

**Anti-POR Antibody**  
Catalog # ABO11258**Specification****Anti-POR Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC, ICC           |
| Primary Accession | <a href="#">P16435</a> |
| Host              | Rabbit                 |
| Reactivity        | Human, Mouse, Rat      |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

Rabbit IgG polyclonal antibody for NADPH--cytochrome P450 reductase(POR) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-POR Antibody - Additional Information**

Gene ID 5447

**Other Names**

NADPH--cytochrome P450 reductase {ECO:0000255|HAMAP-Rule:MF\_03212}, CPR {ECO:0000255|HAMAP-Rule:MF\_03212}, P450R {ECO:0000255|HAMAP-Rule:MF\_03212}, 1.6.2.4 {ECO:0000255|HAMAP-Rule:MF\_03212}, POR {ECO:0000255|HAMAP-Rule:MF\_03212}, CYPOR

**Calculated MW**

76690 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat<br><br>Immunocytochemistry , 0.5-1 µg/ml, Human, Mouse, Rat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization**

Endoplasmic reticulum membrane; Peripheral membrane protein. Anchored to the ER membrane by its N- terminal hydrophobic region.

**Protein Name**

NADPH--cytochrome P450 reductase

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human POR (659-677aa DYIKKLMTKGRYSLDVWS), different from the related rat and mouse sequences by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

In the C-terminal section; belongs to the flavoprotein pyridine nucleotide cytochrome reductase family.

**Anti-POR Antibody - Protein Information**

**Name** POR {ECO:0000255|HAMAP-Rule:MF\_03212}

**Synonyms** CYPOR

**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.

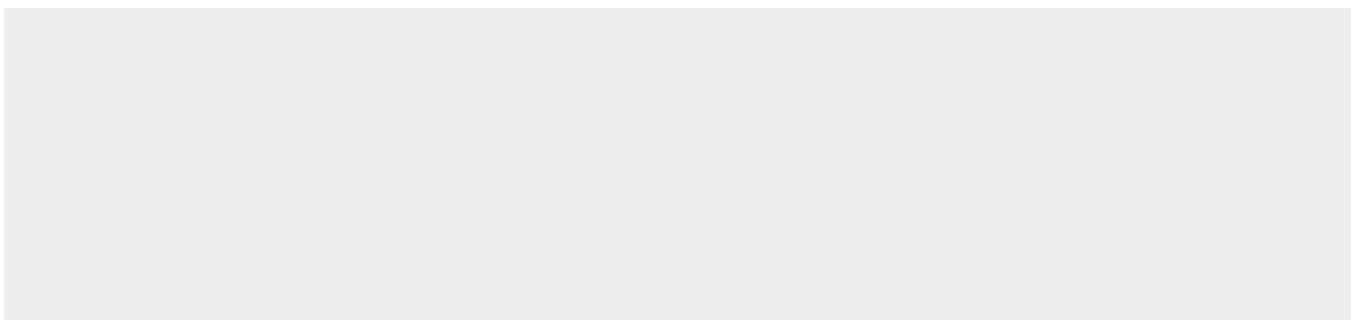
**Cellular Location**

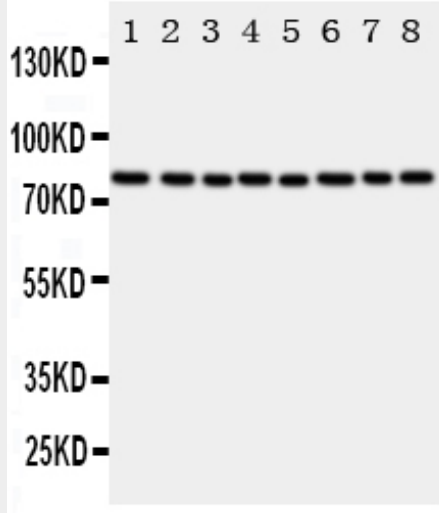
Endoplasmic reticulum membrane {ECO:0000255|HAMAP-Rule:MF\_03212}; Single-pass membrane protein {ECO:0000255|HAMAP-Rule:MF\_03212}; Cytoplasmic side {ECO:0000255|HAMAP-Rule:MF\_03212}

**Anti-POR Antibody - Protocols**

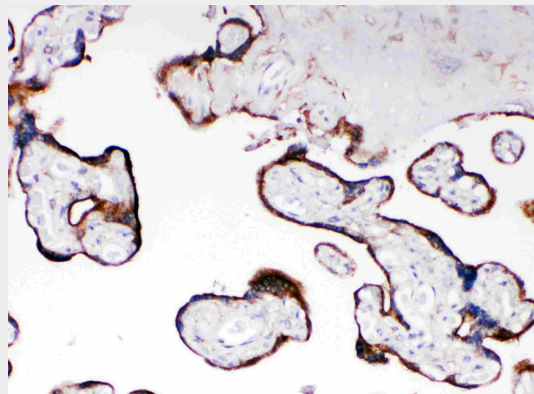
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

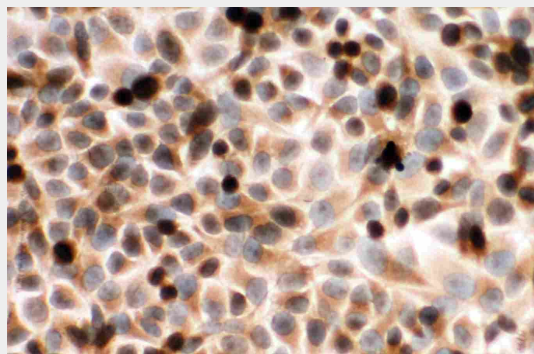
**Anti-POR Antibody - Images**



Anti-POR antibody, ABO11258, Western blotting  
 Lane 1: Rat Ovary Tissue Lysate  
 Lane 2: Rat Lung Tissue Lysate  
 Lane 3: Rat Testis Tissue Lysate  
 Lane 4: Rat Spleen Tissue Lysate  
 Lane 5: A549 Cell Lysate  
 Lane 6: HELA Cell Lysate  
 Lane 7: SKOV Cell Lysate  
 Lane 8: MCF-7 Cell Lysate



Anti-POR antibody, ABO11258, IHC(P)  
 IHC(P): Human Placenta Tissue



Anti-POR antibody, ABO11258, ICC  
 ICC: HELA Cell

### Anti-POR Antibody - Background

POR is a membrane-bound enzyme required for electron transfer from NADPH to cytochrome P450 in the endoplasmic reticulum of the eukaryotic cell. The gene encodes an endoplasmic reticulum membrane oxidoreductase with an FAD-binding domain and a flavodoxin-like domain. The protein binds two cofactors, FAD and FMN, which allow it to donate electrons directly from NADPH to all microsomal P450 enzymes. Mutations in this gene have been associated with various diseases, including apparent combined P450C17 and P450C21 deficiency, amenorrhea and disordered

steroidogenesis, congenital adrenal hyperplasia and Antley-Bixler syndrome.