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ACCEPTED MANUSCRIPT

Dipeptidyl Peptidase 9 Enzymatic Activity Influences the Expression of Neonatal Metabolic Genes*

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*Running title: DPP9 in neonatal metabolism

receptor; WT: wild type; $\Delta\Delta C_T$: comparative C_T

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* Abbreviations

acetyl-coenzyme A carboxylase alpha; ACSL1: acyl-CoA synthetase long-chain family member 1; ADIPOR2: adiponectin receptor 2; Akt: protein kinase B; AK2: Adenylate kinase 2; AMPK: AMP-activated protein kinase; CE: cytoplasmic extract; ChREBP: carbohydrate regulatory element binding protein; CPT-1a: carnitine palmitoyltransferase 1a; CXCL10: C-X-C motif chemokine 10; DGAT1: diacylglycerol acyltransferase 1; DMEM: Dulbecco's Modified Eagle's Medium; DPP: dipeptidyl peptidase; EGF: epidermal growth factor; EGFR: epidermal growth factor receptor; EL: endothelial lipase; FABP2: fatty acid binding protein 2; FAP: fibroblast activation protein; FASN: fatty acid synthase; FATP4: fatty acid transporter 4; FoxO1: forkhead box O1; gki: gene knock-in; gko: gene knock-out; GLUT4: glucose transporter 4; GR: glucocorticoid receptor; G6PC: glucose 6-phosphatase; HDL: high-density lipoprotein; Het: heterozygote; HGF: hepatocyte growth factor; HMG-CoA: 3-hydroxy-3-methylglutaryl-CoA; HMGCS2: 3-hydroxy-3-methylglutaryl-CoA synthase; HNF-4α: hepatic nuclear factor-4α; IGFBP1: insulin-like growth factor-binding protein 1; IL-1RA: interleukin-1 receptor antagonist; IL-1β: interleukin-1 β; IRS: insulin receptor substrate; IκBα: NF-κB-inhibitor-α; LCFAs: long-chain fatty acids; MCFAs: medium-chain fatty acids; NE: nuclear extract; NT: Non-Targeting; PDK4: pyruvate dehydrogenase kinase 4; PEPCK: phosphoenolpyruvate carboxykinase; PI3K: phosphatidylinositol-3kinases; PGC-1α: peroxisome proliferator-activated receptor γ coactivator-1α; POP: prolyl oligopeptidase; PPARα: peroxisome proliferator activated receptor α; SCD1: stearoyl-Coenzyme A desaturase 1; SREBP-1: sterol regulatory element binding transcription factor 1; SUMO: small ubiquitin-like modifier; TNF-α: tumour

ACADM: medium chain acyl-CoA dehydrogenase; ACADVL: very long chain acyl-CoA dehydrogenase; ACC:

necrosis factor α; VEGF-A: vascular endothelial growth factor-A; VLDLR: very low-density lipoprotein

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