abcam

Product datasheet

Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] ab109364

Recombinant RabMAb

★★★★☆ **12 Abreviews**   **52 References**   9 Images

Overview

Product name	Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805]
Description	Rabbit monoclonal [EPR4805] to GABARAP+GABARAPL1+GABARAPL2
Host species	Rabbit
Specificity	This antibody will also recognize related targets GABARAPL1 and GABARAPL2:GABARAPL1: pBLAST 100% immunogen homology AND Abreview 38385 WB data GABARAPL2: pBLAST 93% homology (only 1aa gap of 14aa) AND Abreview 38385 WB data
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF **Unsuitable for:** IP
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Silk worm ⚠
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Fetal kidney lysate, fetal brain lysate, SH-SY5Y cell lysate, HepG2 whole cell lysate (**ab7900**), human brain tissue, HeLa cells.
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. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20

Preservative: 0.01% Sodium azide
Constituents: 40% Glycerol (glycerin, glycerine), PBS, 0.05% BSA

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4805
Isotype	IgG

Applications

The Abpromise guarantee   Our **Abpromise guarantee** covers the use of ab109364 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
Flow Cyt (Intra)		1/20.
WB	★★★★☆ (7)	1/1000 - 1/10000. Predicted molecular weight: 14 kDa.
IHC-P	★★★★★ (1)	1/500 - 1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Antigen retrieval is recommended. Ssee **IHC antigen retrieval protocols**. The mouse and rat recommendation is based on the WB results.
ICC/IF	★★★★★ (1)	1/100 - 1/500.

**Application notes**   Is unsuitable for IP.

Target

Relevance   GABARAP: Ubiquitin-like modifier that plays a role in intracellular transport of GABA(A) receptors and its interaction with the cytoskeleton. Involved in apoptosis. Involved in autophagy. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation.
GABARAPL1: Ubiquitin-like modifier that increases cell-surface expression of kappa-type opioid receptor through facilitating anterograde intracellular trafficking of the receptor. Involved in formation of autophagosomal vacuoles. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation.
GABARAPL2: Ubiquitin-like modifier involved in intra-Golgi traffic. Modulates intra-Golgi transport through coupling between NSF activity and SNAREs activation. It first stimulates the ATPase activity of NSF which in turn stimulates the association with GOSR1 (By similarity). Involved in autophagy. Plays a role in mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation.

Images
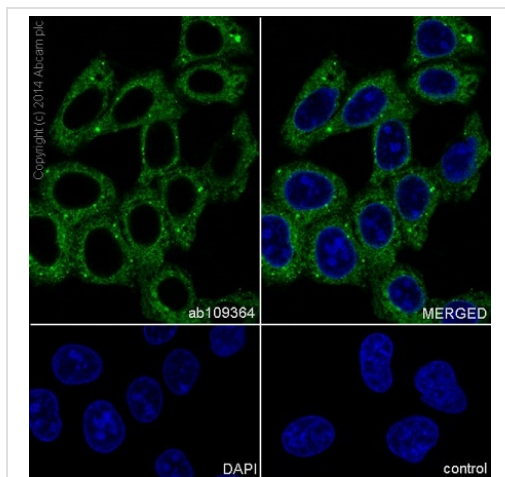
Immunocytochemistry/ Immunofluorescence - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma) labelling GABARAP+GABARAPL1+GABARAPL2 with purified ab109364 at 1/500. Cells were fixed with 4% PFA and permeabilized with 0.1% Triton X-100. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody (Ab150077). Nuclei counterstained with DAPI (blue).
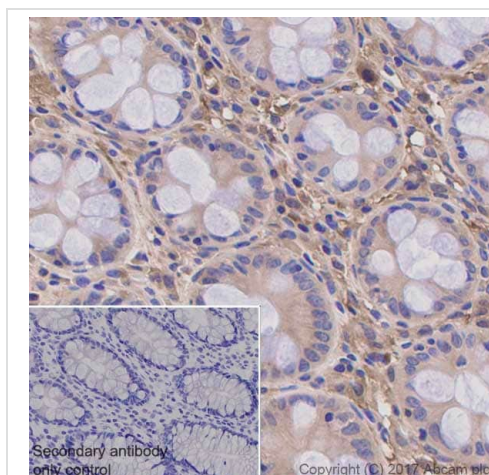

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue sections labeling GABARAP+GABARAPL1+GABARAPL2 with Purified ab109364 at 1:500 dilution (0.29 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, pH 9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.
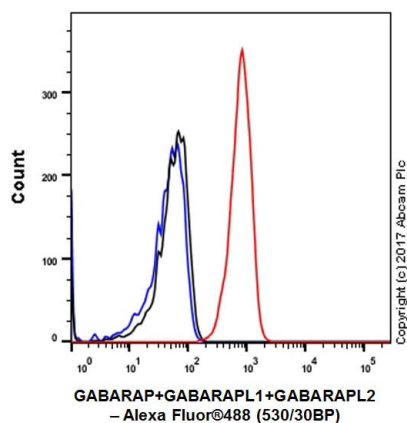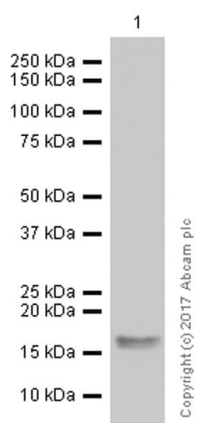
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling GABARAP+GABARAPL1+GABARAPL2 with purified ab109364 at 1/20 dilution (10 ug/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilized with 90% methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

