


## Product datasheet

### Anti-CYB5R3 antibody [EPR3867] $\alpha$ b109620

Recombinant RabMAb

3 Images

#### Overview

Product name	Anti-CYB5R3 antibody [EPR3867]
Description	Rabbit monoclonal [EPR3867] to CYB5R3
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	A431, HepG2, and HeLa cell lysates. Human testis tissue.
General notes	<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> <p>Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3867
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab109620 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

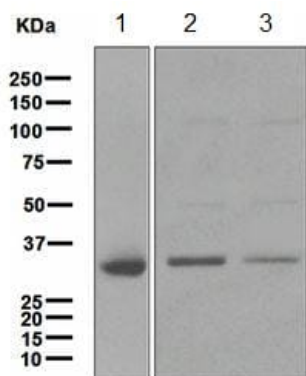
Application	Abreviews	Notes
<b>WB</b>		1/1000 - 1/10000. Predicted molecular weight: 34 kDa.
<b>IHC-P</b>		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Heat to 98°C, allow to cool for 10-20 minutes.

**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IP.

## Target

<b>Function</b>	Desaturation and elongation of fatty acids, cholesterol biosynthesis, drug metabolism, and, in erythrocyte, methemoglobin reduction.
<b>Tissue specificity</b>	Isoform 2 is expressed at late stages of erythroid maturation.
<b>Involvement in disease</b>	Defects in CYB5R3 are the cause of methemoglobinemia CYB5R3-related (METHB-CYB5R3) [MIM:250800]. A form of methemoglobinemia, a hematologic disease characterized by the presence of excessive amounts of methemoglobin in blood cells, resulting in decreased oxygen carrying capacity of the blood, cyanosis and hypoxia. There are two types of methemoglobinemia CYB5R3-related. In type 1, the defect affects the soluble form of the enzyme, is restricted to red blood cells, and causes well-tolerated methemoglobinemia. In type 2, the defect affects both the soluble and microsomal forms of the enzyme and is thus generalized, affecting red cells, leukocytes and all body tissues. Type 2 methemoglobinemia is associated with mental deficiency and other neurologic symptoms.
<b>Sequence similarities</b>	Belongs to the flavoprotein pyridine nucleotide cytochrome reductase family. Contains 1 FAD-binding FR-type domain.
<b>Cellular localization</b>	Endoplasmic reticulum membrane. Mitochondrion outer membrane and Cytoplasm. Produces the soluble form found in erythrocytes.

## Images



Western blot - Anti-CYB5R3 antibody [EPR3867] (ab109620)

**All lanes :** Anti-CYB5R3 antibody [EPR3867] (ab109620) at 1/1000 dilution

**Lane 1 :** A431 cell lysate

**Lane 2 :** HepG2 cell lysate

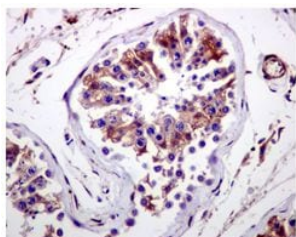
**Lane 3 :** HeLa cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** HRP-labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 34 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CYB5R3 antibody [EPR3867] (ab109620)

ab109620 at 1/250 dilution staining CYB5R3 in paraffin-embedded Human testis tissue by Immunohistochemistry.

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-CYB5R3 antibody [EPR3867] (ab109620)

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

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