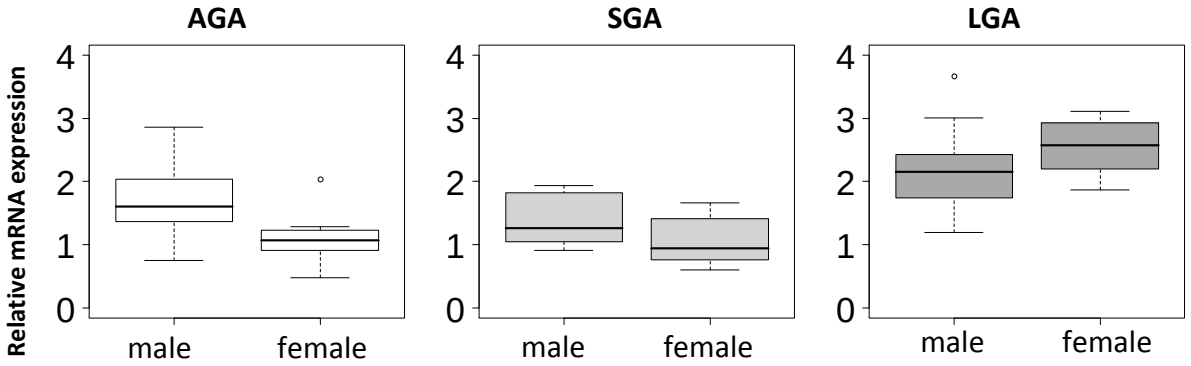
Supplemental Materials and Methods

RT-PCR reaction conditions

Each PCR reaction was performed in a total volume of 25 µl containing, 2.5 µl 10x PCR reaction buffer containing $(NH_4)_2\ SO_4$ (Naxo Ltd., Estonia), 2 mM $MgCl_2$, 0.2 mM dNTP mix (Solis BioDyne, Estonia), 0.5 units HOT FIREPol® DNA Polymerase (Solis BioDyne), cDNA (0.5 µl), and 400 nmol/µl of forward and reverse primer. For consistency, all PCR reagents (except primers) and cDNA were combined in one tube for all gene specific and reference gene reactions, mixed thoroughly, distributed equally between PCR tubes and finally gene-specific primers were added.

Amplification was attained by GeneAmp PCR System 2700 (Applied Biosystems Inc., USA) under the following conditions: 95°C for 15 min to denature, then 10 cycles of 95°C for 20s to denature, and from 67 to 56°C for 30s ('touch-down') to anneal, and 72°C for 1 min to extend, followed by 26 cycles of 95°C for 20s, 56°C for 30s and 72°C for 1 min (*CSH1/CSH2*, *GAPDH* and *GH2*) or 'touch-down' 72 to 61°C for 30s, followed by 27 cycles of 95°C for 20s, 61°C for 30s and 72°C for 1 min (*CSHL1*). The reaction was ended by final incubation of 72°C for 10 min. The number of cycles needed for amplification for each assay was optimized to ensure that PCR remained in the logarithmic phase of amplification.

Supplemental Figure 1.



Relative expression level of *CSH1-1* transcripts in term placenta from pregnancies with appropriate-for-gestational age (AGA, n=21), small-for-gestational-age (SGA, n=14) and large-for-gestatioanl-age (LGA, n=32) newborns by gender. The relative expression is given as ratio to reference gene *GAPDH*. The boxes represent the 25th and 75th percentiles. The median is denoted as the line that bisects the boxes. The whiskers are lines extending from each end of the box covering the extent of the data on 1.5× interquartile range.