SANTA CRUZ BIOTECHNOLOGY, INC.

UGT1A1 (N-20): sc-27413

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

UDP-glucuronosyltransferase 1A1 (UDPGT, UGT1A), also designated Bilirubin specific UDPGT isozyme 1 (HUG-BR1), is crucial in the conjugation and elimination of toxic zenobiotics and endogenous compounds. The microsomal protein is expressed in liver but can not be found in skin or kidney. The UGT1A1 isoform is bilirubin-glucuronidating and genetic deficiencies in this isoform are associated with several diseases, including Gilbert Syndrome and Crigler-Najjar syndrome. Defects in UGT1A1 may also cause transient familial neonatal hyperbilirubinemia associated with breast milk, which is is characterizied by excessive concentration of bilirubin in the blood, leading to jaundice.

REFERENCES

1. SWISS-PROT/TrEMBL (P22309). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html
2. World Wide Web URL: http://harvester.embl.de/harvester /P223/P22309.html
3. Maruo, Y., Nishizawa, K., Sato, H., Sawa, H. and Shimada, M. 2000. Prolonged unconjugated hyperbilirubinemia associated with breast milk and mutations of the bilirubin uridine diphosphate- glucuronosyltransferase gene. Pediatrics 106: E59. PMID: 11061796.
4. Ohnishi, A. and Emi, Y. 2003. Rapid proteasomal degradation of translocation-deficient UDP-glucuronosyltransferase 1A1 proteins in patients with Crigler-Najjar type II. Biochem. Biophys. Res. Commun. 310: 735-741. PMID: 14550264.

CHROMOSOMAL LOCATION

Genetic locus: UGT1A1 (human) mapping to 2q37; Ugt1a1 (mouse) mapping to 1 51.7 cM.

SOURCE

UGT1A1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of UGT1A1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-27413 P, (100 µg 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.

PROTOCOLS

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

APPLICATIONS

UGT1A1 (N-20) is recommended for detection of UGT1A1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.