

Supplemental Table 1. The hyperlink information of metabolites that differed in serum of sows at 24 hours postpartum and day 11 of lactation between CON and L-Ser groups

Metabolites	URL-Info
4,7,10,13,16,19-Docosahexaenoate	http://www.kegg.jp/kegg-bin/show_pathway?map01040+C06429+C00219
Arachidonate	http://www.kegg.jp/kegg-bin/show_pathway?map01040+C08320+C08323+C00219+C08316+C06426+C01595+C00712
Anthranilate	http://www.kegg.jp/kegg-bin/show_pathway?map00380+C00108
Sphingomyelin (d18:1/18:0)	http://www.kegg.jp/kegg-bin/show_pathway?map00600+C00550
1,2-dioleoyl-sn-glycero-3-phosphatidylcholine	-
L-Citrulline	http://www.kegg.jp/kegg-bin/show_pathway?map00220+C00062+C00064+C00437+C00025+C00327
Taurodeoxycholate	-
Linolenate	http://www.kegg.jp/kegg-bin/show_pathway?map01040+C08320+C08323+C00219+C08316+C06426+C01595+C00712
Trans-Vaccenate	-

Supplemental Table 2. The hyperlink information of metabolites that differed in colostrum of sows at 24 hours postpartum and day 11 of lactation between CON and L-

Ser group

Metabolites	URL-Info
L-Glutamine	http://www.kegg.jp/kegg-bin/show_pathway?map00230+C00064+C00262
Hypoxanthine	http://www.kegg.jp/kegg-bin/show_pathway?map00230+C00064+C00262
Nicotinamide adenine dinucleotide	http://www.kegg.jp/kegg-bin/show_pathway?map00760+C00003+C00111+C00253
Nicotinate	http://www.kegg.jp/kegg-bin/show_pathway?map00760+C00003+C00111+C00253
L-Pyroglutamate	http://www.kegg.jp/kegg-bin/show_pathway?map00480+C00025+C01879
L-Glutamate	http://www.kegg.jp/kegg-bin/show_pathway?map04974+C00078+C00025+C00041+C00079+C00064+C00082+C00483
cis-9-Palmitoleate	http://www.kegg.jp/kegg-bin/show_pathway?map00061+C00249+C06424+C08362
Eicosapentaenoate	http://www.kegg.jp/kegg-bin/show_pathway?map01040+C00249+C06428+C06427+C00219+C01595
alpha-Linolenate	http://www.kegg.jp/kegg-bin/show_pathway?map01040+C00249+C06428+C06427+C00219+C01595
Taurine	http://www.kegg.jp/kegg-bin/show_pathway?map00920+C00245
Pantothenate	http://www.kegg.jp/kegg-bin/show_pathway?map00770+C00864+C00106
Betaine	http://www.kegg.jp/kegg-bin/show_pathway?map00260+C00078+C00719
D-Proline	http://www.kegg.jp/kegg-bin/show_pathway?map00330+C00025+C00763+C00791
D-(+)-Melibiose	http://www.kegg.jp/kegg-bin/show_pathway?map00052+C00111+C00137+C00029+C00116+C00052+C01613+C05402+C00243
Stachyose	http://www.kegg.jp/kegg-bin/show_pathway?map00052+C00111+C00137+C00029+C00116+C00052+C01613+C05402+C00243
L-Carnitine	http://www.kegg.jp/kegg-bin/show_pathway?map04976+C00318+C02528
Uridine 5'-monophosphate (UMP)	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00105+C00029+C00106+C00064+C00178+C00015
Uridine 5'-diphosphate (UDP)	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00105+C00029+C00106+C00064+C00178+C00015
Arachidonate	http://www.kegg.jp/kegg-bin/show_pathway?map01040+C00249+C06428+C06427+C00219+C01595
sn-Glycerol 3-phosphoethanolamine	http://www.kegg.jp/kegg-bin/show_pathway?map00564+C00111+C01233+C00588+C00157+C00670
Citrate	http://www.kegg.jp/kegg-bin/show_pathway?map00250+C00158+C00064+C00025
myo-Inositol	http://www.kegg.jp/kegg-bin/show_pathway?map00052+C00111+C00137+C00029+C00116+C00052+C01613+C05402+C00243

