

UGT2B (F-17): sc-23479

BACKGROUND

UDP-glucuronosyltransferase isoenzymes (UGTs) catalyze the glucuronidation of small lipophilic molecules, which regulates the bioactivity and metabolic fate of a wide range of endo- and xenobiotics. Glucuronidation increases the polarity of lipophilic molecules and facilitates their entry into aqueous compartments and their ultimate excretion. In essence, glucuronidation provides a protective function by terminating or attenuating the biological activity of its substrates. The UGT2B family of isoenzymes are highly expressed in liver, but are also detected in several non-hepatic tissues, including skin, breast, prostate, intestine, placenta and lung. Therefore, the UGT2B family may preferentially modulate steroid metabolism and excretion in addition to bile acids and xenobiotics. The human UGT2B genes localize as a cluster on chromosome 4q13.2.

REFERENCES

1. Monaghan, G., Clarke, D.J., Povey, S., See, C.G., Boxer, M. and Burchell, B. 1994. Isolation of a human YAC contig encompassing a cluster of UGT2 genes and its regional localization to chromosome 4q13. *Genomics* 23: 496-499.
2. Beaulieu, M., Levesque, E., Hum, D.W. and Belanger, A. 1996. Isolation and characterization of a novel cDNA encoding a human UDP-glucuronosyltransferase active on C19 steroids. *J. Biol. Chem.* 271: 22855-22862.
3. Beaulieu, M., Levesque, E., Hum, D.W. and Belanger, A. 1998. Isolation and characterization of a human orphan UDP-glucuronosyltransferase, UGT2B11. *Biochem. Biophys. Res. Commun.* 248: 44-50.

SOURCE

UGT2B (F-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of UGT2B 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-23479 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

UGT2B (F-17) is recommended for detection of a broad range of UGT2B family members of mouse, rat and 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).

UGT2B (F-17) is also recommended for detection of a broad range of UGT2B family members in additional species, including equine and canine.

Molecular Weight of UGT2B: 52 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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.

SELECT PRODUCT CITATIONS

1. Nishiyama, T., Kobori, T., Arai, K., Ogura, K., Ohnuma, T., Ishii, K., Hayashi, K. and Hiratsuka, A. 2006. Identification of human UDP-glucuronosyltransferase isoform(s) responsible for the C-glucuronidation of phenylbutazone. *Arch. Biochem. Biophys.* 454: 72-79.
2. Fujiwara, R., Nakajima, M., Oda, S., Yamanaka, H., Ikushiro, S., Sakaki, T. and Yokoi, T. 2010. Interactions between human UDP-glucuronosyltransferase (UGT) 2B7 and UGT1A enzymes. *J. Pharm. Sci.* 99: 442-454.
3. Meyer zu Schwabedissen, H.E., Oswald, S., Bresser, C., Nassif, A., Modess, C., Desta, Z., Ogburn, E.T., Marinova, M., Lütjohann, D., Spielhagen, C., Nauck, M., Kroemer, H.K. and Siegmund, W. 2012. Compartment-specific gene regulation of the CAR inducer efavirenz *in vivo*. *Clin. Pharmacol. Ther.* 92: 103-111.

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.



Try **UGT2B (E-6): sc-271777**, our highly recommended monoclonal alternative to UGT2B (F-17).