



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

UGT2B38 siRNA (m): sc-154904

BACKGROUND

UDP-glucuronosyltransferase isoenzymes (UGTs) catalyze the glucuronidation of small lipophilic molecules, thereby regulating the bioactivity and metabolic fate of a wide range of endogenous compounds and xenobiotics. Glucuronidation increases the polarity of lipophilic molecules and facilitates their entry into aqueous compartments and, ultimately, their 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. UGT2B38 (UDP glucuronosyltransferase 2 family, polypeptide B38) is the rodent ortholog of human UGT2B17, which plays an important role in the elimination of toxic compounds from several tissues throughout the body.

REFERENCES

1. Beaulieu, M., Lévesque, E., Hum, D.W. and Bélanger, A. 1996. Isolation and characterization of a novel cDNA encoding a human UDP-glucuronosyltransferase active on C19 steroids. *J. Biol. Chem.* 271: 22855-22862.
2. Beaulieu, M., Lévesque, E., Tchernof, A., Beatty, B.G., Bélanger, A. and Hum, D.W. 1997. Chromosomal localization, structure, and regulation of the UGT2B17 gene, encoding a C19 steroid metabolizing enzyme. *DNA Cell Biol.* 16: 1143-1154.
3. Lampe, J.W., Bigler, J., Bush, A.C. and Potter, J.D. 2000. Prevalence of polymorphisms in the human UDP-glucuronosyltransferase 2B family: UGT2B4(D458E), UGT2B7(H268Y), and UGT2B15(D85Y). *Cancer Epidemiol. Biomarkers Prev.* 9: 329-333.
4. Swanson, C., Mellström, D., Lorentzon, M., Vandenput, L., Jakobsson, J., Rane, A., Karlsson, M., Ljunggren, O., Smith, U., Eriksson, A.L., Bélanger, A., Labrie, F. and Ohlsson, C. 2007. The uridine diphosphate glucuronosyltransferase 2B15 D85Y and 2B17 deletion polymorphisms predict the glucuronidation pattern of androgens and fat mass in men. *J. Clin. Endocrinol. Metab.* 92: 4878-4882.
5. Xue, Y., Sun, D., Daly, A., Yang, F., Zhou, X., Zhao, M., Huang, N., Zerjal, T., Lee, C., Carter, N.P., Hurler, M.E. and Tyler-Smith, C. 2008. Adaptive evolution of UGT2B17 copy-number variation. *Am. J. Hum. Genet.* 8: 337-346.
6. Yang, T.L., Chen, X.D., Guo, Y., Lei, S.F., Wang, J.T., Zhou, Q., Pan, F., Chen, Y., Zhang, Z.X., Dong, S.S., Xu, X.H., Yan, H., Liu, X., Qiu, C., Zhu, X.Z., Chen, T., Li, M., Zhang, H., Zhang, L., Drees, B.M., Hamilton, J.J., Papasian, C.J., Recker, R.R., Song, X.P., Cheng, J. and Deng, H.W. 2008. Genome-wide copy-number-variation study identified a susceptibility gene, UGT2B17, for osteoporosis. *Am. J. Hum. Genet.* 83: 663-674.
7. Schulze, J.J., Lundmark, J., Garle, M., Skilving, I., Ekström, L. and Rane, A. 2008. Doping test results dependent on genotype of uridine diphospho-glucuronosyl transferase 2B17, the major enzyme for testosterone glucuronidation. *J. Clin. Endocrinol. Metab.* 93: 2500-2506.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: *Ugt2b38* (mouse) mapping to 5 E1.

PRODUCT

UGT2B38 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see UGT2B38 shRNA Plasmid (m): sc-154904-SH and UGT2B38 shRNA (m) Lentiviral Particles: sc-154904-V as alternate gene silencing products.

For independent verification of UGT2B38 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154904A, sc-154904B and sc-154904C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

UGT2B38 siRNA (m) is recommended for the inhibition of UGT2B38 expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor UGT2B38 gene expression knockdown using RT-PCR Primer: UGT2B38 (m)-PR: sc-154904-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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