UDP-D-Galactose	http://www.kegg.jp/kegg-bin/show_pathway?map00052+C00111+C00137+C00029+C00116+C00052+C01613+C05402+C00243
Acetylcarnitine	http://www.kegg.jp/kegg-bin/show_pathway?map04931+C02571+C00043
cis-Aconitate	http://www.kegg.jp/kegg-bin/show_pathway?map00020+C00158+C00417
Pregnenolone	http://www.kegg.jp/kegg-bin/show_pathway?map00140+C18044+C01953
Uracil	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00178+C00299+C00105+C00029+C00106+C00214+C00064+C00526+C00015
N-Acetyl-D-glucosamine	http://www.kegg.jp/kegg-bin/show_pathway?map00520+C00191+C00446+C00029+C02336+C00167+C00140+C00052
Trigonelline	http://www.kegg.jp/kegg-bin/show_pathway?map00760+C00253+C00003+C00111+C01004+C05842
Oleate	http://www.kegg.jp/kegg-bin/show_pathway?map01040+C01595+C00712
Linolenate	http://www.kegg.jp/kegg-bin/show_pathway?map01040+C01595+C00712
Tyramine	http://www.kegg.jp/kegg-bin/show_pathway?map00350+C00082+C00483
L-Tyrosine	http://www.kegg.jp/kegg-bin/show_pathway?map00350+C00082+C00483
N2-Acetyl-L-ornithine	http://www.kegg.jp/kegg-bin/show_pathway?map00220+C00025+C00437+C00064
L-Phenylalanine	http://www.kegg.jp/kegg-bin/show_pathway?map00360+C00180+C00079+C00082
D-Lactose	http://www.kegg.jp/kegg-bin/show_pathway?map00052+C00137+C00446+C00029+C00111+C00243+C00052+C05402
Uridine	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00178+C00299+C00105+C00029+C00106+C00214+C00064+C00526+C00015
Inosine	http://www.kegg.jp/kegg-bin/show_pathway?map00230+C00294+C00385+C00064+C00262
N1-Methyl-2-pyridone-5-carboxamide	http://www.kegg.jp/kegg-bin/show_pathway?map00760+C00253+C00003+C00111+C01004+C05842
Lumichrome	http://www.kegg.jp/kegg-bin/show_pathway?map00740+C01727
Glycerophosphocholine	http://www.kegg.jp/kegg-bin/show_pathway?map00564+C00588+C01233+C00346+C00093+C00111+C00670
Pregnenolone	http://www.kegg.jp/kegg-bin/show_pathway?map00140+C18044+C01953

Supplemental Table 3. The hyperlink information of metabolites that differed in serum of offspring piglets aged 21 days between CON and L-Ser groups

Metabolites	URL-Info
Cytosine	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00299+C00214+C00526+C00106+C00178+C00380+C00475+C00086
Uridine	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00299+C00214+C00526+C00106+C00178+C00380+C00475+C00086
Hypoxanthine	http://www.kegg.jp/kegg-bin/show_pathway?map00230+C00262+C00086
Uracil	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00299+C00214+C00526+C00106+C00178+C00380+C00475+C00086
Cytidine	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00299+C00214+C00526+C00106+C00178+C00380+C00475+C00086
Thymine	http://www.kegg.jp/kegg-bin/show_pathway?map00240+C00299+C00214+C00526+C00106+C00178+C00380+C00475+C00086
L-Pyroglutamate	http://www.kegg.jp/kegg-bin/show_pathway?map00480+C00025+C01879
L-Glutamate	http://www.kegg.jp/kegg-bin/show_pathway?map05033+C00025
Dopamine	http://www.kegg.jp/kegg-bin/show_pathway?map00350+C03758
Betaine	http://www.kegg.jp/kegg-bin/show_pathway?map00260+C00719
L-Leucine	http://www.kegg.jp/kegg-bin/show_pathway?map04150+C00123
Taurine	http://www.kegg.jp/kegg-bin/show_pathway?map00430+C00025+C00245
Anthranilate	http://www.kegg.jp/kegg-bin/show_pathway?map00380+C00322+C00108
Glycerophosphocholine	http://www.kegg.jp/kegg-bin/show_pathway?map00564+C00670
1-Stearoyl-sn-glycerol 3-phosphocholine	http://www.kegg.jp/kegg-bin/show_pathway?map00564+C00670
N1-Methyl-2-pyridone-5-carboxamide	http://www.kegg.jp/kegg-bin/show_pathway?map00564+C00670
Cholate	http://www.kegg.jp/kegg-bin/show_pathway?map00120+C00695+C01921+C00245+C05466

Glycocholate

http://www.kegg.jp/kegg-bin/show_pathway?map00120+C00695+C01921+C00245+C05466
