


## Product datasheet

### Anti-GNAI1 antibody [EPR9441(B)] ab140125

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [3 References](#) [5 Images](#)

#### Overview

<b>Product name</b>	Anti-GNAI1 antibody [EPR9441(B)]
<b>Description</b>	Rabbit monoclonal [EPR9441(B)] to GNAI1
<b>Host species</b>	Rabbit
<b>Specificity</b>	The immunogenic sequence of ab140125 has 92.9% homology with GNAI3 and 64% (4 continuous residues) homology with GNAI2 which might cause cross reactivity with GNAI3 and GNAI2.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P <b>Unsuitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	SH-SY5Y, U-87 MG, Human glioma, and Human fetal brain lysates; Human endometrial carcinoma and thyroid carcinoma tissues.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>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>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR9441(B)
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab140125 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
<b>Flow Cyt (Intra)</b>		1/999 - 1/9999. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
<b>WB</b>	★☆☆☆☆ (1)	1/1000 - 1/10000. Predicted molecular weight: 40 kDa.
<b>IHC-P</b>		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**Application notes** Is unsuitable for IP.

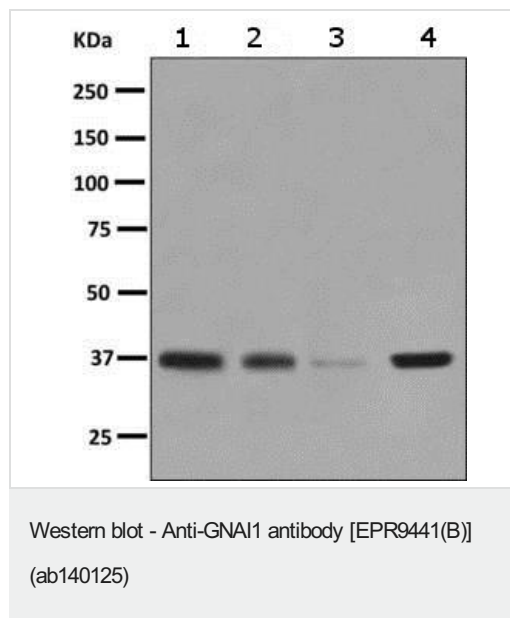
## Target

**Function** Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. The G(i) proteins are involved in hormonal regulation of adenylate cyclase: they inhibit the cyclase in response to beta-adrenergic stimuli. The inactive GDP-bound form prevents the association of RGS14 with centrosomes and is required for the translocation of RGS14 from the cytoplasm to the plasma membrane. May play a role in cell division.

**Sequence similarities** Belongs to the G-alpha family. G(i/o/t/z) subfamily.

**Cellular localization** Nucleus. Cytoplasm. Cell membrane. Cytoplasm > cytoskeleton > centrosome. Localized at the plasma membrane throughout mitosis. Colocalizes with RIC8A and RGS14 at the plasma membrane (By similarity). Localizes in the centrosomes of interphase and mitotic cells, but not in centrosomes during cytokinesis. Detected at the cleavage furrow or the midbody.

## Images



**All lanes :** Anti-GNAI1 antibody [EPR9441(B)] (ab140125) at 1/1000 dilution

**Lane 1 :** SH-SY5Y cell lysate

**Lane 2 :** U-87 MG cell lysate

**Lane 3 :** Human glioma tissue lysate

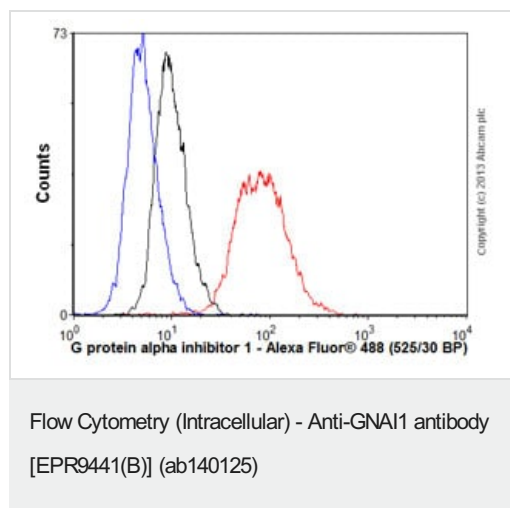
**Lane 4 :** Human fetal brain tissue lysate

Lysates/proteins at 10 µg per lane.

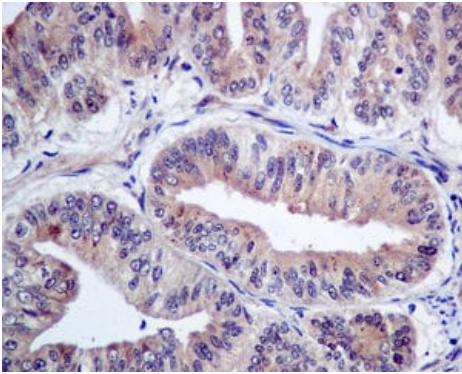
#### Secondary

**All lanes :** Goat anti-rabbit HRP conjugated at 1/2000 dilution

**Predicted band size:** 40 kDa



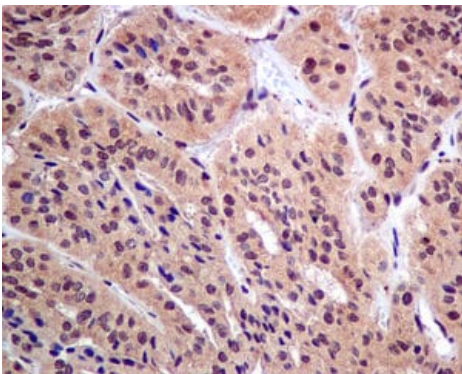
Overlay histogram showing SHSY-5Y cells stained with ab140125 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab140125, 1/9999 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) ([ab150077](#)) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in SHSY-5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GNAI1 antibody  
[EPR9441(B)] (ab140125)

Immunohistochemical analysis of paraffin-embedded Human endometrial carcinoma tissue labelling GNAI1 with ab140125 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GNAI1 antibody  
[EPR9441(B)] (ab140125)

Immunohistochemical analysis of paraffin-embedded Human thyroid carcinoma tissue labelling GNAI1 with ab140125 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

### 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-GNAI1 antibody [EPR9441(B)] (ab140125)

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

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