

Rabbit Anti-CYP4V2 antibody

SL14161R

Product Name:	CYP4V2
Chinese Name:	细胞色素P450 4V2抗体
Alias:	BCD; CP4V2_HUMAN; CYP4AH1; CYP4V 2; CYP4V2; Cytochrome P450 4V2;
	Cytochrome P450, family 4, subfamily V, polypeptide 2; Retina CYP4V2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	61kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CYP4V2:431-525/525
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	This gene encodes a member of the cytochrome P450 hemethiolate protein superfamily
	which are involved in oxidizing various substrates in the metabolic pathway. It is
	implicated in the metabolism of fatty acid precursors into n-3 polyunsaturated fatty
	acids. Mutations in this gene result in Bietti crystalline corneoretinal dystrophy.
	[provided by RefSeq, Jul 2008]

Function:

Catalyzes the omega-hydroxylation of medium-chain saturated fatty acids such as laurate, myristate and palmitate in an NADPH-dependent pathway. The substrate specificity is higher for myristate > laurate > palmitate (C14>C16>C12). May have a role in fatty acid and steroid metabolism in the eye.

Subcellular Location:

Endoplasmic reticulum membrane.

Tissue Specificity:

Broadly expressed. Detected in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, retina, retinal pigment epithelium (RPE) and lymphocytes.

DISEASE:

Bietti crystalline corneoretinal dystrophy (BCD) [MIM:210370]: An autosomal recessive ocular disease characterized by retinal degeneration and marginal corneal dystrophy. Typical features include multiple glistening intraretinal crystals scattered over the fundus, a characteristic degeneration of the retina, and sclerosis of the choroidal vessels, ultimately resulting in progressive night blindness and constriction of the visual field. Most patients have similar crystals at the corneoscleral limbus. Patients develop decreased vision, nyctalopia, and paracentral scotomata between the 2nd and 4th decade of life. Later, they develop peripheral visual field loss and marked visual impairment, usually progressing to legal blindness by the 5th or 6th decade of life. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the cytochrome P450 family.

SWISS:

O6ZWL3

Gene ID:

285440

Database links:

Entrez Gene: 285440 Human

Entrez Gene: 102294 Mouse

Entrez Gene: 266761 Rat

Omim: 608614 Human

SwissProt: O6ZWL3 Human

SwissProt: Q9DBW0 Mouse

SwissProt: A2RRT9 Rat

Unigene: 587231 Human

Unigene: 245297 Mouse

Unigene: 201722 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.