

Product datasheet

Anti-ASPA antibody [EPR22072] ab223269

Recombinant RabMAb

9 Images

Overview

<b>Product name</b>	Anti-ASPA antibody [EPR22072]
<b>Description</b>	Rabbit monoclonal [EPR22072] to ASPA
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, IHC-Fr, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human ASPA aa 50-300. The exact sequence is proprietary. Database link: <a href="#">P45381</a>
<b>Positive control</b>	WB: Human brain, fetal kidney and testis lysate. Mouse brain lysate. Rat brain and testis lysate. IHC-P: Mouse and human cerebrum, rat cerebral cortex and human kidney tissues. IHC-Fr: Rat and mouse cerebrum tissues. IP: Human brain lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR22072

Isotype

IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab223269** 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. Detects a band of approximately 36 kDa (predicted molecular weight: 36 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/100. Perform heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
IP		1/30.

## Target

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### Function

Catalyzes the deacetylation of N-acetylaspartic acid (NAA) to produce acetate and L-aspartate. NAA occurs in high concentration in brain and its hydrolysis NAA plays a significant part in the maintenance of intact white matter. In other tissues it act as a scavenger of NAA from body fluids.

### Tissue specificity

Brain white matter, skeletal muscle, kidney, adrenal glands, lung and liver.

### Involvement in disease

Defects in ASPA are the cause of Canavan disease (CAND) [MIM:271900]; also known as spongy degeneration of the brain. CAND is a rare neurodegenerative condition of infancy or childhood characterized by white matter vacuolization and demyelination that gives rise to a spongy appearance. The clinical features are onset in early infancy, atonia of neck muscles, hypotonia, hyperextension of legs and flexion of arms, blindness, severe mental defect, megaloccephaly, and death by 18 months on the average.

### Sequence similarities

Belongs to the AspA/AstE family. Aspartoacylase subfamily.

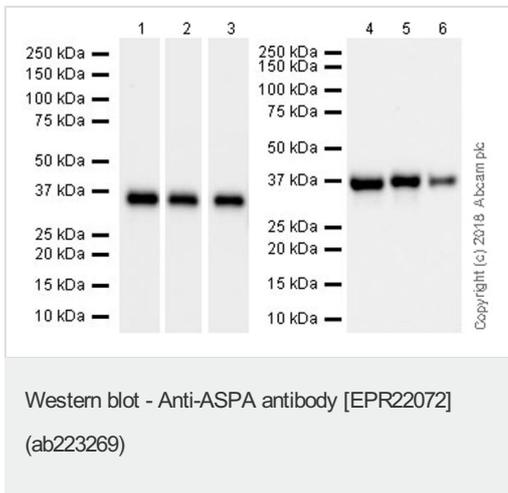
### Cellular localization

Cytoplasm. Nucleus.

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## Images

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**All lanes** : Anti-ASPA antibody [EPR22072] (ab223269) at 1/1000 dilution

- Lane 1** : Human brain lysate
- Lane 2** : Human fetal kidney lysate
- Lane 3** : Human testis lysate
- Lane 4** : Mouse brain lysate
- Lane 5** : Rat brain lysate
- Lane 6** : Rat testis lysate

Lysates/proteins at 20 µg per lane.

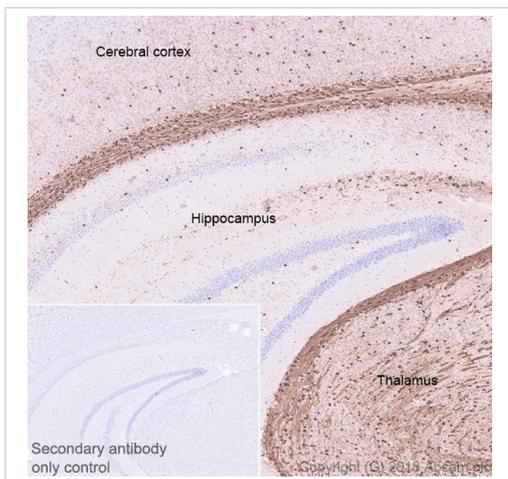
**Secondary**

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size:** 36 kDa  
**Observed band size:** 36 kDa

**Exposure time** : Lanes 1-3: 15 seconds; Lanes 4-6: 8 seconds.

Blocking/Dilution buffer: 5% NFDm/TBST.

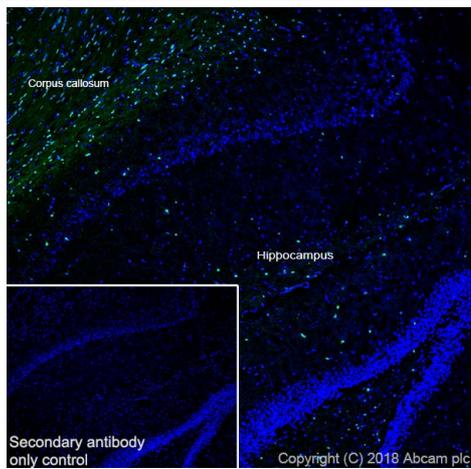


Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling ASPA with ab223269 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear and cytoplasmic staining on gliocytes of mouse cerebrum (PMID: 29116375). Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ASPA antibody [EPR22072] (ab223269)

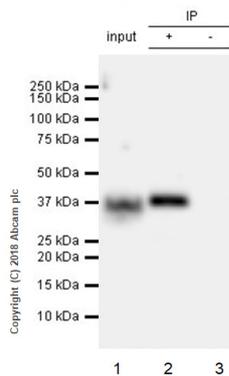


Immunohistochemistry (Frozen sections) - Anti-ASPA antibody [EPR22072] (ab223269)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen rat cerebrum tissue labeling ASPA with ab223269 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Nuclear and cytoplasmic staining on gliocytes of rat cerebrum. (PMID: 29116375).

