

CYP2B6 (Y-17): sc-55927

BACKGROUND

CYP2B6 (cytochrome P450 2B6) is a 491 amino acid protein encoded by the human gene CYP2B6. CYP genes are highly polymorphic and can affect individual drug response and adverse reactions to a great extent. The CYP2B6 gene product, along with a few other CYP gene products, are highly susceptible to variation due to several copy number variants (CNV), missense mutations, insertions and deletions, and gene expression mutations. There are 57 active CYP genes and 58 pseudogenes known in the human genome. In liver microsomes, CYP2B6 is involved in an NADPH-dependent electron transport pathway. It acts to oxidize a variety of structurally unrelated compounds, including steroids, fatty acids and xenobiotics. CYP2B6 is expressed in liver, lung and heart and can be induced by phenobarbital.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CYP2B6 (human) mapping to 19q13.2.

SOURCE

CYP2B6 (Y-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CYP2B6 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-55927 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CYP2B6 (Y-17) is recommended for detection of CYP2B6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

CYP2B6 (Y-17) is also recommended for detection of CYP2B6 in additional species, including bovine.

Suitable for use as control antibody for CYP2B6 siRNA (h): sc-62181, CYP2B6 shRNA Plasmid (h): sc-62181-SH and CYP2B6 shRNA (h) Lentiviral Particles: sc-62181-V.

Molecular Weight of CYP2B6: 56 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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