

## Product datasheet

# Anti-CYB5R3 antibody [EPR3868] ab133247

Recombinant RabMAb

3 Images

### Overview

<b>Product name</b>	Anti-CYB5R3 antibody [EPR3868]
<b>Description</b>	Rabbit monoclonal [EPR3868] to CYB5R3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	A431; Fetal liver; HeLa and U87 MG lysates. human testis tissue.
<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> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3868

**Isotype** IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab133247 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
WB		1/1000 - 1/10000. Predicted molecular weight: 34 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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

## Target

**Function** Desaturation and elongation of fatty acids, cholesterol biosynthesis, drug metabolism, and, in erythrocyte, methemoglobin reduction.

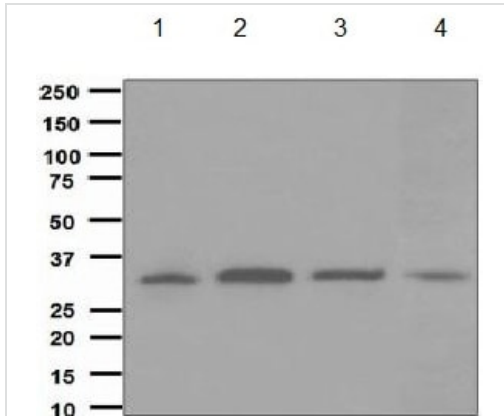
**Tissue specificity** Isoform 2 is expressed at late stages of erythroid maturation.

**Involvement in disease** 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.

**Sequence similarities** Belongs to the flavoprotein pyridine nucleotide cytochrome reductase family. Contains 1 FAD-binding FR-type domain.

**Cellular localization** Endoplasmic reticulum membrane. Mitochondrion outer membrane and Cytoplasm. Produces the soluble form found in erythrocytes.

## Images



Western blot - Anti-CYB5R3 antibody [EPR3868]  
(ab133247)

**All lanes** : Anti-CYB5R3 antibody [EPR3868] (ab133247) at  
1/1000 dilution

**Lane 1** : A431 cell lysate

**Lane 2** : Fetal liver cell lysate

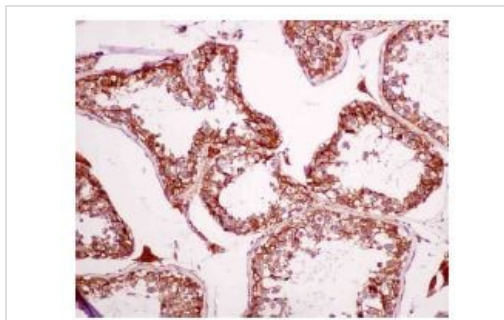
**Lane 3** : HeLa cell lysate

**Lane 4** : U87 MG cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 34 kDa

Note: Primary antibody ab133247 is diluted with 1% BSA

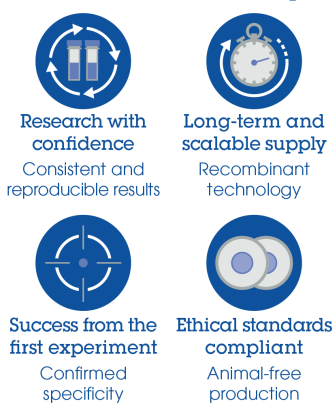


Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-CYB5R3 antibody  
[EPR3868] (ab133247)

Immunohistochemical analysis of paraffin embedded Human testis  
tissue labelling CYB5R3 with ab133247 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6  
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 [EPR3868] (ab133247)

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

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