

Anti-POR Picoband Antibody
Catalog # ABO12422**Specification****Anti-POR Picoband Antibody - Product Information**

Application	WB, IHC
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 in Human;Mouse;Rat.

Reconstitution

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

Anti-POR Picoband 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, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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 Na₃N.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human POR (633-668aa RNMARDVQNTFYDIVAELGAMEHAQAVDYIKKLMTK), different from the related mouse and rat sequences by five amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, 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.

Anti-POR Picoband 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

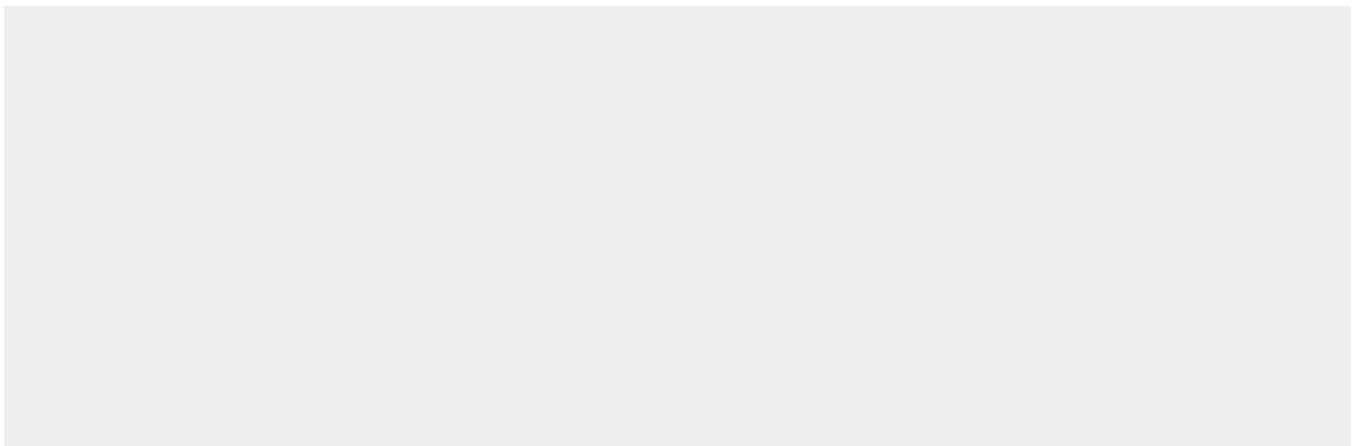
Endoplasmic reticulum membrane {ECO:0000255|HAMAP-Rule:MF_03212}; Single-pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03212}; Cytoplasmic side {ECO:0000255|HAMAP-Rule:MF_03212}

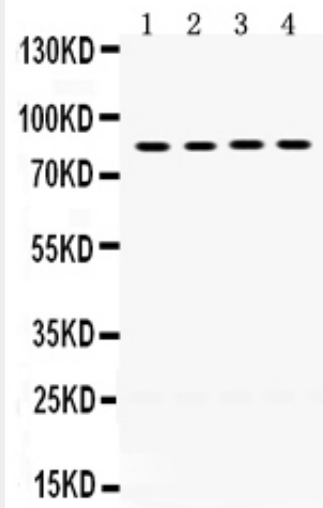
Anti-POR Picoband Antibody - Protocols

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

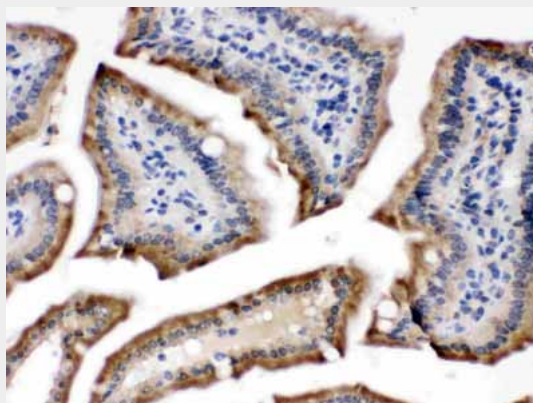
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-POR Picoband Antibody - Images

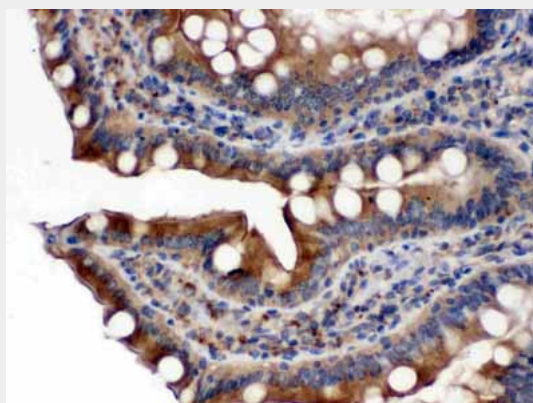




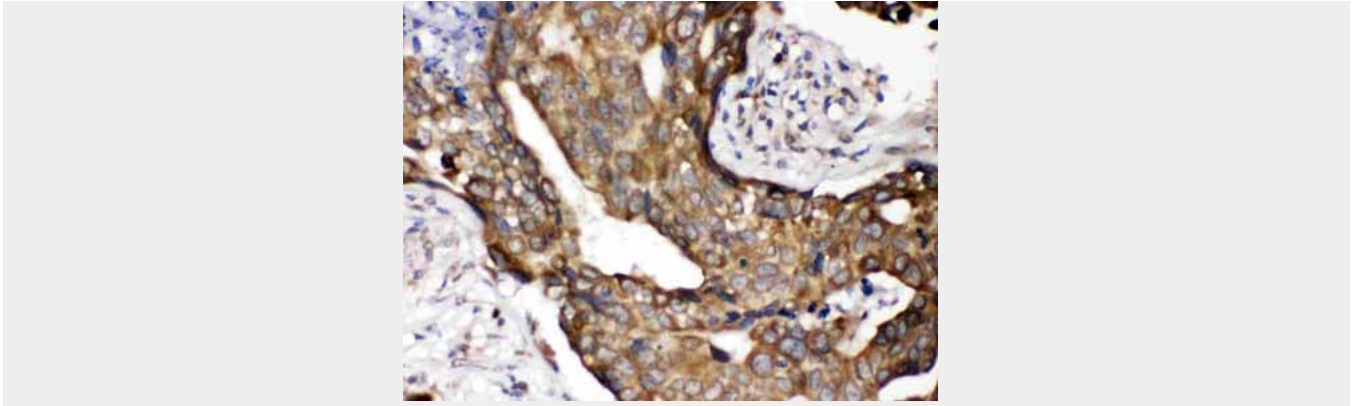
Anti- POR Picoband antibody, ABO12422, Western blotting All lanes: Anti POR (ABO12422) at 0.5ug/ml
 Lane 1: Rat Liver Tissue Lysate at 50ug
 Lane 2: Human Placenta Tissue Lysate at 50ug
 Lane 3: HEPG2 Whole Cell Lysate at 40ug
 Lane 4: HEPA Whole Cell Lysate at 40ug
 Predicted bind size: 77KD
 Observed bind size: 85KD



Anti- POR Picoband antibody, ABO12422, IHC(P) IHC(P): Mouse Intestine Tissue



Anti- POR Picoband antibody, ABO12422, IHC(P) IHC(P): Rat Intestine Tissue



Anti- POR Picoband antibody, ABO12422,IHC(P)IHC(P): Human Mammary Cancer Tissue

Anti-POR Picoband 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.