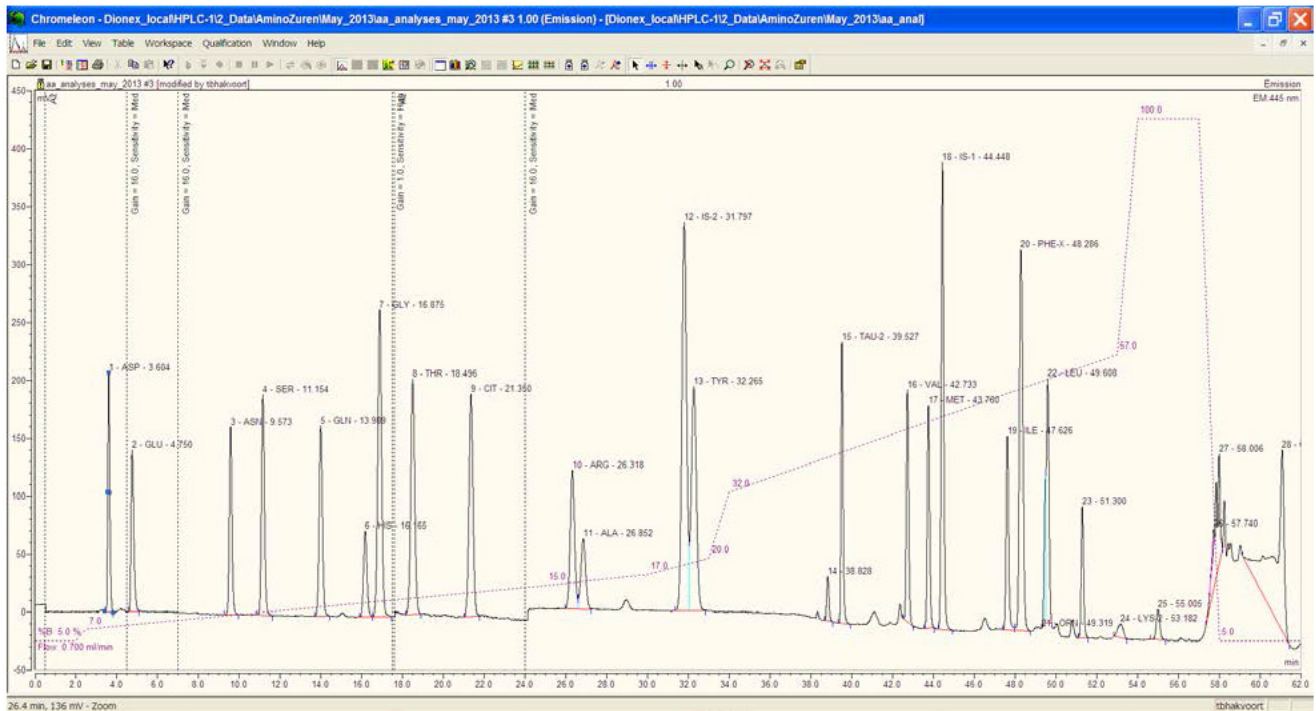


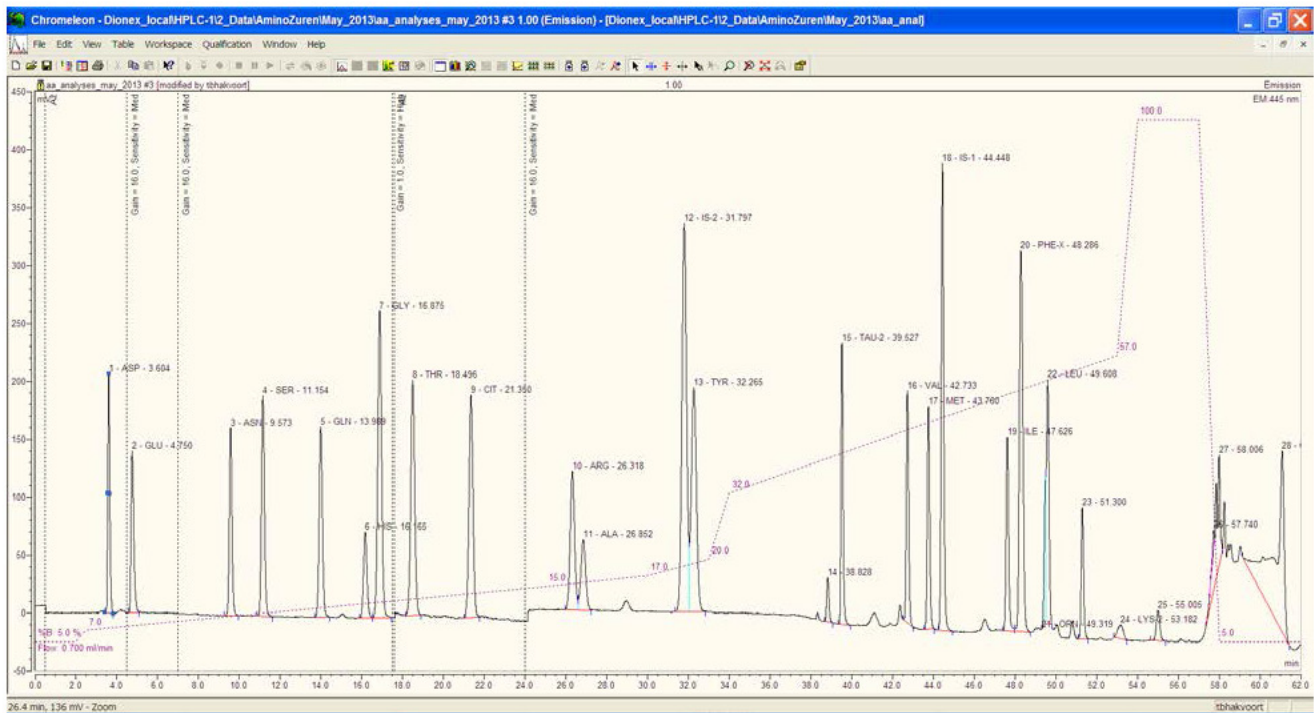
**Figure S1. Amino acid HPLC chromatogram.**

