


# Anti-PAH antibody [EPR12380] - BSA and Azide free ab202431

Recombinant RabMAb

6 Images

### Overview

Product name	Anti-PAH antibody [EPR12380] - BSA and Azide free
Description	Rabbit monoclonal [EPR12380] to PAH - BSA and Azide free
Host species	Rabbit
Tested applications	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF <b>Unsuitable for:</b> IP
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HepG2 lysates. ICC/IF: HepG2 cells. Flow Cyt (Intra): HepG2 cells. IHC-P: Human kidney and liver tissues.
General notes	<p>ab202431 is the carrier-free version of <a href="#">ab178430</a>.</p> <p>Our <b>carrier-free</b> 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.</p> <p>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.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <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>

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](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR12380
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab202431 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>		Use at an assay dependent concentration. <b>ab199376</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 51 kDa.
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
<b>ICC/IF</b>		Use at an assay dependent concentration.

**Application notes** Is unsuitable for IP.

## Target

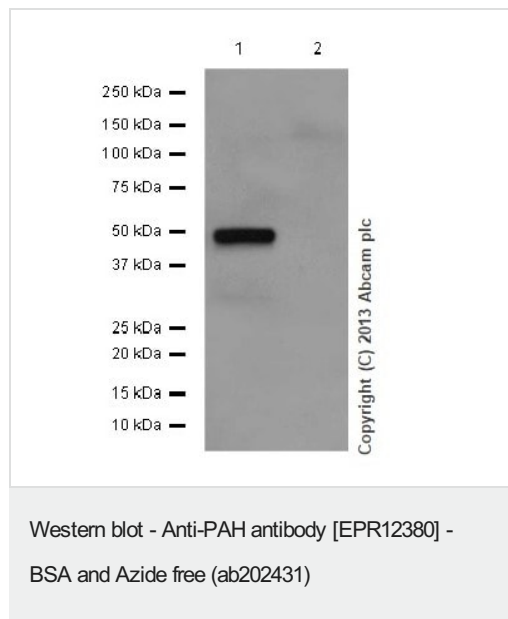
<b>Pathway</b>	Amino-acid degradation; L-phenylalanine degradation; acetoacetate and fumarate from L-phenylalanine: step 1/6.
<b>Involvement in disease</b>	Defects in PAH are the cause of phenylketonuria (PKU) [MIM:261600]. PKU is an autosomal recessive inborn error of phenylalanine metabolism, due to severe phenylalanine hydroxylase deficiency. It is characterized by blood concentrations of phenylalanine persistently above 1200 μmol (normal concentration 100 μmol) which usually causes mental retardation (unless low phenylalanine diet is introduced early in life). They tend to have light pigmentation, rashes similar

to eczema, epilepsy, extreme hyperactivity, psychotic states and an unpleasant 'mousy' odor. Defects in PAH are the cause of non-phenylketonuria hyperphenylalaninemia (Non-PKU HPA) [MIM:261600]. Non-PKU HPA is a mild form of phenylalanine hydroxylase deficiency characterized by phenylalanine levels persistently below 600  $\mu\text{mol}$ , which allows normal intellectual and behavioral development without treatment. Non-PKU HPA is usually caused by the combined effect of a mild hyperphenylalaninemia mutation and a severe one. Defects in PAH are the cause of hyperphenylalaninemia (HPA) [MIM:261600]. HPA is the mildest form of phenylalanine hydroxylase deficiency.

## Sequence similarities

Belongs to the bipterin-dependent aromatic amino acid hydroxylase family.  
Contains 1 ACT domain.

## Images



**All lanes :** Anti-PAH antibody [EPR12380] ([ab178430](#)) at 1/10000 dilution

**Lane 1 :** HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate

**Lane 2 :** U-87MG (Human glioblastoma-astrocytoma epithelial cell) whole cell lysate

Lysates/proteins at 20  $\mu\text{g}$  per lane.

### Secondary

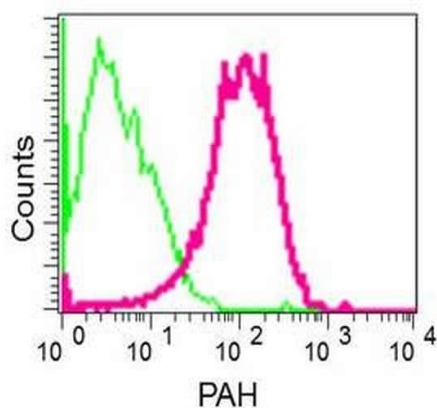
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 51 kDa

**Observed band size:** 51 kDa

**Exposure time:** 180 seconds

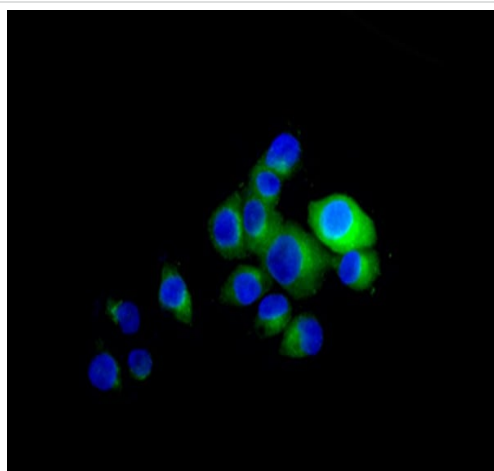
**Blocking buffer:** 5% NFDm/TBST.



Flow Cytometry (Intracellular) - Anti-PAH antibody  
[EPR12380] - BSA and Azide free (ab202431)

Intracellular flow cytometric analysis of permeabilized HepG2 cells labeling PAH with **ab178430** at 1/10 dilution (red) or a rabbit IgG (negative) (green).

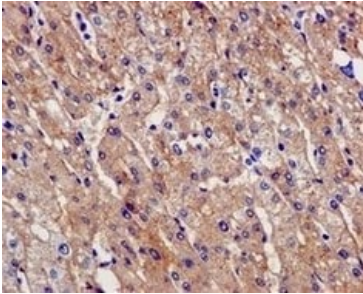
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178430**).



Immunocytochemistry/ Immunofluorescence - Anti-PAH antibody [EPR12380] - BSA and Azide free (ab202431)

Immunofluorescent analysis of HepG2 cells labeling PAH with **ab178430** at 1/50 dilution (green). DAPI nuclear staining (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178430**).

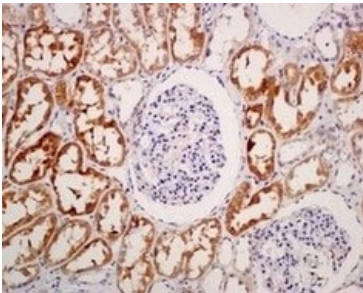


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAH antibody [EPR12380] - BSA and Azide free (ab202431)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling PAH with **ab178430** at 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178430**).

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAH antibody [EPR12380] - BSA and Azide free (ab202431)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling PAH with **ab178430** at 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab178430**).

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-PAH antibody [EPR12380] - BSA and Azide free (ab202431)

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

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