

CYP4F11 (F21 P6 F5): sc-53619

BACKGROUND

The cytochrome P450 proteins (CYPs) are monooxygenases that catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. P450 enzymes are classified into subfamilies based on their sequence similarities. CYP4F11 is an isoform of the cytochrome P450 4F protein and is expressed mainly in human liver, followed by kidney, heart and skeletal muscle. CYP4F11 contains 524 amino acid residues that share 80.0, 82.3 and 79.2% identity to CYP4F2, CYP4F3 and CYP4F8 amino acid sequences, respectively. CYP4F11 has catalytic properties towards endogenous eicosanoids as well as some clinically relevant drugs, and is able to metabolize large molecules such as erythromycin.

CHROMOSOMAL LOCATION

Genetic locus: CYP4F11 (human) mapping to 19p13.12.

SOURCE

CYP4F11 (F21 P6 F5) is a mouse monoclonal antibody raised against the C-terminus of CYP4F11 of human origin.

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.

CYP4F11 (F21 P6 F5) is available conjugated to agarose (sc-53619 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53619 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53619 PE), fluorescein (sc-53619 FITC), Alexa Fluor® 488 (sc-53619 AF488), Alexa Fluor® 546 (sc-53619 AF546), Alexa Fluor® 594 (sc-53619 AF594) or Alexa Fluor® 647 (sc-53619 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53619 AF680) or Alexa Fluor® 790 (sc-53619 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

CYP4F11 (F21 P6 F5) is recommended for detection of CYP4F11 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for CYP4F11 siRNA (h): sc-63345, CYP4F11 shRNA Plasmid (h): sc-63345-SH and CYP4F11 shRNA (h) Lentiviral Particles: sc-63345-V.

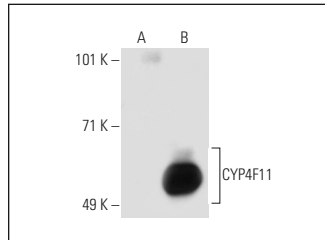
Molecular Weight of CYP4F11: 57 kDa.

Positive Controls: CYP4F11 (h): 293T lysate: sc-112784 or Hep G2 cell lysate: sc-2227.

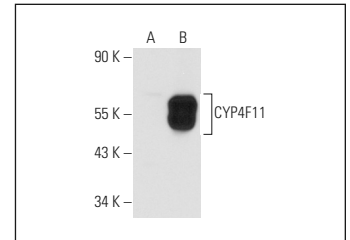
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CYP4F11 (F21 P6 F5): sc-53619. Western blot analysis of CYP4F11 expression in non-transfected: sc-117752 (A) and human CYP4F11 transfected: sc-112784 (B) 293T whole cell lysates.



CYP4F11 (F21 P6 F5): sc-53619. Western blot analysis of CYP4F11 expression in non-transfected: sc-117752 (A) and human CYP4F11 transfected: sc-175635 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Theodoropoulos, P.C., et al. 2016. Discovery of tumor-specific irreversible inhibitors of stearyl CoA desaturase. *Nat. Chem. Biol.* 12: 218-225.
- Bar-Peled, L., et al. 2017. Chemical proteomics identifies druggable vulnerabilities in a genetically defined cancer. *Cell* 171: 696-709.e23.
- McMillan, E.A., et al. 2018. Chemistry-first approach for nomination of personalized treatment in lung cancer. *Cell* 173: 864-878.e29.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.