## File S3. Copy number variation validation protocol by quantitative RT-PCR.

Amplification reactions (10 µl) were performed in quadruplicate with 10 ng of template DNA, 2X TaqMan® Genotyping Master Mix (Applied Biosystems, Foster City, CA, USA), 900 nM of each primer and 250 nM of each fluorogenic probe. Thermal cycling conditions were: 2 mins at 50° C, 10 mins at 95° C, followed by 40 cycles of 15 secs at 95° C and 60 secs at 60° C. Real-time data was collected by SDS 2.2.2 software (Applied Biosystems) and analyzed by the Copy Caller v.1.0 software (Applied Biosystems). Comparative C<sub>T</sub> method (Applied Biosystems user bulletin Part number 4400042) was used to calculate copy numbers. Each replicate was normalized to RNAseP to get  $\Delta$  C<sub>T</sub> (FAM dye C<sub>T</sub> – VIC dye C<sub>T</sub>). Average  $\Delta$  C<sub>T</sub> for each sample was calculated from the four replicates. All of the samples were normalized to a calibrator sample to determine  $\Delta\Delta$ C<sub>T</sub>. Copy number was obtained from the formula  $2x2-\Delta^{\Delta C}$ .