**BACKGROUND**

P450 enzymes constitute a family of monooxygenase enzymes that are involved in the metabolism of a wide array of endogenous and xenobiotic compounds. P450 enzymes can be classified, based on their sequence similarities, into distinct subfamilies, which include CYP1A and CYP2A. The P450 family member CYP19 catalyzes the conversion of C19 steroids to estrogens in various tissues, including placenta, gonads, adipose tissue, skin and brain. P450 cholesterol 7α-hydroxylase, CYP7A1, is the rate limiting enzyme of bile acid synthesis in the liver, and its expression is mediated by the bile acid receptor FXR. CYP27A1 catalyzes vitamin D 25-hydroxylation and is localized to the mitochondria in kidney and liver. Overexpression of CYP24 (encoding vitamin D 24-hydroxylase) is likely to lead to abrogation of growth control mediated by vitamin D.

**CHROMOSOMAL LOCATION**

Genetic locus: CYP24A1 (human) mapping to 20q13.2; Cyp24a1 (mouse) mapping to 2H3.

**SOURCE**

CYP24 (H-87) is a rabbit polyclonal antibody raised against amino acids 351-437 mapping near the C-terminus of CYP24 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

CYP24 (H-87) is recommended for detection of CYP24 of mouse, rat and 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CYP24 (H-87) is also recommended for detection of CYP24 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CYP24 siRNA (h): sc-44652, CYP24 siRNA (m): sc-44653, CYP24 shRNA Plasmid (h): sc-44652-SH, CYP24 shRNA Plasmid (m): sc-44653-SH, CYP24 shRNA (h) Lentiviral Particles: sc-44652-V and CYP24 shRNA (m) Lentiviral Particles: sc-44653-V.

Molecular Weight of CYP24: 59 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, mouse pancreas extract: sc-364244 or mouse liver extract: sc-2256.

**STORAGE**

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

**RESEARCH USE**

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

**DATA**

CYP24 (H-87) is also recommended for detection of CYP24 in additional species, including equine, canine, bovine and porcine.

**SELECT PRODUCT CITATIONS**


**TRY CYP24 (E-7): sc-365700, our highly recommended monoclonal alternative to CYP24 (H-87).**