

Supplement

Targeted Deletion of Hepatocyte ABCA1 Leads to VLDL Triglyceride Overproduction and LDL hypercatabolism

Soonkyu Chung¹, Jenelle M. Timmins¹, MyNgan Duong¹, Chiara Degirolamo¹, Shunxing Rong¹, Janet K. Sawyer¹, Roshni R. Singaraja², Michael R. Hayden², Nobuyo Maeda³, Lawrence L. Rudel¹, Gregory S. Shelness¹, and John S. Parks^{1,*}

¹Department of Pathology/Section on Lipid Sciences, Wake Forest University Health Sciences, Winston-Salem, NC 27157, ²Centre for Molecular Medicine and Therapeutics, University of British Columbia, Vancouver, British Columbia, V5Z 4H4 Canada, ³Department of Pathology and Laboratory Medicine, University of North Carolina, Chapel Hill, NC, 27599

Running title: Hepatic ABCA1 regulates apoB-containing Lp metabolism

*Correspondence to: John S. Parks, Ph.D., Department of Pathology/Section on Lipid Sciences, Wake Forest University Health Sciences, Medical Center Blvd., Winston-Salem, NC, USA, 27157-1040. Email: jparks@wfubmc.edu Phone: (336)716-2145 Fax: (336)716-6279

Table 1. Gene-specific primers for qPCR

Target mRNA	Forward Primer	Reverse Primer
ABCG5	TGG CCC TGC TCA GCA TCT	ATT TTT AAA GGA ATG GGC ATC TCT T
LRP	TGGGTCTCCCGAAATCTGTT	CCACCGCATTCTTGAAGGA
LDLr	AGGCTGTGGGCTCCATAGG	TGCGGTCCAGGGTCATCT
SREBP1c	GGCCGAGATGTGCGAACT	TTGTTGATGAGCTGGAGCATGT
PPAR α	ACAAGGCCTCAGGGTACCA	GCCGAAAGAACGCCCTACAG
PPAR γ	CACAATGCCATCAGGTTGG	GCTGGTCGATATCACTGGAGATC
PGC1 α	AACCACACCCACAGGATCAGA	TCTTCGCTTATTGCTCCATGA
FXR α	TGGGCTCCGAATCCTCTTAGA	TGGTCCTCAAATAAGATCCTTGG
MTP	CCTACCAGGCCAACAAAGAC	CGCTCAATTTCATGTATCC

Supplement Fig. 1. A. Real time PCR quantification of hepatic mRNA levels of ABCG5, ABCG1, LRP and SRB-1. Data were normalized to GAPDH expression (mean \pm SEM; n=3 per genotype). **B.** Western blot analysis of hepatic SR-B1 and EL expression in WT and HSKO mice (n=3).

Supplemental Figure 1

