Product Name: KD-Validated Cytochrome P450 Oxidoreductase Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01377
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 76.7kDa

Antigen Information

Gene Name	POR
Alternative Names	POR; Cytochrome P450 Oxidoreductase; CYPOR; P450 (Cytochrome) Oxidoreductase; NADPH--Cytochrome P450 Reductase; NADPH--Hemoprotein Reductase; EC 1.6.2.4; FLJ26468; P450R; CPR; NADPH-Dependent Cytochrome P450 Reductase
Gene ID	5447.0
SwissProt ID	P16435
Immunogen	A synthesized peptide derived from human Cytochrome P450 Reductase

Background

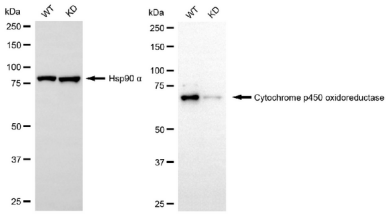
This gene encodes an endoplasmic reticulum membrane oxidoreductase that is essential for multiple metabolic processes,

including reactions catalyzed by cytochrome P450 proteins for metabolism of steroid hormones, drugs and xenobiotics. The encoded protein has a flavin adenine dinucleotide (FAD)-binding domain and a flavodoxin-like domain which bind two cofactors, FAD and FMN, that allow it to donate electrons directly from NADPH to all microsomal P450 enzymes. Mutations in this gene cause a complex set of disorders, including apparent combined P450C17 and P450C21 deficiency, amenorrhea and disordered steroidogenesis, congenital adrenal hyperplasia and Antley-Bixler syndrome, that resemble those caused by defects in steroid metabolizing enzymes such as aromatase, 21-hydroxylase, and 17 alpha-hydroxylase. [provided by RefSeq, Aug 2020]

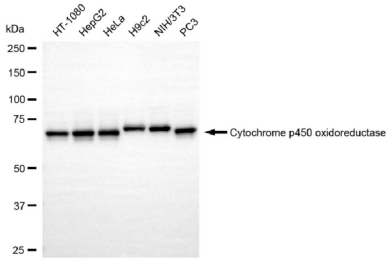
Research Area

Cardiovascular,Signal Transduction,Metabolism

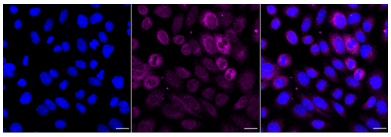
Image Data



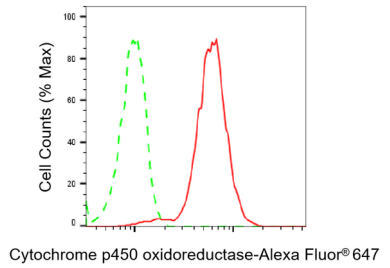
Western blotting analysis using cytochrome p450 oxidoreductase antibody (KVAb01377). Cytochrome p450 oxidoreductase expression in wild-type (WT) and cytochrome p450 oxidoreductase (POR) knockdown (KD) 293T cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with cytochrome p450 oxidoreductase antibody (KVAb01377, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using cytochrome p450 oxidoreductase antibody (KVAb01377). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with cytochrome p450 oxidoreductase antibody (KVAb01377, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Cytochrome p450 oxidoreductase antibody (KVAb01377, 1:1,000). Nuclei were stained blue with DAPI; Cytochrome p450 oxidoreductase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High/Medium/Low. Scale bar, 20 µm.



Cytochrome p450 oxidoreductase-Alexa Fluor® 647

Flow cytometric analysis of Cytochrome p450 oxidoreductase expression in HepG2 cells using Cytochrome p450 oxidoreductase antibody (KVAb01377, 1:2,000). Green, isotype control; red, Cytochrome p450 oxidoreductase.