Product name: Anti-GUCY1B3 antibody [EPR8822] ab154841

Description: Rabbit monoclonal [EPR8822] to GUCY1B3

Host species: Rabbit

Specificity: The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.

Tested applications: Suitable for: WB, IHC-P

Species reactivity: Reacts with: Mouse, Rat, Human

Immunogen: Synthetic peptide within Human GUCY1B3 aa 1-100. The exact sequence is proprietary.

Positive control: Recombinant Human GUCY1B3 protein (ab152446) can be used as a positive control in WB. Human placenta lysate; Human fetal brain and fetal lung lysates; Human pancreas tissue; Human thyroid gland carcinoma tissue; Mouse brain; Rat brain; Rat spleen; Human kidney.

General notes: This product was previously labelled as Guanylyl Cyclase beta 1.

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.

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

Reproducibility is key to advancing scientific discovery and accelerating scientists’ next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and
species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™
guarantee.

In preparation for this, we have started to update the applications & species that this product is
Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work
with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own
labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions,
special requirements or concerns, please send us an inquiry and/or contact our Support team
ahead of purchase. Recommended alternatives for this product can be found below, as well as
customer reviews and Q&As.

Properties

Form

Storage instructions

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long
term. Avoid freeze / thaw cycle.

Storage buffer

pH: 7.2
Preservative: 0.01% Sodium azide
Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity

Protein A purified

Clonality

Monoclonal

Clone number

EPR8822

Isotype

IgG

Applications

Our Abpromise guarantee covers the use of ab154841 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
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<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tr>
<td>IHC-P</td>
<td>1/400. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. For unpurified use at 1/100 -1/250.</td>
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Target

Sequence similarities

Belongs to the adenyl cyclase class-4/guanylyl cyclase family.
Contains 1 guanylate cyclase domain.

**Cellular localization**

Cytoplasm.

**Images**

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human kidney tissue sections labeling GUCY1B3 with Purified ab154841 at 1:400 dilution (2.54 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/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.

**All lanes** : Anti-GUCY1B3 antibody [EPR8822] (ab154841) at 1/5000 dilution (purified)

**Lane 1** : Human fetal lung lysates

**Lane 2** : Mouse brain lysates

**Lane 3** : Rat brain lysates

**Lane 4** : Rat spleen lysates

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes** : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size**: 71 kDa

Blocking and diluting buffer : 5% NFDM/TBST
**Western blot - Anti-GUCY1B3 antibody [EPR8822] (ab154841)**

**All lanes**: Anti-GUCY1B3 antibody [EPR8822] (ab154841) at 1/1000 dilution (unpurified)

**Lane 1**: Human placenta lysate  
**Lane 2**: Human fetal brain lysate  
**Lane 3**: Human fetal lung lysate  

Lysates/proteins at 10 µg per lane.

**Predicted band size**: 71 kDa

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**Western blot - Anti-GUCY1B3 antibody [EPR8822] (ab154841)**

**All lanes**: Anti-GUCY1B3 antibody [EPR8822] (ab154841) at 1/2000 dilution (unpurified)

**Lane 1**: Mouse brain tissue lysate  
**Lane 2**: Mouse heart tissue lysate  
**Lane 3**: Mouse kidney tissue lysate  
**Lane 4**: Mouse spleen tissue lysate  
**Lane 5**: Rat brain tissue lysate  
**Lane 6**: Rat heart tissue lysate  
**Lane 7**: Rat kidney tissue lysate  
**Lane 8**: Rat spleen tissue lysate  

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**: 71 kDa  
**Observed band size**: 65 kDa

*why is the actual band size different from the predicted?*

**Exposure time**: 3 minutes

Blocking and diluting buffer: 5% NFDM/TBST
Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human pancreas tissue, labeling GUCY1B3 using unpurified ab154841 at a 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human thyroid gland carcinoma tissue, labeling GUCY1B3 using unpurified ab154841 at a 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemical analysis of paraffin embedded Human normal kidney tissue using unpurified ab154841 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Immunohistochemical analysis of paraffin embedded Human heart tissue using unpurified ab154841 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemical analysis of paraffin embedded Human endometrial carcinoma tissue using unpurified ab154841 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"
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- Extensive multi-media technical resources to help you
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