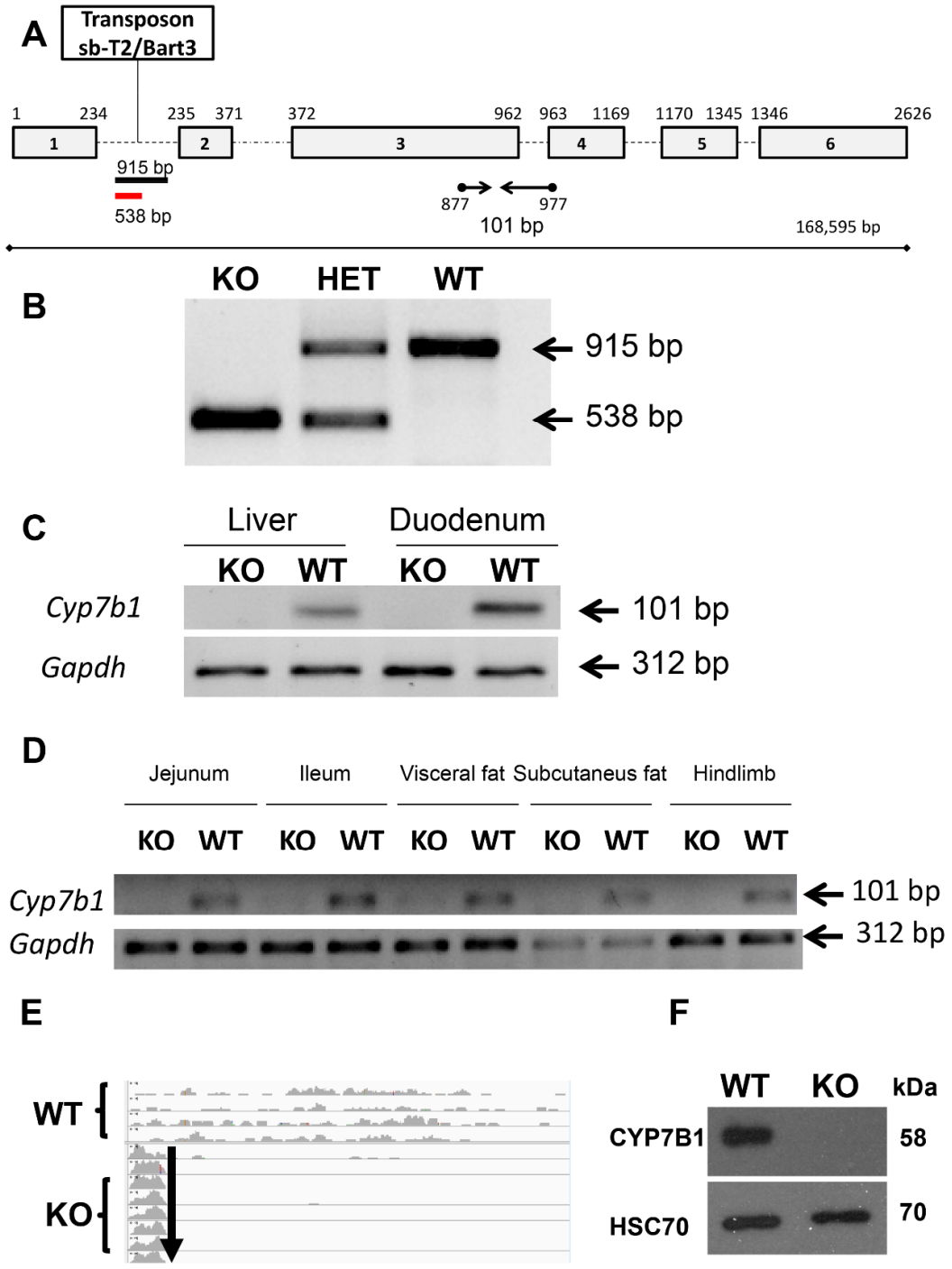
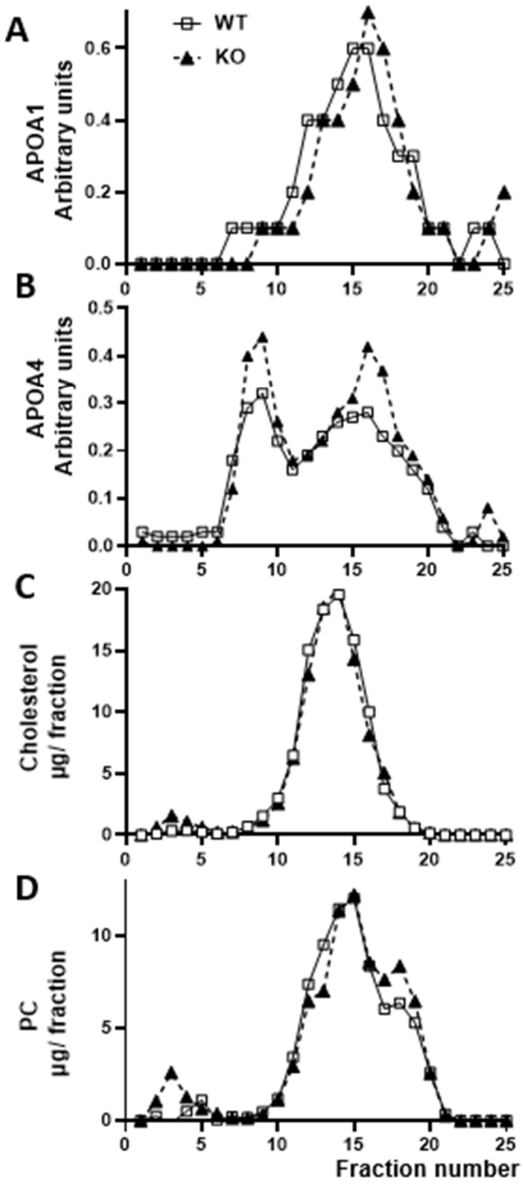
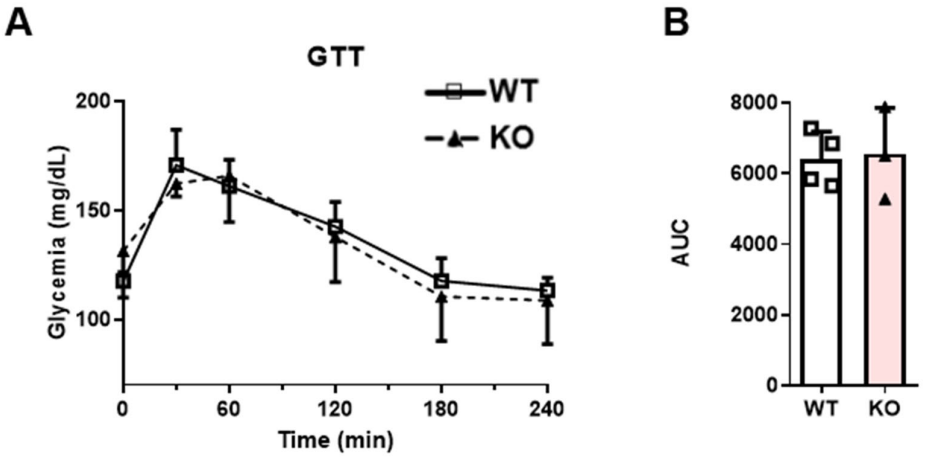



