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Anti-Cytochrome P450 4V2 Antibody

Catalog # AP53990

Product Information

Application	WB, IHC
Primary Accession	Q6ZWL3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60724

Additional Information

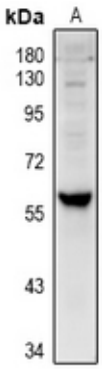
Gene ID	285440
Other Names	Cytochrome P450 4V2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 4V2. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1/50 - 1/100
Format	Liquid in 0.42% Potassium phosphate, 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

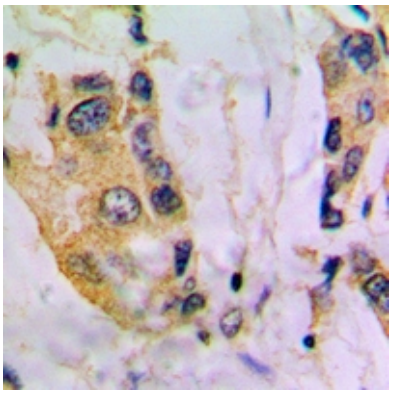
Name	CYP4V2
Function	A cytochrome P450 monooxygenase involved in fatty acid metabolism in the eye. Catalyzes the omega-hydroxylation of polyunsaturated fatty acids (PUFAs) docosahexaenoate (DHA) and its precursor eicosapentaenoate (EPA), and may contribute to the homeostasis of these retinal PUFAs (PubMed:22772592). Omega hydroxylates saturated fatty acids such as laurate, myristate and palmitate, the catalytic efficiency decreasing in the following order: myristate > laurate > palmitate (C14>C12>C16) (PubMed:19661213). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH- ferrihemoprotein reductase).
Cellular Location	Endoplasmic reticulum membrane; Single-pass membrane protein
Tissue Location	Broadly expressed. Detected in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, retina, retinal pigment epithelium (RPE) and

lymphocytes

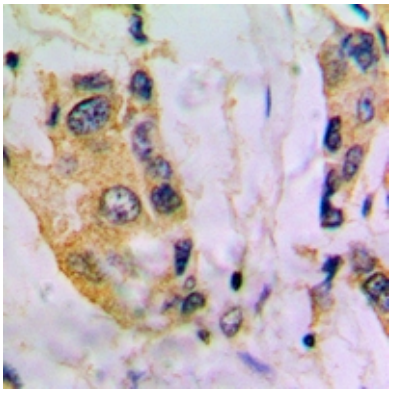
Images



Western blot analysis of Cytochrome P450 4V2 expression in U87MG (A) whole cell lysates. (Predicted band size: 60 kD; Observed band size: 61 kD)



Immunohistochemical analysis of Cytochrome P450 4V2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.