HPLC amino acid chromatogram, showing typical separation of 1.0 uM amino acid calibration solution (A) and typical separation of a deproteinized medium sample (B).

**A**



**B**



## Supplemental Table S1. Primer sequences

| Gene            | Sense primer             | RT- and antisense primer | Amplicon size (bp) | Template dilution |
|-----------------|--------------------------|--------------------------|--------------------|-------------------|
| <i>18S rRNA</i> | TTCGGAAGCTGAGGCCATGAT    | CGAACCTCCGACTTTCGTTCT    | 151                | 1000x             |
| <i>AFP</i>      | TKCCAACAGGAGGCTATGC      | CCCAAAGCAKACGAGTTTT      | 306                | -                 |
| <i>ALB</i>      | TGAGCAGCTTGGAGAGTACA     | GTTCCAGGACCACGGATAGAT    | 189                | -                 |
| <i>ARG1</i>     | TTGGCAAGGTGATGGAAGAAACA  | CCTCCCAGCAAGTCCGAAACAA   | 305                | -                 |
| <i>ARG2</i>     | GGTCCCCTGCCATAAGAGA      | GGCATCAACCCAGACAACACAA   | 299                | -                 |
| <i>CEBPA</i>    | GTGCGTCTAAGATGAGGGGG     | GGAAGGAGGCAGGAAACCTC     | 203                | -                 |
| <i>CAR</i>      | CGTCATGGCCAGTAGGGAAG     | CATGCCAGCATCTAAGCACT     | 232                | -                 |
| <i>CPS1</i>     | GAAGGGGCCCCGAGAAGTAGAA   | CTCAACCGGGGCCAGGAAAAC    | 445                | -                 |
| <i>CYP2B6</i>   | CCCGCCCTCTGCCCTTTTG      | TCCACACTCCGCTTCCCATCC    | 328                | -                 |
| <i>CYP3A4</i>   | AGCTTAGGAGGACTTCTTCAACC  | AGCCAAATCTACCTCCTCACACT  | 313                | -                 |
| <i>CYP3A7</i>   | ATTACGCTTTGGAGGACTTCTTCT | CGTCTTCATTTAGGGTTCTATTT  | 182                | -                 |
| <i>FVII</i>     | ACGGGCACCAAGCGCTCCTGTCG  | CACCCGCCGGCTCTGCTCATCC   | 359                | -                 |
| <i>GLS</i>      | GTCTGGAGGAAAGGTTGCAG     | TCTTAGTCCACTCGGCTCTT     | 229                | -                 |
| <i>GLS2</i>     | CTGTGTTCTGTGGAGGCTACT    | TCACGCCGTGGGTCTAACT      | 386                | -                 |
| <i>GS</i>       | GCCTGCTTGATGCTGGAGTC     | GGCGCTACGATTGGCTACAC     | 420                | -                 |
| <i>HNF4A</i>    | CCGGGTGTCCATACGCATCCT    | CAGGTTGTCAATCTTGCC       | 321                | -                 |
| <i>NTCP</i>     | GGCTTTCTGCTGGGTTATGTT    | GGGGAAAGAAGAAAAGTGGTC    | 162                | -                 |
| <i>OATP1B1</i>  | GCCGGACTAACCATGACCTAT    | GCTGAGTAATTTCTGTTCTGG    | 250                | -                 |
| <i>OTC</i>      | GCCGGATGCTAGTGTAACCAA    | AGCCGCTTTTTCTTCTCCTCTTC  | 161                | -                 |
| <i>PXR</i>      | GAGAGCGGCATGAAGAAGGAGA   | CATGTGGGGCAGCAGGGAGAAG   | 420                | -                 |
| <i>TF</i>       | GAAGGACCTGCTGTTTAAGG     | CTCCATCCAAGCTCATGGC      | 310                | -                 |

Primer sequences used in the RT-PCR analyses with resulting amplicon sizes. Primers are indicated from 5' → 3'. bp, base pairs; *rRNA*, ribosomal RNA; *AFP*, Alpha fetoprotein; *ALB*, Albumin; *ARG1*, arginase 1; *ARG2*, arginase 2; *CEBPA*, enhancer-binding protein alpha; *CAR*, constitutive androstane receptor; *CPS1*, carbamoyl phosphate synthetase; *CYP2B6*, cytochrome p450 2B6; *CYP3A4*, cytochrome p450 3A4; *CYP3A7*, cytochrome p450 3A7; *FVII*, factor seven; *GLS*, glutaminase; *GLS2*, glutaminase 2; *GS*, glutamine synthetase; *HNF4A*, hepatic nuclear factor alpha; *NTCP*, sodium taurine co-transporting peptide; *SLCO1B1*, Solute carrier organic anion transporter family member 1B1; *OTC*, ornithine transcarbamylase; *PXR*, pregnane x receptor; *TF*, transferrin.