

- amino acid
- β -alanine
- energetic nucleotide
- lipid
- organic acid
- sugar
- other

MUFA
Mono-unsaturated Fatty acid

PUFA
Poly-unsaturated Fatty acid

glycerol d
Glycerol derivative

GPC
Glycerophosphocholine

TAG
Tri-acyl glycerol

aas
Aminoacids, 3-letter code

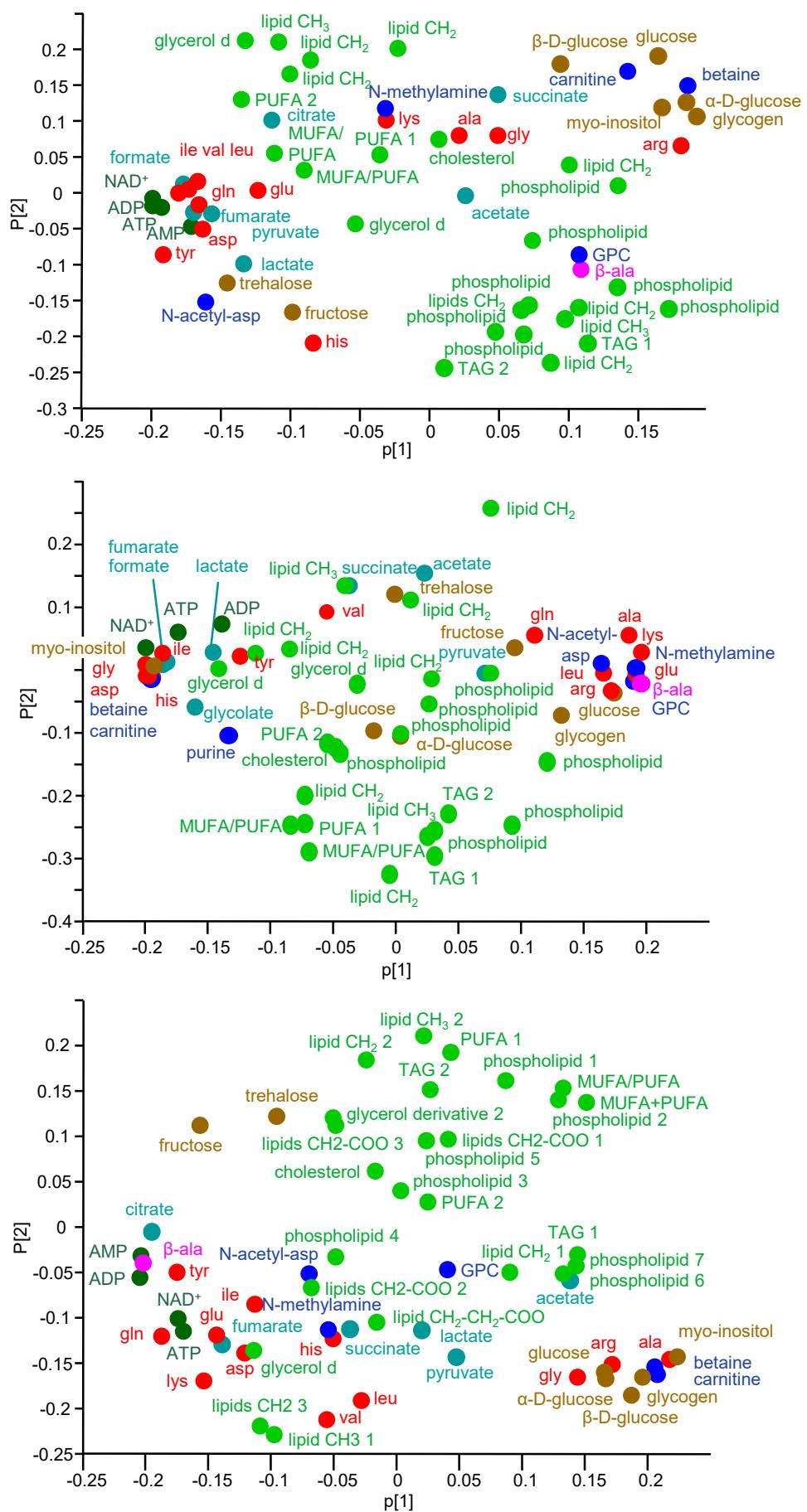


Figure S1. Loading plots from Figure 2 with individual metabolite assignation.

