abcam

Product datasheet

Anti-CLN5 antibody [EPR12197(B)] ab170899

Recombinant RabMAb

* ★ ★ ★ ★ 1 Abreviews 8 References 8 Images

Overview

Product name Anti-CLN5 antibody [EPR12197(B)]

Description Rabbit monoclonal [EPR12197(B)] to CLN5

Host species Rabbit

Specificity The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for

mouse and rat.

Tested applications Suitable for: WB, IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide within Human CLN5 aa 150-250 (Cysteine residue). The exact sequence is

proprietary.

Database link: **O75503**

(Peptide available as ab204069)

Positive control WB: Fetal kidney tissue lysate. T47-D, A431, NIH/3T3, A549, and HepG2 whole cell lysates; IHC:

Human kidney and liver tissue; ICC/IF: A431 and T-47D cells.

General notesThis 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

1

Clonality Monoclonal
Clone number EPR12197(B)

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab170899 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	**** <u>(1)</u>	1/1000 - 1/10000. Predicted molecular weight: 41 kDa.
IHC-P		1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. For unpurified use at 1/100-1/120 dilution. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
ICC/IF		1/50. For unpurified use at 1/100-1/250 dilution.

Target

Tissue specificity

Ubiquitous.

Involvement in disease

Defects in CLN5 are the cause of neuronal ceroid lipofuscinosis type 5 (CLN5) [MIM:256731]; also known as Finnish variant late-infantile neuronal ceroid lipofuscinosis (vLINCL). A form of neuronal ceroid lipofuscinosis. Neuronal ceroid lipofuscinoses are progressive neurodegenerative, lysosomal storage diseases characterized by intracellular accumulation of autofluorescent liposomal material, and clinically by seizures, dementia, visual loss, and/or cerebral atrophy. The lipopigment patterns observed most often in neuronal ceroid lipofuscinosis type 5 comprise mixed combinations of granular, curvilinear, and fingerprint profiles.

Sequence similarities

Belongs to the CLN5 family.

Post-translational modifications

Glycosylated.

Cellular localization

Lysosome.

Images



Western blot - Anti-CLN5 antibody [EPR12197(B)] (ab170899)

All lanes : Anti-CLN5 antibody [EPR12197(B)] (ab170899) at 1/1000 dilution (purified)

Lane 1 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysateLane 2 : HepG2 (Human hepatocellular carcinoma epithelial cell)whole cell lysate

Lane 3 : A549 (Human lung carcinoma epithelial cell) whole cell lysate

Lysates/proteins at 15 µg per lane.

Secondary

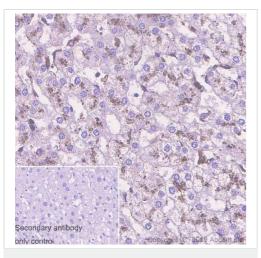
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 41 kDa

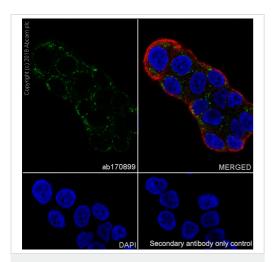
Observed band size: 48-52 kDa

The molecular weights observed are consistent with what have been described in the literature (PMID: 26342652).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue sections labeling CLN5 with purified ab170899 at 1/2000 dilution (0.22 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

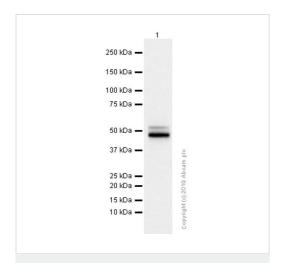


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CLN5 antibody
[EPR12197(B)] (ab170899)



Immunocytochemistry/ Immunofluorescence - Anti-CLN5 antibody [EPR12197(B)] (ab170899)

Immunocytochemistry/ Immunofluorescence analysis of T-47D (Human ductal breast epithelial tumor epithelial cell) cells labeling CLN5 with purified ab170899 at 1/50 dilution (8.7 μ g/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% TritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 μ g/mL). Goat anti rabbit lgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 μ g/mL) dilution. DAPI (blue) was used as the secondary antibody only control.



Western blot - Anti-CLN5 antibody [EPR12197(B)] (ab170899)

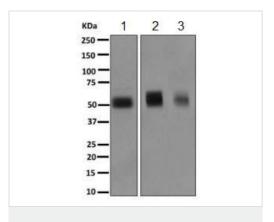
Anti-CLN5 antibody [EPR12197(B)] (ab170899) at 1/5000 dilution (purified) + C6 (Rat glial tumor glial cell) whole cell lysate at 15 μg

Secondary

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

Predicted band size: 41 kDa **Observed band size:** 48-52 kDa

The molecular weights observed are consistent with what have been described in the literature (PMID: 26342652).



Western blot - Anti-CLN5 antibody [EPR12197(B)] (ab170899)

All lanes : Anti-CLN5 antibody [EPR12197(B)] (ab170899) at 1/1000 dilution (unpurified)

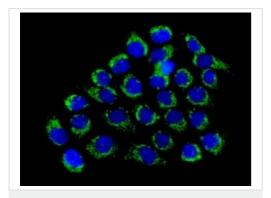
Lane 1 : Fetal kidney lysate Lane 2 : T47-D cell lysate Lane 3 : A431 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

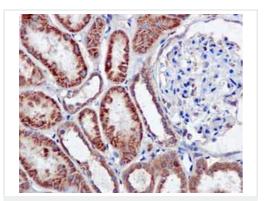
All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 41 kDa



Immunocytochemistry/ Immunofluorescence - Anti-CLN5 antibody [EPR12197(B)] (ab170899)

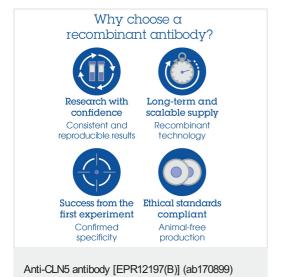
Immunofluorescent analysis of A431 cells labeling CLN5 with unpurified ab170899 at 1/100 dilution (green). DAPI nuclear staining (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CLN5 antibody
[EPR12197(B)] (ab170899)

Immunohistochemical analysis of paraffin-embedded
Human kidney tissue labeling CLN5 with unpurified ab170899 at 1/100 dilution.

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



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.com/abpromise or contact our technical team.

Terms and conditions

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