

CYP4V2 (M29-P3B10): sc-101386

BACKGROUND

CYP4V2 (Cytochrome P450 4V2) is a 525 amino acid protein that belongs to the cytochrome P450 family. Localized to the endoplasmic reticulum membrane, CYP4V2 is widely expressed in various tissues. Defects in CYP4V2 have been linked to Bietti crystalline corneoretinal dystrophy (BCD), an autosomal recessive retinal dystrophy characterized by 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. The homology of CYP4V2 to other members of the cytochrome P450 family suggests that it may play a role in fatty acid and steroid metabolism. Two isoforms of CYP4V2 exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CYP4V2 (human) mapping to 4q35.2.

SOURCE

CYP4V2 (M29-P3B10) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 495-504 of CYP4V2 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CYP4V2 (M29-P3B10) is available conjugated to agarose (sc-101386 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-101386 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-101386 PE), fluorescein (sc-101386 FITC), Alexa Fluor[®] 488 (sc-101386 AF488), Alexa Fluor[®] 546 (sc-101386 AF546), Alexa Fluor[®] 594 (sc-101386 AF594) or Alexa Fluor[®] 647 (sc-101386 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-101386 AF680) or Alexa Fluor[®] 790 (sc-101386 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CYP4V2 (M29-P3B10) is recommended for detection of CYP4V2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CYP4V2 siRNA (h): sc-89024, CYP4V2 shRNA Plasmid (h): sc-89024-SH and CYP4V2 shRNA (h) Lentiviral Particles: sc-89024-V.

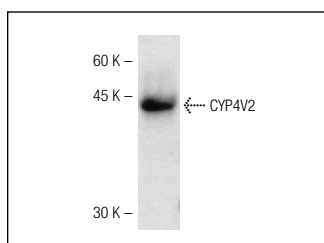
Molecular Weight of CYP4V2: 61 kDa.

Positive Controls: human liver microsomes cell extract.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CYP4V2 (M29-P3B10): sc-101386. Western blot analysis of CYP4V2 expression in human liver microsomes cell extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.