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



Immunoprecipitation - Anti-ASPA antibody [EPR22072] (ab223269)

ASPA was immunoprecipitated from 0.35 mg human brain lysate with ab223269 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab223269 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

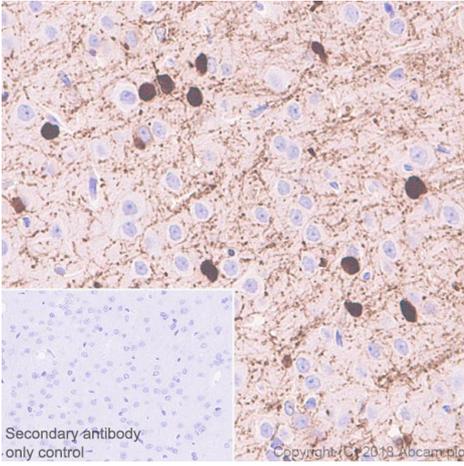
**Lane 1:** Human brain lysate 10 µg (Input).

**Lane 2:** ab223269 IP in human brain lysate.

**Lane 3:** Rabbit monoclonal IgG (ab172730) instead of ab223269 in human brain lysate.

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: 10 seconds.

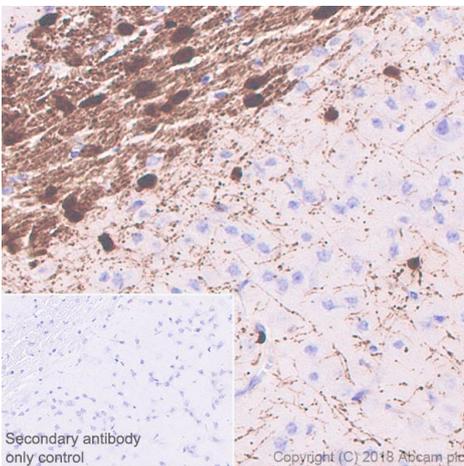


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ASPA antibody [EPR22072] (ab223269)

Immunohistochemical analysis of paraffin-embedded rat cerebral cortex tissue labeling ASPA with ab223269 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear and cytoplasmic staining on gliocytes of rat cerebral cortex (PMID: 29116375). Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

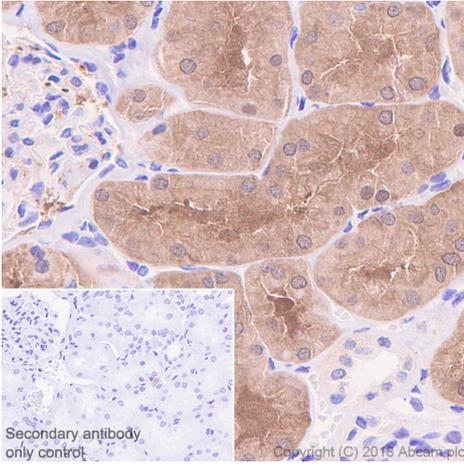


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ASPA antibody [EPR22072] (ab223269)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling ASPA with ab223269 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear and cytoplasmic staining on gliocytes of mouse cerebrum (PMID: 29116375). Counterstained with hematoxylin.

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Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

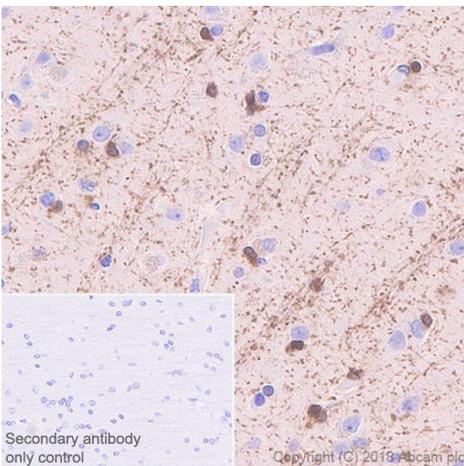


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ASPA antibody [EPR22072] (ab223269)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling ASPA with ab223269 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear and cytoplasmic staining mainly on proximal renal tubules of human kidney (PMID: 16935940). Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

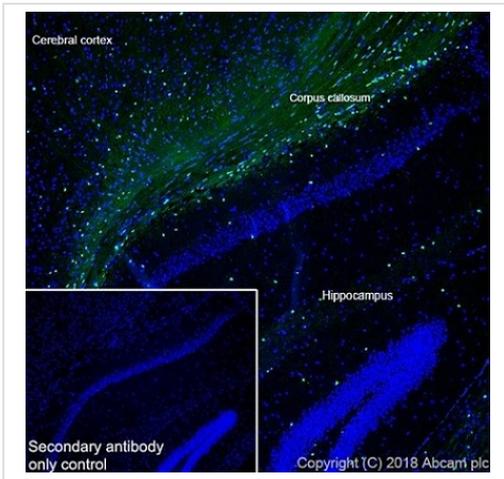


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ASPA antibody [EPR22072] (ab223269)

Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling ASPA with ab223269 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear and cytoplasmic staining on gliocytes of human cerebrum (PMID: 29116375). Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

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Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse cerebrum tissue labeling ASPA with ab223269 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Nuclear and cytoplasmic staining on gliocytes of mouse cerebrum (PMID: 29116375).

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Immunohistochemistry (Frozen sections) - Anti-ASPAs antibody [EPR22072] (ab223269)

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

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