

Table S5. Key DEGs selected in lipid and energy metabolism for three comparison groups. Three comparison group included LS vs. Con, LT vs. Con, LT vs. LS.

Comparison group	Gene	Description	log2FC	Padj	regulated	ko ID
LS vs. Con	<i>HSD17B12</i>	<i>17beta-estradiol 17-dehydrogenase</i>	7.317	0.033	up	ko00062, ko1040
	<i>TGL</i>	<i>Triacylglycerol lipase</i>	-5.881	0.029	down	ko00561
	<i>AGPAT</i>	<i>1-acyl-sn-glycerol-3-phosphate acyltransferase</i>	7.098	0.048	up	ko00561
	<i>FBA</i>	<i>fructose-bisphosphate aldolase</i>	8.807	0.002	up	ko00010
	<i>PCK</i>	<i>phosphoenolpyruvate carboxykinase</i>	7.792	0.018	up	ko00010, ko00020
LT vs. Con	<i>FAS</i>	<i>fatty acid synthase</i>	-5.472	<0.001	down	ko00061
	<i>FabD</i>	<i>malonyl-CoA-acyl carrier protein transacylase</i>	6.327	<0.001	up	ko00061
	<i>FabF</i>	<i>3-oxoacyl-[acyl-carrier-protein] synthase II</i>	4.851	0.038	up	ko00061
	<i>MECR</i>	<i>mitochondrial enoyl-[acyl-carrier protein] reductase</i>	4.556	0.024	up	ko00061
	<i>ACSL</i>	<i>long-chain fatty acid CoA ligase</i>	2.684	0.004	up	ko00061, ko00071
	<i>CPT1</i>	<i>carnitine O-palmitoyltransferase 1</i>	7.179	<0.001	up	ko00071
	<i>CPT2</i>	<i>carnitine O-palmitoyltransferase 2</i>	7.489	<0.001	up	ko00071
	<i>echA</i>	<i>enoyl-CoA hydratase</i>	6.524	<0.001	up	ko00071
	<i>ALDH</i>	<i>aldehyde dehydrogenase</i>	5.159	0.004	up	ko00010, ko00071, ko00561
	<i>TGL</i>	<i>Triacylglycerol lipase</i>	-4.546	<0.001	down	ko00561
	<i>AGPAT</i>	<i>1-acyl-sn-glycerol-3-phosphate acyltransferase</i>	7.589	<0.001	up	ko00561
	<i>ACOT</i>	<i>acyl-coenzyme A thioesterase</i>	7.328	<0.001	up	ko1040
	<i>ELOVL</i>	<i>elongation of very long chain fatty acids</i>	8.516	<0.001	up	ko1040
	<i>HSD17B12</i>	<i>17beta-estradiol 17-dehydrogenase</i>	8.538	<0.001	up	ko0062, ko1040
	<i>LDH</i>	<i>lactate dehydrogenase</i>	3.405	<0.001	up	ko00010
	<i>FBA</i>	<i>fructose-bisphosphate aldolase</i>	9.064	<0.001	up	ko00010
	<i>G6PC</i>	<i>glucose-6-phosphatase</i>	3.593	0.042	up	ko00010
	<i>PCK</i>	<i>phosphoenolpyruvate carboxykinase</i>	7.828	<0.001	up	ko00010, ko00020
	<i>SDH</i>	<i>succinate dehydrogenase</i>	2.393	<0.001	up	ko00020
	<i>ACADM</i>	<i>acyl-CoA dehydrogenase</i>	9.370	0.005	up	ko00071