# abcam

## Product datasheet

## Anti-GALC antibody [EPR23598-126] ab240638

Recombinant RabMAb

#### 6 Images

#### Overview

**Product name** Anti-GALC antibody [EPR23598-126]

Rabbit monoclonal [EPR23598-126] to GALC **Description** 

**Host species** Rabbit

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

Unsuitable for: Flow Cyt,ICC/IF,IHC-Fr or IP

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: PC-12 whole cell lysate; Mouse brain and testis lysates; Rat brain and testis lysates; Human

brain lysate. IHC-P: Human cerebrum tissue; Mouse cerebrum tissue; Rat cerebrum 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**.

#### **Properties**

**Form** 

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 pH: 7.2

Preservative: 0.01% Sodium azide

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

**Purity** Protein A purified

Clonality Monoclonal

Clone number EPR23598-126

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab240638 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. Predicted molecular weight: 77 kDa.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

## **Application notes**

Is unsuitable for Flow Cyt,ICC/IF,IHC-Fr or IP.

#### **Target**

**Function** Hydrolyzes the galactose ester bonds of galactosylceramide, galactosylsphingosine,

lactosylceramide, and monogalactosyldiglyceride. Enzyme with very low activity responsible for the lysosomal catabolism of galactosylceramide, a major lipid in myelin, kidney and epithelial cells

of small intestine and colon.

Tissue specificity Detected in urine. Detected in testis, brain and placenta (at protein level). Detected in kidney and

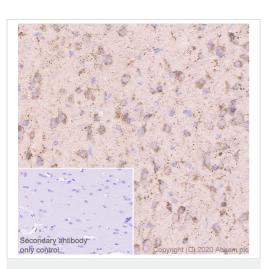
liver.

Involvement in disease Leukodystrophy, globoid cell

**Sequence similarities** Belongs to the glycosyl hydrolase 59 family.

Cellular localization Lysosome.

## Images

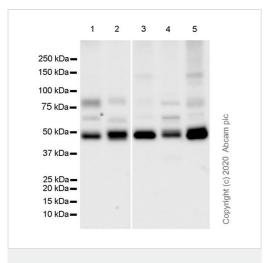


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GALC antibody
[EPR23598-126] (ab240638)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling GALC with ab240638 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on rat cerebrum (PMID: 15987783). The section was incubated with ab240638 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Western blot - Anti-GALC antibody [EPR23598-126] (ab240638)

**All lanes :** Anti-GALC antibody [EPR23598-126] (ab240638) at 1/1000 dilution

Lane 1 : PC-12 (rat adrenal gland pheochromocytoma ) whole cell

Lane 2: Mouse brain tissue lysate

Lane 3: Rat brain tissue lysate

Lane 4: Mouse testis tissue lysate

Lane 5: Rat testis tissue lysate

Lysates/proteins at 20 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 77 kDa

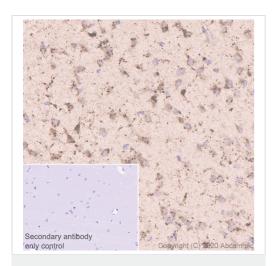
Observed band size: 140,50,70,80 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

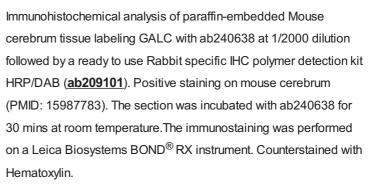
The precursor form of GALC (80 KD) is processed in lysosomes into N-terminal fragment (70 and 50 KD) and C-terminal fragment (30 KD), the observed band at 140 KD is the aggregate GALC, which is consistent to the literature(PMID: 7852280;PMID:

9760019; PMID: 20410102).

Exposure time: 37 seconds.

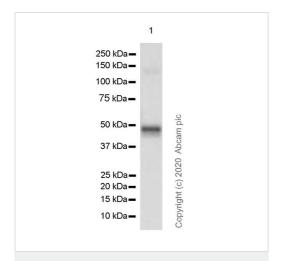


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GALC antibody
[EPR23598-126] (ab240638)



Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Western blot - Anti-GALC antibody [EPR23598-126] (ab240638)

Anti-GALC antibody [EPR23598-126] (ab240638) at 1/1000 dilution + Human brain tissue lysate at 20  $\mu g$ 

#### Secondary

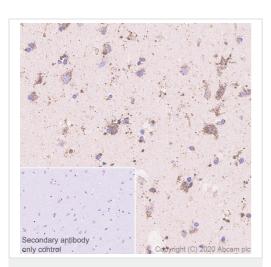
VeriBlot for IP secondary antibody(HRP)(ab131366) at 1/1000 dilution

**Predicted band size:** 77 kDa **Observed band size:** 50 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST This blot was developed using a higher sensitivity ECL substrate.

The precursor form of GALC (80 KD) is processed in lysosomes into N-terminal fragment (50 KD), which is consistent to the literature(PMID: 7852280;PMID: 9760019).

Exposure time: 3 minutes.

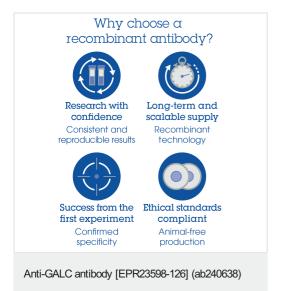


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GALC antibody
[EPR23598-126] (ab240638)

Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labeling GALC with ab240638 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on human cerebrum (PMID: 15987783). The section was incubated with ab240638 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

## Terms and conditions

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