

## Product datasheet

# Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (HRP) $\alpha$ b201813

Recombinant RabMAb

2 Images

### Overview

<b>Product name</b>	Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (HRP)
<b>Description</b>	Rabbit monoclonal [EPR4805] to GABARAP+GABARAPL1+GABARAPL2 (HRP)
<b>Host species</b>	Rabbit
<b>Conjugation</b>	HRP
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	within Human GABARAP+GABARAPL1+GABARAPL2 aa 1-100. The exact sequence is proprietary.
<b>Positive control</b>	WB: SHSY-5Y whole cell lysate, human fetal brain tissue. IHC: Human normal testis tissue.
<b>General notes</b>	Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .  This product is a <a href="#">recombinant rabbit monoclonal antibody</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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. Store In the Dark.
<b>Storage buffer</b>	pH: 7.4 Preservative: 0.1% Proclin Constituents: 30% Glycerol, PBS, 1% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4805
<b>Isotype</b>	IgG

### Applications

## Applications

---

Our [Abpromise guarantee](#) covers the use of **ab201813** 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
IHC-P		1/100 - 1/250. Perform antigen retrieval
WB		1/5000. Detects a band of approximately 15 kDa (predicted molecular weight: 14 kDa).

## Target

---

### Relevance

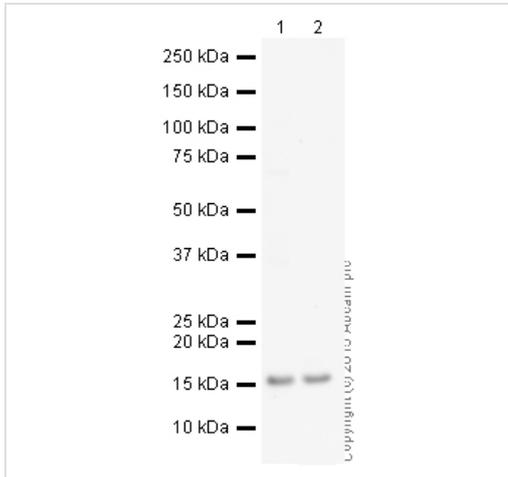
**GABARAP:** Ubiquitin-like modifier that plays a role in intracellular transport of GABA(A) receptors and its interaction with the cytoskeleton. Involved in apoptosis. Involved in autophagy. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential 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

---



Western blot - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (HRP) (ab201813)

**All lanes :** Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (HRP) (ab201813) at 1/5000 dilution

**Lane 1 :** SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate

**Lane 2 :** Brain (Human) Tissue Lysate - fetal normal tissue

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

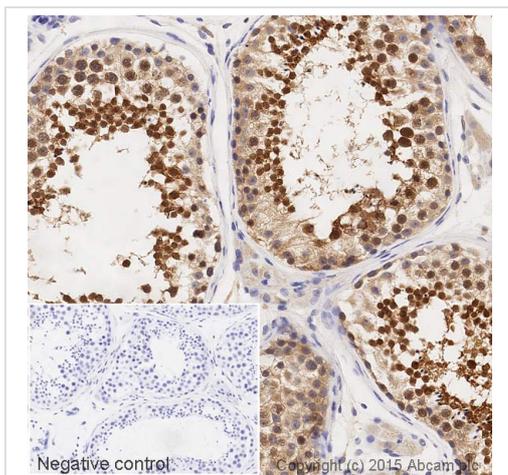
**Predicted band size:** 14 kDa

**Observed band size:** 15 kDa

[why is the actual band size different from the predicted?](#)

**Exposure time:** 20 minutes

This blot was produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab201813 overnight at 4°C. Antibody binding was visualised using ECL development solution [ab133406](#).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GABARAP+GABARAPL1+GABARAPL2 antibody [EPR4805] (HRP) (ab201813)

IHC image of SENP1 staining in a section of formalin-fixed paraffin-embedded human normal testis\*, performed on a Leica BOND. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab201813, 1/100 dilution, for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

**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 <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

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