

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human POR/Cytochrome P450 Reductase in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 739613
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human POR/Cytochrome P450 Reductase Arg45-Ser677 Accession # P16435
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

NADPH-Cytochrome P450 Reductase (POR, P450R) is an essential component of the cytochrome P450 monooxygenase system of eukaryotic cells (1). POR is anchored in the endoplasmic reticulum membrane with its catalytic domain residing in the cytosol. POR is a flavoprotein, containing one molecule each of FMN and FAD, which are essential for the transfer of electrons from NADPH to the cytochromes P450 (2). This reduction is necessary for cytochromes P450 to perform each cycle of oxidation. POR is also capable of transferring electrons to cytochrome b₅, heme oxygenase, the fatty acid elongation system, and other proteins. Mutations of POR can result in disordered steroidogenesis and Antley-Bixler syndrome.

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