

CYP2B1/2B2 (11II D12A2): sc-73421

BACKGROUND

The cytochrome P450 (CYP2) superfamily is one of three enzyme systems which metabolize the fatty acid arachadonic acid (AA) to vascular tone regulators. CYP2 are monooxygenase enzymes that require several cofactors such as nicotinamide adenine dinucleotide phosphate (NADPH) and P450 reductase. Epoxygenases are members of the CYP2 family that metabolize AA to epoxy-eicosatrienoic acid, and omega-hydroxylases are members of the CYP2 family that produce 19- and 20-hydroxyeicosatetraenoic acids. The CYP2 family members are part of the microsomal drug metabolizing system responsible for oxidation of many therapeutic agents as well as steroids, fatty acids and many other endogenous substances. CYP2B1 and CYP2B2 are members of the CYP2 family that comprise the major phenobarbital-inducible hepatic cytochromes P450s. CYP2B1 converts ifosfamide to its active cytotoxic compounds, while CYP2B2 mediates phenobarbital inducibility.

REFERENCES

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SOURCE

CYP2B1/2B2 (11II D12A2) is a mouse monoclonal antibody raised against liver cytochromes P450 2B1 and 2B2 of rat origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CYP2B1/2B2 (11II D12A2) is recommended for detection of CYP2B1 and CYP2B2 of mouse and rat 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)]; may cross-react with rat CYP2C2.

Molecular Weight of CYP2B1/2B2: 50 kDa.

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, TBS Blotto A Blocking Reagent: sc-2333 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.

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.