# abcam

# Product datasheet

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



★★★★★ 12 Abreviews 52 References 9 图像

概述

免疫原

产品名称 Anti-GABARAP+GABARAPL1+GABARAPL2抗体[EPR4805]

描述 兔单克隆抗体[EPR4805] to GABARAP+GABARAPL1+GABARAPL2

**宿主** Rabbit

特异性 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

经测试应用 适用于: Flow Cyt (Intra), WB, IHC-P, ICC/IF

不适用于: №

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Silk worm 🔷

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

**阳性**对照 Fetal kidney lysate, fetal brain lysate, SH-SY5Y cell lysate, HepG2 whole cell lysate (ab7900),

human brain tissue, HeLa cells.

常规说明 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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

性能

形式 Liquid

**存放说明** 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.

**存储溶液** pH: 7.20

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Preservative: 0.01% Sodium azide

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

纯度 Protein A purified

**克隆** 单克隆

**克隆编号** EPR4805

**同种型** IgG

#### 应用

# The Abpromise guarantee Abpromise™承诺保证使用ab109364于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/20.
WB	<b>★★★★ (7)</b>	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	<b>★★★★★ (1)</b>	1/100 - 1/500.

应用说明

Is unsuitable for IP.

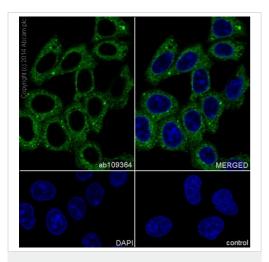
# 靶标

#### 相关性

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.

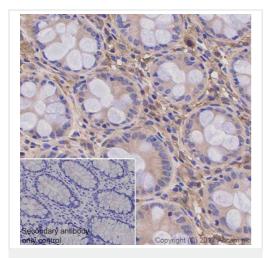
GABARAPL1: Ubiquitin-like modifier that increases cell-surface expression of kappa-type opioid receptor through facilitating anterograde intracellular trafficking of the receptor. Involved in formation of autophagosomal vacuoles. Whereas LC3s are involved in elongation of the phagophore membrane, the 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.



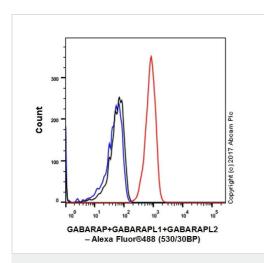
Immunocytochemistry/ Immunofluorescence - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

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 lgG (1/1000) was used as the secondary antibody (Ab150077). Nuclei counterstained with DAPI (blue).

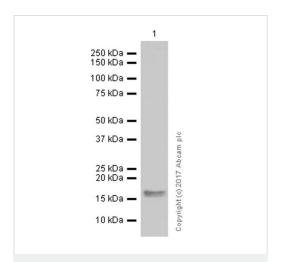


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

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.



Flow Cytometry (Intracellular) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364) 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 lgG (Alexa Fluorr® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



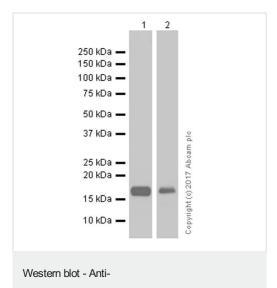
Western blot - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364) Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364) at 1/5000 dilution (purified) + Rat kidney lysates at 20 µg

#### Secondary

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

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

Blocking and diluting buffer: 5% NFDM/TBST



**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.

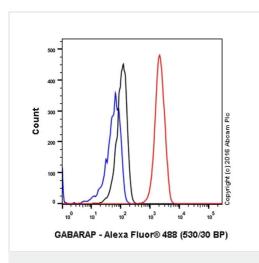
# Secondary

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

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



Blocking and diluting buffer: 5% NFDM/TBST



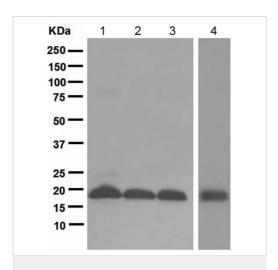
Unpurified ab109364 staining

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<sup>®</sup> 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)

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



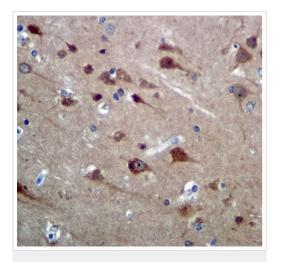
Western blot - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (ab109364)

**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

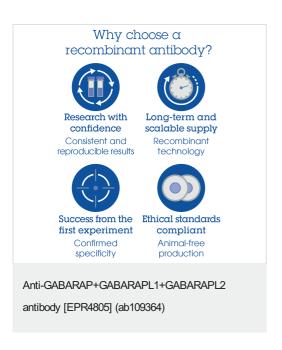
Lysates/proteins at 10 µg per lane.

Predicted band size: 14 kDa



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

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



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