**Additional Files - Description**

**Additional file 1: Figure S1-S6**

, related to Figs. 1, 2, 3, 4 - Document with supplemental Figures 1, 2, 3, 4, 5, 6, including figure captions.

**Additional file 2: Table S1**

, related to Fig. 1 - Sample information for all sequenced rat and mouse tissue samples, including all open reading frames (ORFs) detected in rat heart and liver.

**Additional file 3: Table S2**

, related to Fig. 1 - Table with local and distant QTL mapping results for rat heart and liver. Includes mRNA expression level QTLs (eQTLs), ribosome occupancy QTLs (riboQTLs) and translational efficiency QTLs (teQTLs).

**Additional file 4: Table S3**

, related to Fig. 1 - Table with upstream ORFs identified in rat heart and liver and detected uORFs-QTLs.

**Additional file 5: Table S4**

, related to Fig. 2 - Table with cardiac QTL hotspots as identified by HESS (see methods).

**Additional file 6: Table S5**

. Table with SDP genotypes from the refined genotype map of the HXB/BXH recombinant inbred panel.

**Additional file 7.**

Review history.