

Anti-Cytochrome P450 4V2 Antibody

Catalog # AP53990

Specification

Anti-Cytochrome P450 4V2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC <u>O6ZWL3</u> Human Rabbit Polyclonal 60724

Anti-Cytochrome P450 4V2 Antibody - Additional Information

Gene ID 285440

Other Names Cytochrome P450 4V2

Target/Specificity Recognizes endogenous levels of Cytochrome P450 4V2 protein.

Dilution WB~~1/500 - 1/1000 IHC~~1:100~500

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-Cytochrome P450 4V2 Antibody - 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

Anti-Cytochrome P450 4V2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Cytochrome P450 4V2 Antibody - Images



Western blot analysis of Cytochrome P450 4V2 expression in U87MG (A) whole cell lysates.



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.

Anti-Cytochrome P450 4V2 Antibody - Background

Rabbit polyclonal antibody to Cytochrome P450 4V2