

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

Anti-POR Antibody - Product Information

Application	WB, IHC-P, ICC
Primary Accession	P16435
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

Immunocytochemistry , 0.5-1 µg/ml, Human, Mouse, Rat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human POR (659-677aa DYIKLMTKGRYSLDVWS), 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.

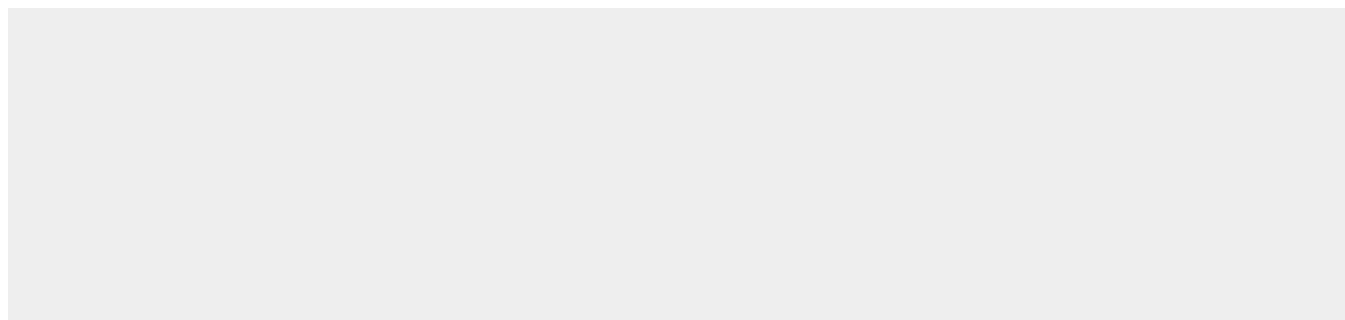
Cellular Location

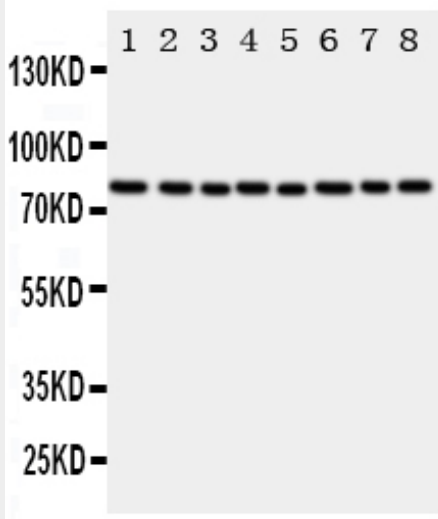
Endoplasmic reticulum membrane {ECO:0000255|HAMAP-Rule:MF_03212}; Single-pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03212}; Cytoplasmic side {ECO:0000255|HAMAP-Rule:MF_03212}

Anti-POR Antibody - Protocols

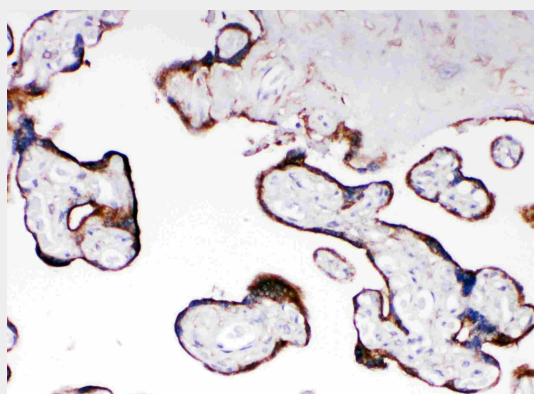
Provided below are standard protocols that you may find useful for product applications.

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

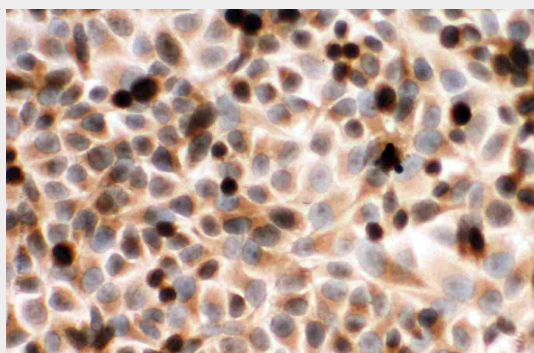
Anti-POR Antibody - Images



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.