abcam

Product datasheet

Anti-ABAT/GABA-T antibody [EPR4433] ab108249

Recombinant RabMAb

★★★★★ **2 Abreviews**   **8 References**   8 Images

Overview

Product name	Anti-ABAT/GABA-T antibody [EPR4433]
Description	Rabbit monoclonal [EPR4433] to ABAT/GABA-T
Host species	Rabbit
Specificity	Mouse cross reactivity tested by western blot and IHC. Rat cross reactivity tested by western blot only.
Tested applications	**Suitable for:** WB, IP, IHC-P **Unsuitable for:** Flow Cyt or ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HepG2 cell lysate, SH-SY5Y cell lysae, Human fetal liver tissue lysate, rat brain tissue lysate, rat kidney tissue lysate, mouse brain tissue lysate, Human liver 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	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	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR4433
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab108249 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	⭐⭐⭐⭐⭐ (2)	1/10000 - 1/50000. Predicted molecular weight: 56 kDa.
IP		1/10 - 1/100.
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. Antigen retrieval is recommended **For unpurified use at 1/250 - 1/500 dilution.**

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

Target

Function	Catalyzes the conversion of gamma-aminobutyrate and L-beta-aminoisobutyrate to succinate semialdehyde and methylmalonate semialdehyde, respectively. Can also convert delta-aminovalerate and beta-alanine.
Tissue specificity	Liver > pancreas > brain > kidney > heart > placenta.
Involvement in disease	Defects in ABAT are a cause of gamma-aminobutyrate transaminase deficiency (GABA-AT deficiency) [MIM:613163]. The phenotype of this deficiency includes psychomotor retardation, hypotonia, hyperreflexia, lethargy, refractory seizures, and EEG abnormalities.
Sequence similarities	Belongs to the class-III pyridoxal-phosphate-dependent aminotransferase family.
Cellular localization	Mitochondrion matrix.

Images

Western blot - Anti-ABAT/GABA-T antibody [EPR4433] (ab108249)

All lanes : Anti-ABAT/GABA-T antibody [EPR4433] (ab108249) at 1/10000 dilution (Purified)

Lane 1 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates with 5% NFDM /TBST

Lane 2 : SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates with 5% NFDM /TBST

Lane 3 : Mouse brain lysates with 5% NFDM /TBST
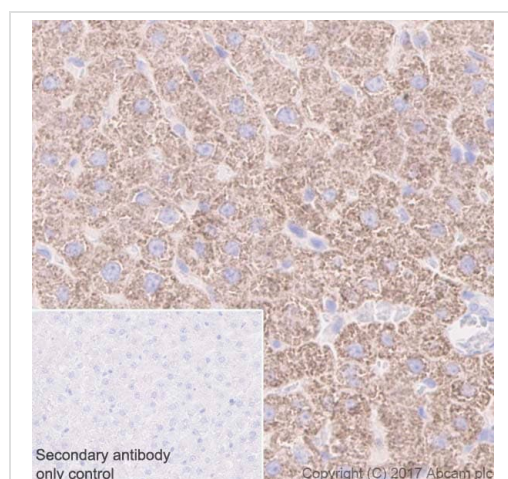
Lane 4 : Rat brain lysates with 5% NFDM /TBST

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)
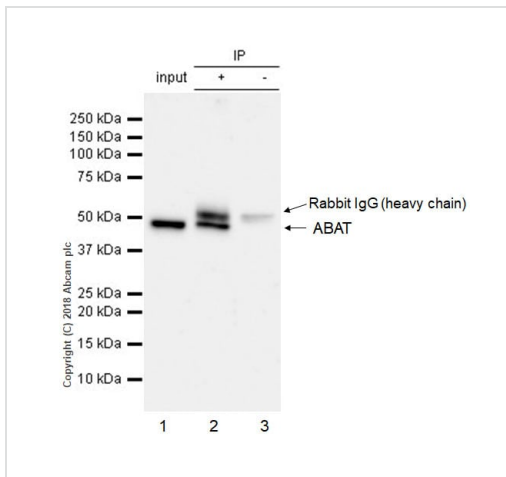
Predicted band size: 56 kDa

Observed band size: 50 kDa

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ABAT/GABA-T antibody [EPR4433] (ab108249)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat liver tissue sections labeling ABAT/GABA-T with Purified ab108249 at 1:1000 dilution (0.9 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0)

