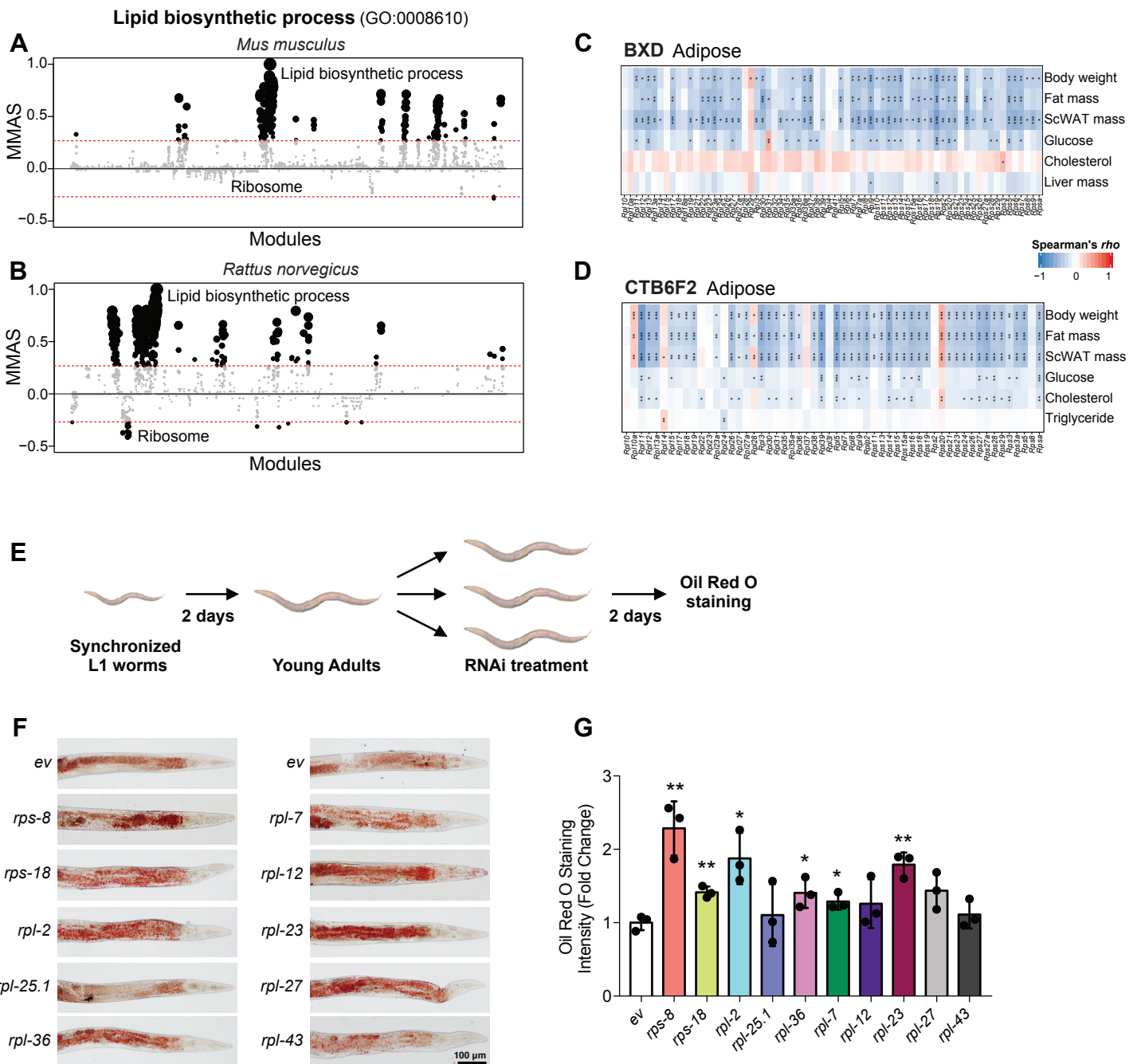


## Figure S12



**Figure S12. Validations of the negative association between ribosome and lipid biosynthetic modules.**

**A-B**, M-MAD results for lipid biosynthetic process in mouse (**A**) and rat (**B**). The threshold of significant module-module connection is indicated by the red dashed line; note that the associations are only suggestive in the mouse. Modules are organized by the module similarities. Dot sizes are proportional to MMAS of the respective modules.

**C-D**, Transcripts of genes encoding for ribosomal proteins in the white adipose tissue negatively correlate with metabolic traits in the BXD (**C**) and CTB6F2 (**D**) mouse cohorts. \*,  $p < 0.05$ ; \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ . ScWAT, subcutaneous white adipose tissue.

**E**, Scheme of the experimental design. L1 worm larvae were grown on regular NGM plates at 20°C for 2 days and then transferred to RNAi plates with 1mM IPTG containing HT115 bacteria expressing RNAi clones for ribosomal genes or empty vector (ev). After 2 days, worms were collected and lipid droplets were stained using Oil Red O.

**F**, Representative images of worm lipid droplet staining after RNAi of ribosomal genes.

**G**, Quantification of the lipid droplet staining intensity in **F**. \*,  $p < 0.05$ ; \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ .  $n=3$ .