10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Cytochrome P450 27C1 Antibody

Catalog # AP53809

Product Information

Application	WB, IF/IC
Primary Accession	Q4G0S4
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60920

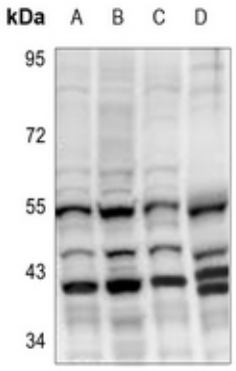
Additional Information

Gene ID	339761
Other Names	Cytochrome P450 27C1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 27C1. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

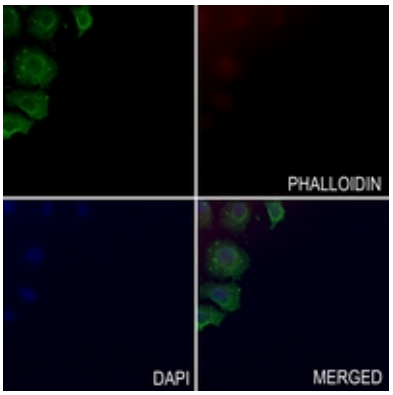
Protein Information

Name	CYP27C1 (HGNC:33480)
Function	[Isoform 2]: A cytochrome P450 monooxygenase that catalyzes the 3,4 desaturation of all-trans-retinol (also called vitamin A1) to all-trans-3,4-didehydroretinol (also called vitamin A2) in the skin. Desaturates with lower efficiency all-trans retinal and all-trans retinoic acid. Forms minor amounts of 3-hydroxy and 4-hydroxy all- trans-retinol derivatives. Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate and reducing the second into a water molecule. Two electrons are provided by NADPH via a two-protein mitochondrial transfer system comprising flavoprotein FDXR (adrenodoxin/ferredoxin reductase) and nonheme iron-sulfur protein FDX1 or FDX2 (adrenodoxin/ferredoxin).
Cellular Location	[Isoform 2]: Mitochondrion membrane {ECO:0000250|UniProtKB:P14137}; Peripheral membrane protein {ECO:0000250|UniProtKB:P14137}
Tissue Location	Widely expressed, with highest levels in the liver, kidney and pancreas.

Images



Western blot analysis of Cytochrome P450 27C1 expression in HepG2 (A), HEK293T (B), Panc1 (C), rat kidney (D) whole cell lysates. (Predicted band size: 60 kD; Observed band size: 42; 55 kD)



Immunofluorescent analysis of Cytochrome P450 27C1 staining in SGC7901 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).