

CYP2C9/19 (C-21): sc-23436

BACKGROUND

Cytochrome P450, family 2, subfamily C polypeptides 9 and 19 are part of the CYP2C subfamily and are responsible for metabolizing many important drugs. CYP2C19 accounts for about 20% of the cytochrome p450 in adult liver. CYP2C9 contributes to the metabolism of fatty acids, prostanoids, and steroid hormones, and it may catalyze potentially toxic bioactivation reactions. A significant negative correlation ($r = -0.572$, $P < .01$) between enzyme activity and age was observed for CYP2C19, but there were no sex differences.

REFERENCES

1. Masta, A., et al. 2003. Analysis of Sepik populations of Papua New Guinea suggests an increase of CYP2C19 null allele frequencies during the colonization of Melanesia. *Pharmacogenetics* 13: 697-700.
2. Koukouritaki, S.B., et al. 2004. Developmental expression of human hepatic CYP2C9 and CYP2C19. *J. Pharmacol. Exp. Ther.* 308: 965-974.
3. Furuta, T., et al. 2004. Polymorphism of interleukin-1 β affects the eradication rates of *Helicobacter pylori* by triple therapy. *Clin. Gastroenterol. Hepatol.* 2: 22-30.
4. Bebia, Z., et al. 2004. Bioequivalence revisited: influence of age and sex on CYP enzymes. *Clin. Pharmacol. Ther.* 76: 618-627.

CHROMOSOMAL LOCATION

Genetic locus: CYP2C9/CYP2C19 (human) mapping to 10q23.33.

SOURCE

CYP2C9/19 (C-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CYP2C9/19 of human origin.

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-23436 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

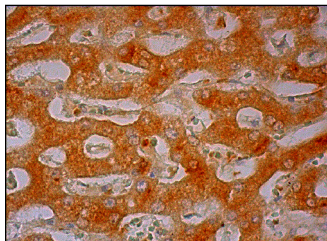
CYP2C9/19 (C-21) is recommended for detection of CYP2C9/19 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CYP2C9/19 (C-21) is also recommended for detection of CYP2C9/19 in additional species, including equine and bovine.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CYP2C9/19 (C-21): sc-23436. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

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.