abcam

Product datasheet

Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] - BSA and Azide free ab225535

Recombinant RabMAb

2 References 6 Images

Overview

Product name	Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] - BSA and Azide free
Description	Rabbit monoclonal [EPR4805] to GABARAP+GABARAPL1+GABARAPL2 - BSA and Azide free
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	IHC-P: Human colon tissue; Human brain tissue. ICC/IF: HeLa cells. Flow Cyt (Intra): HeLa cells.
General notes	ab225535 is the carrier-free version of **ab109364**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4805
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab225535 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)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 14 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. The mouse and rat recommendation is based on the WB results. This antibody may not be suitable for IHC with mouse or rat samples.
ICC/IF		Use at an assay dependent concentration.

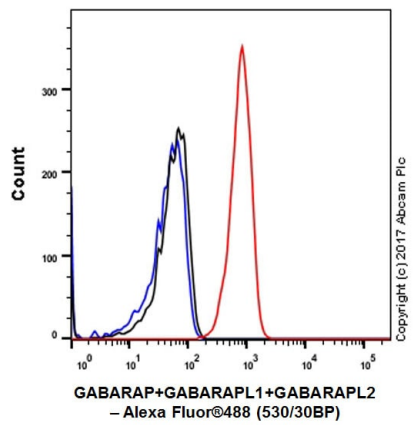
Application notes Is unsuitable for IP.

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.

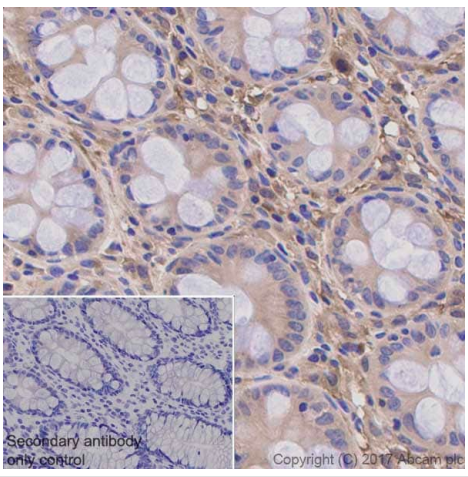
Images



Flow Cytometry (Intracellular) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] - BSA and Azide free (ab225535)

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 Fluor® 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).

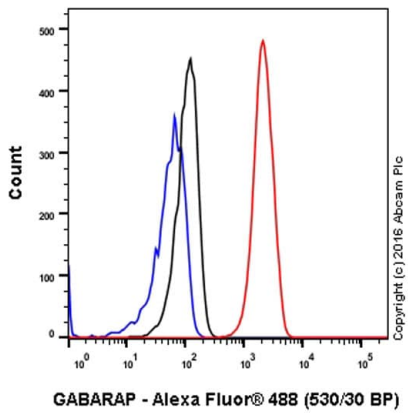
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109364**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] - BSA and Azide free (ab225535)

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, pH9.0. 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109364**).



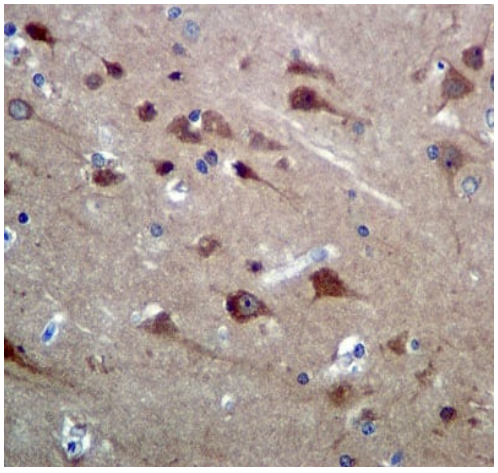
Flow Cytometry (Intracellular) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] - BSA and Azide free (ab225535)

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 Fluor® 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)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109364**).

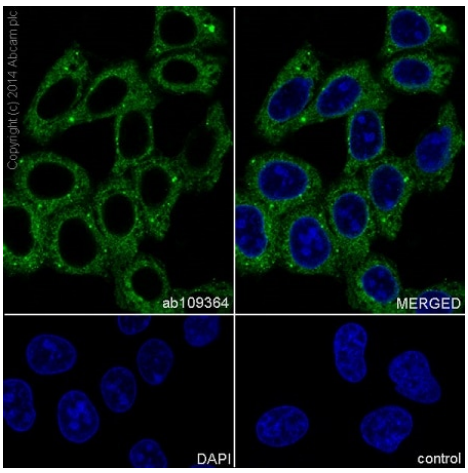


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] - BSA and Azide free (ab225535)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109364**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] - BSA and Azide free (ab225535)

This ICC data was generated using the same anti-GABARAP+GABARAPL1/2 antibody clone [EPR4805] in a different buffer formulation (cat# **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).

Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] - BSA and Azide free (ab225535)

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