

## *Supplementary Material*

### 1 Supplementary Tables

**Supplementary Table 1.** Table with the antibodies used.

| Antibody                                                     | Cat. number             | Concentration |
|--------------------------------------------------------------|-------------------------|---------------|
| <b>Primary antibodies</b>                                    |                         |               |
| goat anti human Alb-HRP                                      | Bethyl, A80-129P        | 1:10 000      |
| mouse anti human HNF4A                                       | Invitrogen, MA1-199     | 1:1000        |
| mouse anti human HNF1A                                       | Invitrogen, MA1-25417   | 1:500         |
| rabbit anti human AFP                                        | Invitrogen, MA5-16321   | 1:1000        |
| rabbit anti human CPS1                                       | Abcam, EPR7493-3        | 1:500         |
| mouse anti human CYP3A4                                      | Invitrogen, MA5-17064   | 1:1000        |
| rabbit anti human CYP2C8                                     | Proteintech, 16546-1-AP | 1:5000        |
| rabbit anti human CYP2E1                                     | Invitrogen, PA5-35351   | 1:1000        |
| rabbit anti human ARG1                                       | Invitrogen, PA5-29645   | 1:5 000       |
| rabbit anti human GAPDH                                      | Invitrogen, PA1-988     | 1:10 000      |
| <b>Secondary antibodies</b>                                  |                         |               |
| goat anti mouse IgG Fc Cross-Adsorbed Secondary Antibody HRP | Invitrogen, 31439       | 1:2000        |
| goat anti rabbit IgG H&L HRP                                 | Abcam, ab97051          | 1:10 000      |

**Supplementary Table 2.** Specific primers used for RT–qPCR analysis (<https://www.Bio-Radad.com/>).

| Gene Name                                             | Gene Symbol   | Gene Aliases                                                                              | Unique Assay ID | Amplicon Length (bp) | Efficiency (%) |
|-------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------|-----------------|----------------------|----------------|
| albumin                                               | <i>ALB</i>    | DKFZp779N1935, PRO0883, PRO0903, PRO1341                                                  | qHsaCID0017798  | 112                  | 95             |
| glutamate-ammonia ligase                              | <i>GLUL</i>   | GLNS, GS, PIG43, PIG59                                                                    | qHsaCED0001392  | 73                   | 99             |
| nuclear receptor subfamily 1, group I, member 2       | <i>PXR</i>    | BXR, ONR1, PAR, PAR1, PAR2, PARq, PRR, NR1I2, SAR, SXR                                    | qHsaCED0045230  | 96                   | 97             |
| hepatocyte nuclear factor 1 homeobox A                | <i>HNF1A</i>  | HNF-1A, HNF1, IDDM20, LFB1, MODY3, TCF-1, TCF1                                            | qHsaCED0001918  | 61                   | 99             |
| hepatocyte nuclear factor 4, alpha                    | <i>HNF4A</i>  | FLJ39654, HNF4, HNF4a7, HNF4a8, HNF4a9, HNF4alpha, MODY, MODY1, NR2A1, NR2A21, TCF, TCF14 | qHsaCID0015879  | 108                  | 102            |
| arginase, liver                                       | <i>ARG1</i>   | Not Available                                                                             | qHsaCED0003959  | 67                   | 100            |
| carbamoyl-phosphate synthase 1, mitochondrial         | <i>CPS1</i>   | CPSASE1                                                                                   | qHsaCID0037920  | 143                  | 98             |
| cytochrome P450, family 2, subfamily C, polypeptide 8 | <i>CYP2C8</i> | CPC8, CYPIIC8, MP-12/MP-20                                                                | qHsaCID0021321  | 119                  | 96             |

|                                                             |               |                                                                                                              |                |    |     |
|-------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------|----------------|----|-----|
| cytochrome P450,<br>family 3, subfamily<br>A, polypeptide 4 | <i>CYP3A4</i> | CP33, CP34,<br>CYP3A, CYP3A3,<br>CYPIIIA3,<br>CYPIIIA4, HLP,<br>MGC126680, NF-<br>25,<br>P450C3,<br>P450PCN1 | qHsaCID0012316 | 98 | 101 |
| cytochrome P450,<br>family 2, subfamily<br>E, polypeptide 1 | <i>CYP2E1</i> | CPE1, CYP2E,<br>P450-J, P450C2E                                                                              | qHsaCED0044326 | 72 | 93  |
| ribosomal protein<br>S18                                    | <i>RPS18</i>  | D6S218E, HKE3,<br>KE-3, KE3,<br>MGC117351,<br>MGC126835,<br>MGC126837, S18                                   | qHsaCED0037454 | 67 | 94  |