

CYP4F11 (h): 293T Lysate: sc-112784

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.

REFERENCES

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2. Cui, X., Nelson, D.R. and Strobel, H.W. 2000. A novel human cytochrome P450 4F isoform (CYP4F11): cDNA cloning, expression, and genomic structural characterization. *Genomics* 68: 161-166.
3. Bylund, J., Bylund, M. and Oliu, E.H. 2001. cDNA cloning and expression of CYP4F12, a novel human cytochrome P450. *Biochem. Biophys. Res. Commun.* 280: 892-897.
4. Kalsotra, A., Turman, C.M., Kikuta, Y. and Strobel, H.W. 2004. Expression and characterization of human cytochrome P450 4F11: putative role in the metabolism of therapeutic drugs and eicosanoids. *Toxicol. Appl. Pharmacol.* 199: 295-304.
5. Kumarakulasingham, M., Rooney, P.H., Dundas, S.R., Telfer, C., Melvin, W.T., Curran, S. and Murray, G.I. 2005. Cytochrome P450 profile of colorectal cancer: identification of markers of prognosis. *Clin. Cancer Res.* 11: 3758-3765.

CHROMOSOMAL LOCATION

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

PRODUCT

CYP4F11 (h): 293T Lysate represents a lysate of human CYP4F11 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

CYP4F11 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CYP4F11 antibodies. Recommended use: 10-20 µl per lane.

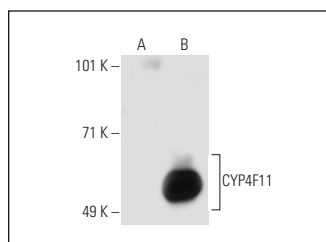
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CYP4F11 (F21 P6 F5): sc-53619 is recommended as a positive control antibody for Western Blot analysis of enhanced human CYP4F11 expression in CYP4F11 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

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.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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