



**Supplemental Figure 2. A metabolomic analysis of *LKRSDH* mutants independent of that illustrate in Figure 4.**  $w^{1118}; +/LKRSDH^{MB}$  and  $w^{1118}; LKRSDH^{1/MB01942}$  adult males were analyzed using a targeted GC-MS approach. Samples were collected for this analysis were independent of those illustrated in Figure 4. GC-MS analysis was conducted three months after the analysis represented in Figure 4. (A) A comparison of the metabolomic data from control and mutant samples using principle component (PC) analysis. (B) Differences in metabolite abundance between control and mutant samples are represented as a volcano plot. Dashed vertical line represents a fold change (FC) of  $> 1.5$ . Dashed horizontal line represents  $p < 0.01$ . Metabolites noted with a red box were also significantly changed in the metabolomic analysis represented in Figure 4.