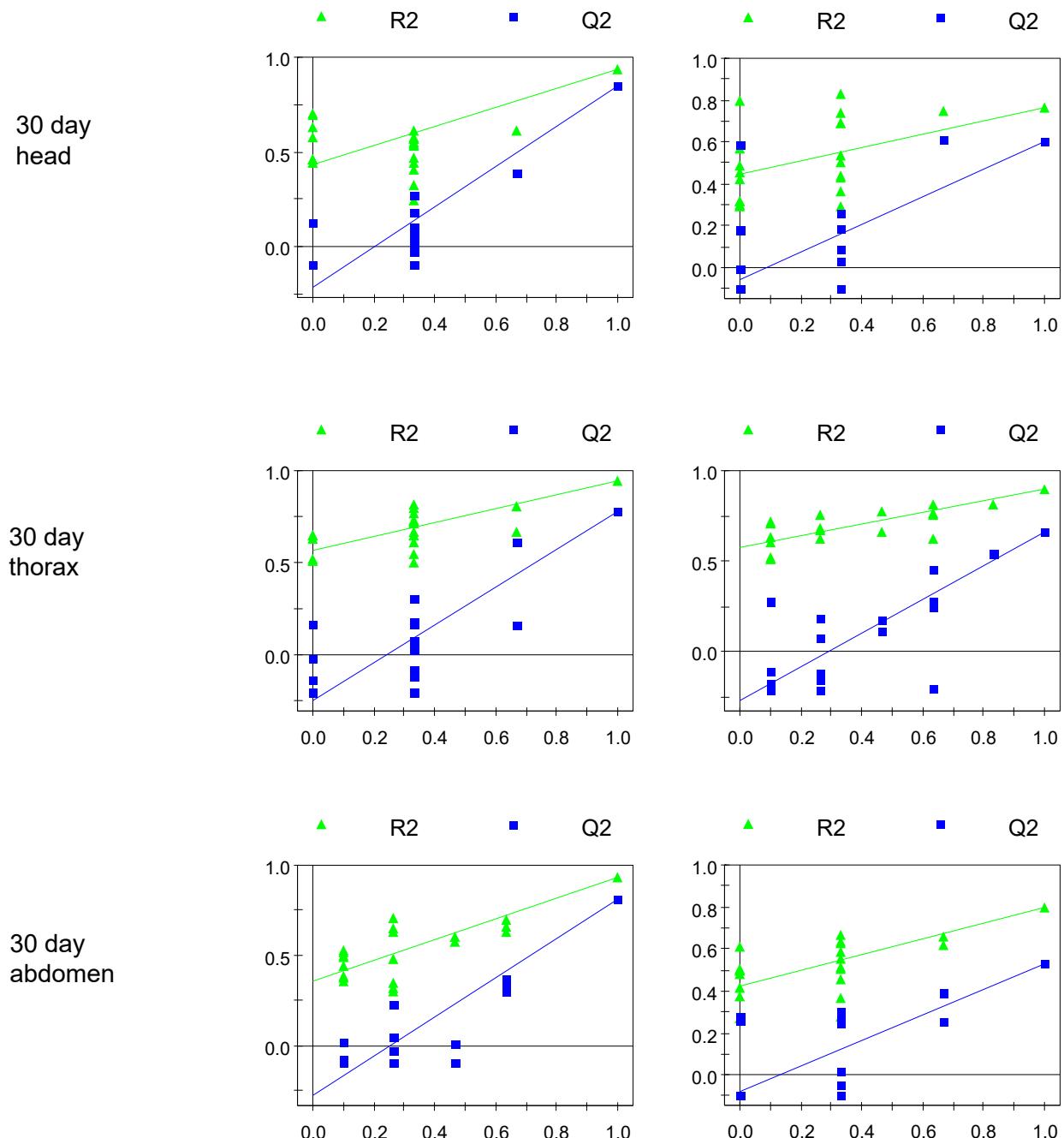
Control vs *Marf*^{KD}Control vs *Opa1*^{KD}

Figure S2. OPLS by pairs at 30 days. The anatomical regions of each one of the RNAi lines was compared to the control flies. In all six cases, a good model was found for the separation of the genotypes.

