**BACKGROUND**

In animals, P450 enzymes serve two major functions: biosynthesis of steroids, fatty acids and bile acids; and the metabolism of endogenous and a wide variety of exogenous substrates, such as toxins and drugs. The four major families involved in drug metabolism are CYP 1, 2, 3 and 4. The hepatic CYP4A enzymes are important fatty acid and prostaglandin omega-hydroxylases that are highly inducible by fibric acid hypolipidemic agents and other peroxisome proliferators. In humans, 4A1, 4A2 and 4A3 have been cloned from liver, kidney and testis and are detected in renal, hepatic and brain microvessels.

**CHROMOSOMAL LOCATION**

Genetic locus: CYP4A11 (human) mapping to 1p33; Cyp4a14 (mouse) mapping to 4D1.

**SOURCE**

CYP4A1 (clo1) is a mouse monoclonal antibody raised against liver Cytochrome P450 2C11 and 4A1 of rat origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

CYP4A1 (clo1) is available conjugated to agarose (sc-53248 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-516102 or m-IgG 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).

**STORAGE**

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

**APPLICATIONS**

CYP4A1 (clo1) is recommended for detection of CYP4A1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation (1-2 µg per 100-500 µg of total protein [1 ml of cell lysate]).

Suitable for use as control antibody for CYP4A11 siRNA (h): sc-88588, CYP4A14 siRNA (m): sc-142723, CYP4A11 shRNA Plasmid (h): sc-88588-SH, CYP4A14 shRNA Plasmid (m): sc-142723-SH, CYP4A11 shRNA Plasmid (h) Lentiviral Particles: sc-88588-V and CYP4A14 shRNA (m) Lentiviral Particles: sc-142723-V.

CYP4A11 siRNA (h): sc-88588, and .

**RECOMMENDED SUPPORT REAGENTs**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG 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**

**SELECT PRODUCTS CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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