suitable for: WB, IHC-P **Tested applications** 

Unsuitable for: ICC/IF or IP

Reacts with: Human Species reactivity

Predicted to work with: Rat ...

**Immunogen** Synthetic peptide within Human Cystatin-B aa 50-150. The exact sequence is proprietary.

Positive control WB: HEK293T, U87-MG, JAR, and Human bladder cell lysates. IHC-P: Human colon tissue,

human kidney tissue.

General notes 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**.

Mouse: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

**Purity** Tissue culture supernatant

Clonality Monoclonal
Clone number EPR3931

**Isotype** IgG

#### **Applications**

## The Abpromise guarantee Our Abpromise guarantee covers the use of ab92449 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
WB		1/1000 - 1/10000. Predicted molecular weight: 11 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**Application notes** Is unsuitable for ICC/IF or IP.

#### **Target**

**Function** This is an intracellular thiol proteinase inhibitor. Tightly binding reversible inhibitor of cathepsins L,

H and B.

**Involvement in disease** Defects in CSTB are the cause of progressive myoclonic epilepsy type 1 (EPM1) [MIM:254800].

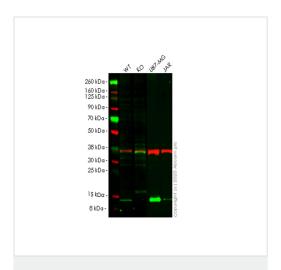
EPM1 is an autosomal recessive disorder characterized by severe, stimulus-sensitive myoclonus and tonic-clonic seizures. The onset, occurring between 6 and 13 years of age, is characterized by convulsions. Myoclonus begins 1 to 5 years later. The twitchings occur predominantly in the proximal muscles of the extremities and are bilaterally symmetrical, although asynchronous. At first small, they become late in the clinical course so violent that the victim is thrown to the floor.

Mental deterioration and eventually dementia develop.

**Sequence similarities** Belongs to the cystatin family.

Cellular localization Cytoplasm. Nucleus.

## **Images**



Western blot - Anti-Cystatin-B antibody [EPR3931] (ab92449)

**All lanes :** Anti-Cystatin-B antibody [EPR3931] (ab92449) at 1/1000 dilution

Lane 1: Wild-type HEK293T cell lysate

Lane 2: CSTB knockout HEK293T cell lysate

Lane 3: U87-MG cell lysate

Lane 4: JAR cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) at 1/10000 dilution

Predicted band size: 11 kDa
Observed band size: 15 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab92449 observed at 15 kDa. Red - loading control **ab8245** observed at 36 kDa.

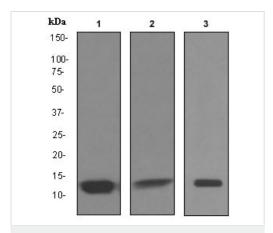
ab92449 Anti-Cystatin-B antibody [EPR3931] was shown to specifically react with Cystatin-B in wild-type HEK293T cells. Loss of signal was observed when knockout cell line <a href="mailto:ab266321">ab266321</a> (knockout cell lysate <a href="mailto:ab257905">ab257905</a>) was used. Wild-type and Cystatin-B knockout samples were subjected to SDS-PAGE. ab92449 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab82445</a>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cystatin-B antibody
[EPR3931] (ab92449)

ab92449, at 1/100 dilution, staining Cystatin-B in paraffinembedded Human colon tissue.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Western blot - Anti-Cystatin-B antibody [EPR3931] (ab92449)

**All lanes :** Anti-Cystatin-B antibody [EPR3931] (ab92449) at 1/1000 dilution

Lane 1 : U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cell lysate

Lane 2: JAR cell lysate

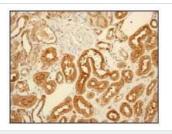
Lane 3: Human bladder tissue lysate

Lysates/proteins at 10 µg per lane.

### **Secondary**

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

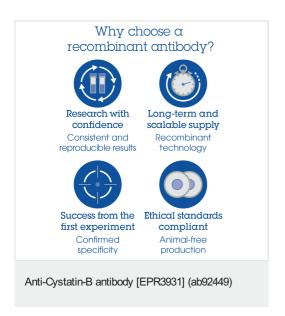
Predicted band size: 11 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cystatin-B antibody
[EPR3931] (ab92449)

ab92449, at 1/100 dilution, staining Cystatin-B in paraffinembedded Human kidney tissue.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



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

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