Marf vs Control

Opa1 vs Control

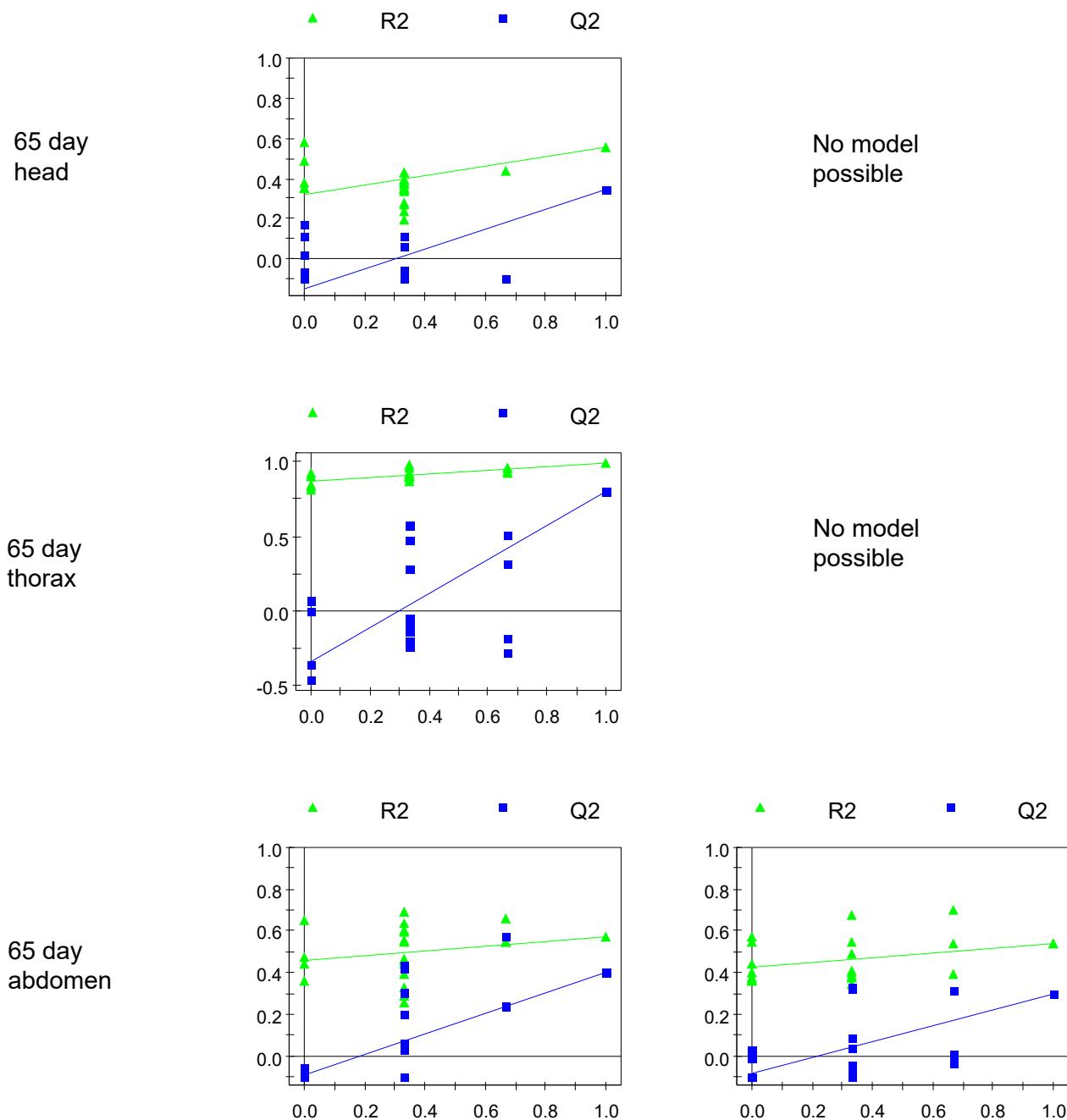


Figure S3. OPLS by pairs at 65 days. The anatomical regions of each one of the RNAi lines was compared to the control flies. In this case a model could be found only for four of the six comparisons, and they were less robust than at 30 days.

