

CYP4A22 (h): 293T Lysate: sc-112663

BACKGROUND

Cytochrome P450 proteins are heme-thiolate monooxygenases that mediate NADPH-dependent electron transport and function to oxidize a variety of structurally unrelated compounds, including steroids, fatty acids and xenobiotics. Specifically, cytochrome P450s are responsible for metabolizing arachidonic acid to hydroxyecosatetraenoic acid (a regulator of blood pressure) and epoxyecosatrienoic acid (a molecule involved in signaling events). CYP4A22 (cytochrome P450, family 4, subfamily A, polypeptide 22) is a 519 amino acid protein that is encoded by a gene located within a cluster of cytochrome P450 genes on chromosome 1. Sharing 96% sequence similarity with CYP4A11 (a related family member), CYP4A22 is thought to play a role in fatty acid metabolism, possibly mediating kidney function and blood pressure.

REFERENCES

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4. Hercule, H.C., et al. 2003. Contribution of cytochrome P450 4A isoforms to renal functional response to inhibition of nitric oxide production in the rat. *J. Physiol.* 551: 971-979.
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6. Zhang, F., et al. 2005. Long-term modifications of blood pressure in normo-tensive and spontaneously hypertensive rats by gene delivery of rAAV-mediated cytochrome P450 arachidonic acid hydroxylase. *Cell Res.* 15: 717-724.
7. Yaghini, et al. 2005. Contribution of arachidonic acid metabolites derived via cytochrome P4504A to angiotensin II-induced neointimal growth. *Hypertension* 45: 1182-1187.
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CHROMOSOMAL LOCATION

Genetic locus: CYP4A22 (human) mapping to 1p33.

PRODUCT

CYP4A22 (h): 293T Lysate represents a lysate of human CYP4A22 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

CYP4A22 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CYP4A22 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.

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.