Flow Cytometry (Intracellular) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364) at 1/5000 dilution (purified) + Rat kidney lysates at 20 µg
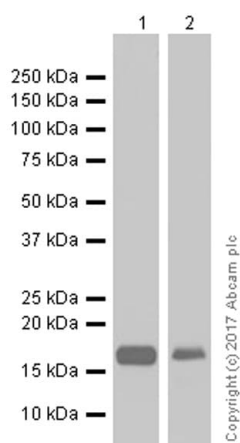
Secondary
Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 14 kDa
Observed band size: 17 kDa

Western blot - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

Blocking and diluting buffer: 5% NFDM/TBST

Western blot - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

All lanes : Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364) at 1/5000 dilution (purified)

Lane 1 : Mouse kidney lysates

Lane 2 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates
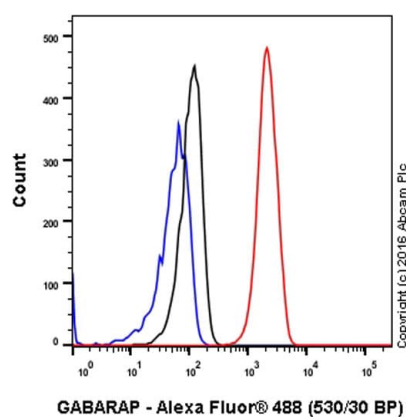
Lysates/proteins at 20 μg per lane.

Secondary

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

Predicted band size: 14 kDa
Observed band size: 17 kDa
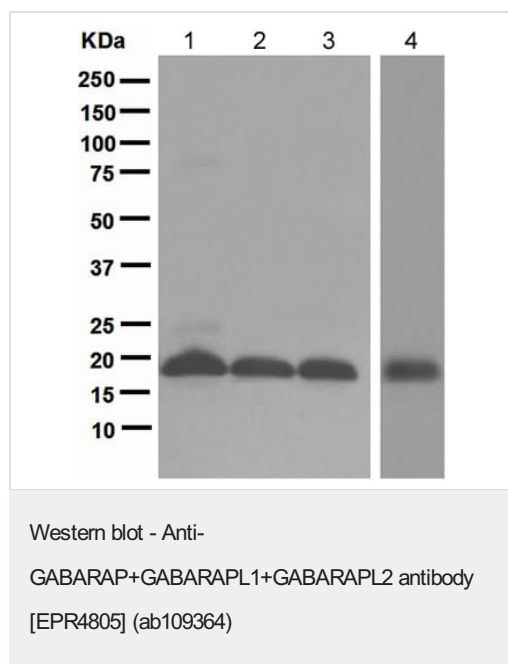
Blocking and diluting buffer: 5% NFDM/TBST

Flow Cytometry (Intracellular) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

Unpurified ab109364 staining GABARAP+GABARAPL1+GABARAPL2 in the human cell line HeLa (human cervix adenocarcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde, permeabilized with 90% methanol and the sample was incubated with the primary antibody at a dilution of 1/20. A goat anti rabbit IgG (Alexa Fluorr® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

Western blot - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

All lanes : Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364) at 1/1000 dilution (unpurified)

Lane 1 : Fetal kidney lysate

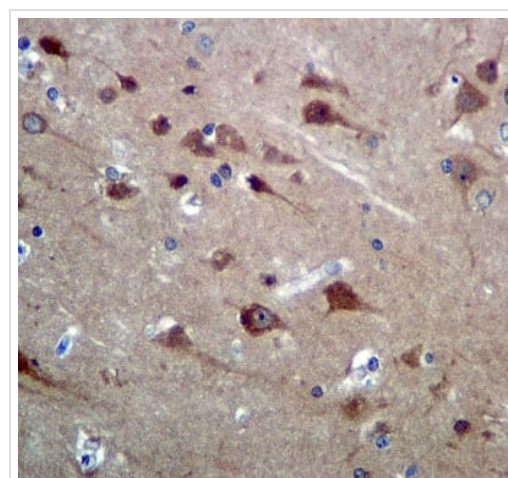**Lane 2 :** SH-SY5Y cell lysate

Lane 3 : HepG2 cell lysate

Lane 4 : Fetal brain lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 14 kDa

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

Unpurified ab109364, at 1/500, staining GABARAP+GABARAPL1+GABARAPL2 in Human brain tissue by immunohistochemistry.

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-GABARAP+GABARAPL1+GABARAPL2

antibody [EPR4805] (ab109364)

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

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