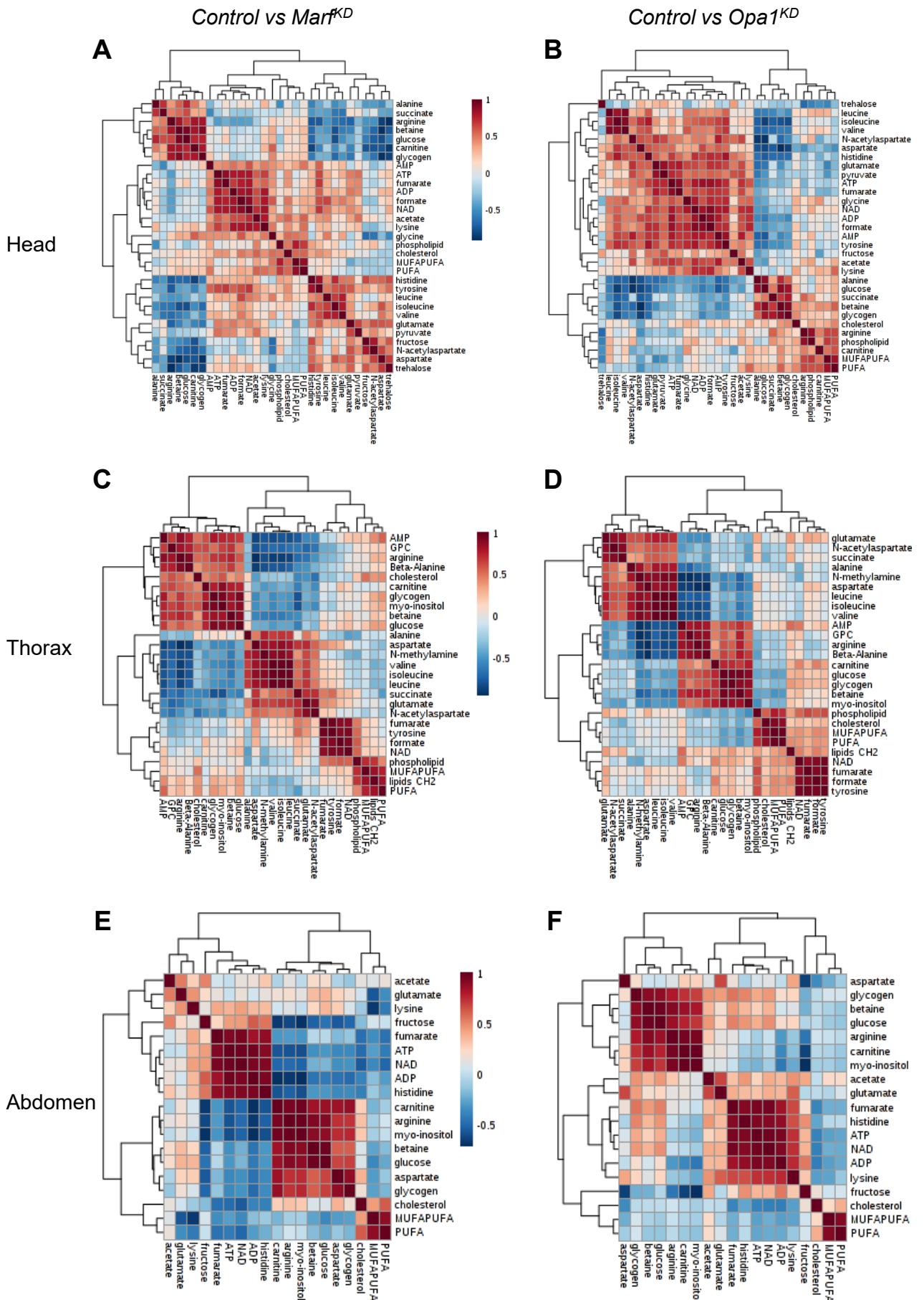


Figure S4. Correlation matrixes of metabolites at 30 days. A. Heads, Control versus Mar^{KD} . B. Heads, Control versus $\text{Opa}1^{KD}$. C. Thorax, Control versus Mar^{KD} . D. Thorax, Control versus $\text{Opa}1^{KD}$. E. Abdomen, Control versus Mar^{KD} . F. Abdomen, Control versus $\text{Opa}1^{KD}$.