CYP3A (D-2): sc-271033

BACKGROUND

CYP3A genes encode monoxygenases, enzymes which catalyze drug metabolism and the synthesis of cholesterol, steroids and other lipids. CYP3A (cytochrome P450, family 3, subfamily A), the most abundant P450 enzyme in human liver, is responsible for the metabolism of more than 50% of all clinical drugs. CYP3A members localize in organs that associate with drug disposition, including the liver, gastrointestinal tract and kidney. The CYP3A cluster consists of four genes: CYP3A43, CYP3A4, CYP3A7 and CYP3A5, and two pseudogenes: CYP3A5P1 and CYP3A5P2. The CYP3A cluster maps to gene locus 7q22.1.

REFERENCES


SOURCE

CYP3A (D-2) is a mouse monoclonal antibody raised against amino acids 204-503 mapping at the C-terminus of CYP3A4 of human origin.

PRODUCT

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

APPLICATIONS

CYP3A (D-2) is recommended for detection of all CYP3A family members of mouse, rat and human origin by Western Blotting (starting dilution: 1:100, dilution range: 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein [1.0 ml of cell lysate]), immunofluorescence (starting dilution: 1:50, dilution range: 1:50-1:500) and solid phase ELISA (starting dilution: 1:30, dilution range: 1:30-1:3000).

Molecular Weight of CYP3A: 52-55 kDa.

Positive Controls: AT3B-1 whole cell lysate: sc-364372, Hep G2 cell lysate: sc-2227 or human liver extract: sc-363766.

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-PE: sc-516140 or m-IgG (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000). 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-2048 or UltraCruz® Hard-set Mounting Medium: sc-359850.

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.

PROTOCOLS

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