Supplemental Table 1: Characteristics of donors for human hepatocytes.

	Donor	Previous numbering	Gender	Race	Age (year)	Cause of Death
Hepatocytes	1	ZYZ	Male	Afr.-Amer.*	46	Anoxia
	2	AAA	Female	Afr.-Amer.	8w**	Head trauma
	3	BAD	Male	Caucasian	60	ICH***

*Afr.-Amer.: African-American; **w: weeks; ***ICH: Intracerebral hemorrhage. Drug intake: none reported.

OTHER SUPPLEMENTAL DATA LEGEND

Supplemental Figure 1: UGT1A3 catalyzes norUDCA glucuronidation

(**A-C**) Ten micrograms of commercially available bacculosomes expressing human UGTs (BD Biosciences, Mississauga, Canada) were incubated with norUDCA (75µM) for 1H at 37°C.

(**D-F**) UGT-HK293 cells were homogenized in PBS containing 0.5 mM dithiothreitol through sonication, and 100 µg of the homogenates were incubated in the presence of norUDCA (75µM) for 1H at 37°C.

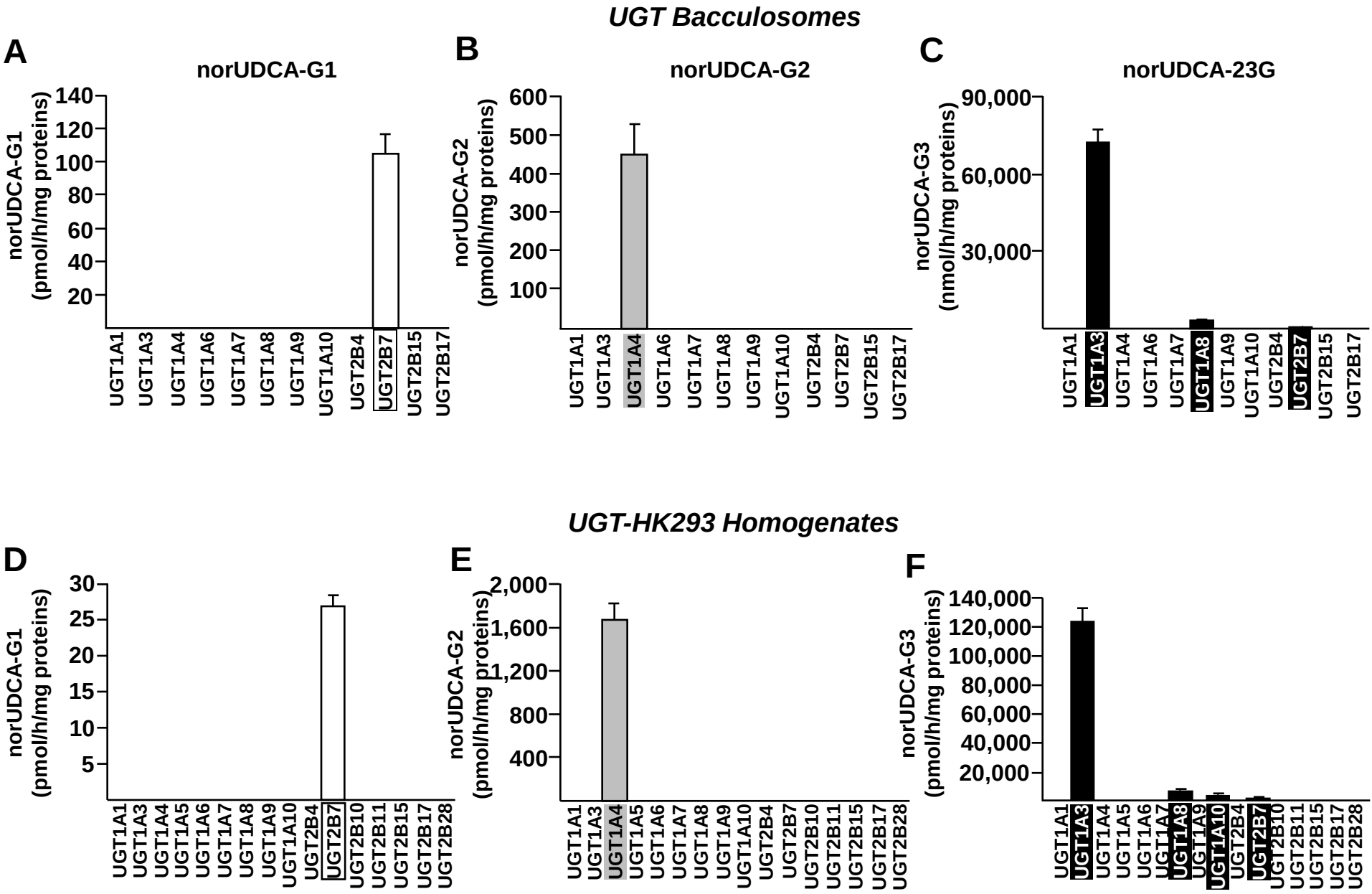
The formation of norUDCA-G1 (**A&D**), -G2 (**B&E**) and -23G (**C&F**) was analyzed by LC-MS/MS. Data represent the mean±S.D. of three different experiments performed in triplicate.

Previous immunoblot analyses[20] established that the UGT protein content in UGT1A3-bacculosomes was lower compared to UGT1A8 and UGT1A10, demonstrating that the high glucuronidation activity was not a consequence of higher UGT1A3 protein levels in the preparation.

Supplemental Figure 2: Rifampicin treatment increases CYP3A4 mRNA levels in the human hepatocytes prepapration used in the present study.

Primary human hepatocytes from 3 donors (Supplemental Data 1) were treated for 48H with DMSO (0.1%) or Rifampicin (20µM). CYP3A4 mRNA levels were measured by real-time RT-PCR, and expressed relative to control (vehicle) set as 1. UGT1A3 mRNA expression was normalized with 28S. Values are means ± SEM. Statistically significant differences between control and treated cells are indicated by asterisks (Student t test: ***: $p < 0.001$).

UGT1A3 glucuronidates norUDCA, **Supplemental Figure 1**



UGT1A3 glucuronidates norUDCA, **Supplemental Figure 2**