# abcam

# Product datasheet

# Anti-Cytochrome P450 Reductase antibody ab13513

★★★★★ 3 Abreviews 23 References 2 Images

Overview

Product name Anti-Cytochrome P450 Reductase antibody

**Description** Rabbit polyclonal to Cytochrome P450 Reductase

Host species Rabbit

Tested applications
Suitable for: WB, ICC/IF
Species reactivity
Reacts with: Rat, Human

**Immunogen** Full length native protein (purified) corresponding to Rat Cytochrome P450 Reductase.

Database link: P00388

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**Storage buffer** Preservative: 0.09% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine)

**Purity** Protein A purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

The Abpromise guarantee Our Abpromise guarantee covers the use of ab13513 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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Application	Abreviews	Notes
WB	<b>★★★★</b> (3)	1/1000. Detects a band of approximately 78 kDa.
ICC/IF		Use a concentration of 10 μg/ml.

#### **Target**

**Function** 

This enzyme is required for electron transfer from NADP to cytochrome P450 in microsomes. It can also provide electron transfer to heme oxygenase and cytochrome B5.

Involvement in disease

Defects in POR are the cause of adrenal hyperplasia variant type (AHV) [MIM:201750]; also known as Antley-Bixler syndrome-like phenotype with disordered steroidogenesis. AHV is a rare variant of congenital adrenal hyperplasia. It is an autosomal recessive disorder with apparent combined P450C17 and P450C21 deficiency. Affected girls are born with ambiguous genitalia, but their circulating androgens are low and virilization does not progress. Conversely, affected boys are sometimes born undermasculinized. Boys and girls can also present with bone malformations, in some cases resembling the pattern seen in patients with Antley-Bixler syndrome.

Defects in POR are a cause of isolated disordered steroidogenesis (IDS) [MIM:201750].

Sequence similarities

In the C-terminal section; belongs to the flavoprotein pyridine nucleotide cytochrome reductase  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

family.

Contains 1 FAD-binding FR-type domain.

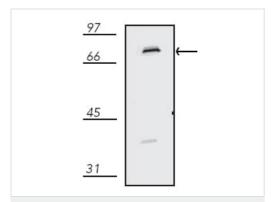
Contains 1 flavodoxin-like domain.

**Cellular localization** 

Endoplasmic reticulum membrane. Anchored to the ER membrane by its N-terminal hydrophobic

region.

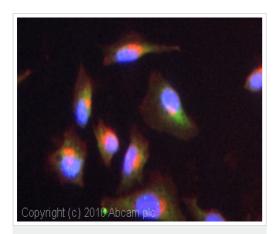
## **Images**



Western blot - Anti-Cytochrome P450 Reductase antibody (ab13513)

Anti-Cytochrome P450 Reductase antibody (ab13513) at 1/2000 dilution + Cell lysates prepared from rat PC12 cells

Western blot analysis of rat PC12 cell lysate, probed with ab13513.



Immunocytochemistry/ Immunofluorescence - Anti-Cytochrome P450 Reductase antibody (ab13513)

ICC/IF image of ab13513 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab13513, 10μg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43μM.

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

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