Immunoprecipitation - Anti-ABAT/GABA-T antibody [EPR4433] (ab108249)

ab108249 (purified) at 1:40 dilution (2μg) immunoprecipitating ABAT/GABA-T in HepG2 whole cell lysate.
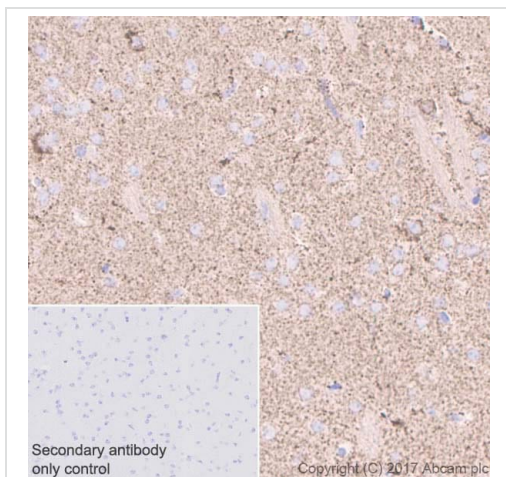
Lane 1 (input): HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate 10μg

Lane 2 (+): ab108249 & HepG2 whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab108249 in HepG2 whole cell lysate
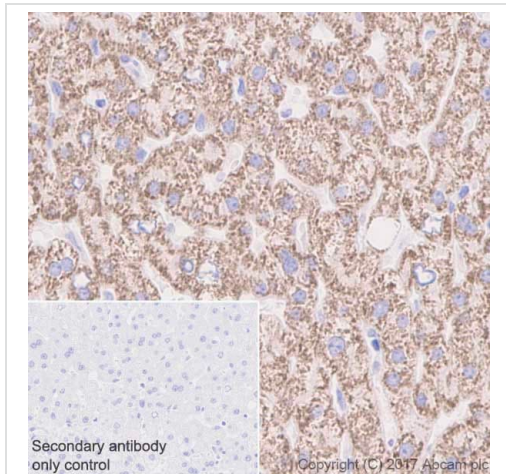
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

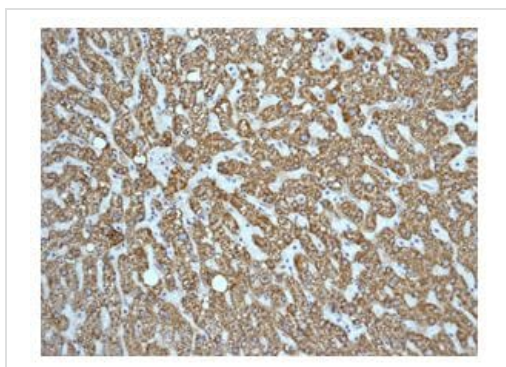Blocking and diluting buffer: 5% NFDM/TBST.

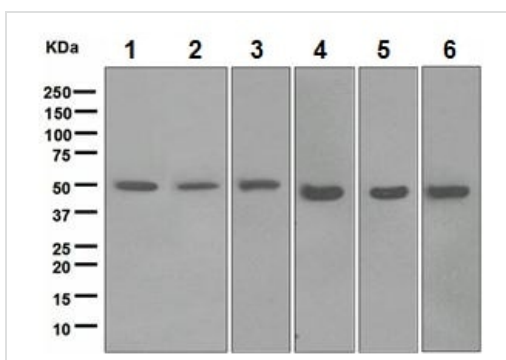Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ABAT/GABA-T antibody [EPR4433] (ab108249)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse cerebrum tissue sections labeling ABAT/GABA-T with Purified ab108249 at 1:1000 dilution (0.9 μg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling ABAT/GABA-T with Purified ab108249 at 1:1000 dilution (0.9 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ABAT/GABA-T antibody [EPR4433] (ab108249)

Unpurified ab108249, at 1/250 dilution, staining ABAT/GABA-T in Human liver tissue by immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ABAT/GABA-T antibody [EPR4433] (ab108249)

Western blot - Anti-ABAT/GABA-T antibody [EPR4433] (ab108249)

All lanes : Anti-ABAT/GABA-T antibody [EPR4433] (ab108249) (unpurified)

Lane 1 : HepG2 cell lysate
Lane 2 : SH-SY5Y cell lysate
Lane 3 : Human fetal liver tissue lysate
Lane 4 : rat brain tissue lysate
Lane 5 : rat kidney tissue lysate
Lane 6 : mouse brain tissue lysate

Predicted band size: 56 kDa

Why choose a recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-ABAT/GABA-T antibody [EPR4433] (ab108249)

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

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