**Supplementary Fig S1. Disruption of the rat *Cyp7b1* gene**. A, schematic representation of the wild-type *Cyp7b1* gene showing the sizes of exons 1-6 and total length of the gene (https://www.ncbi.nlm.nih.gov/gene/25429), insertion of the transposon and location of primers used to genotype and confirm the mRNA expression. *bp*, base pair. B, PCR

genotyping of homozygous (KO) with the transposon inserted in both DNA copies, heterozygous (Het) and wild-type (WT) rats. Wild-type and mutated allele gave bands of 915 and 538 bp, respectively and revealed the insertion in the first intron. C and D, RT-PCR analysis of mRNA expression in several tissues from male homozygous mutant (KO) and wild-type (WT) rats. *Gapdh* was used as loading control. E, RNA sequencing of hepatic mRNA from four wild-type and eight transposon-inserted homozygous rats. Alignments of sequence readings in the different animals for the *Cyp7b1* gene according to Integrative Genome Viewer 2.8.2®. The downward arrow indicates the position where transcription was halted in KO rats. F, Western-blotting showing CYP7B1 protein wild-type and KO rat hepatic microsomal preparations.




**Supplementary Fig. S2. Characterization of male rat plasma lipoproteins**. Plasma lipoproteins were separated by FPLC and their APOA1 and APOA4 contents are reflected in panels A and B, respectively. Their cholesterol, and phosphatidylcholine (PC) contents are depicted in C, and D, respectively. Open squares correspond to wild-type and black triangles to homozygous *Cyp7b1*-KO rats fasted for 16 hours.




**Supplementary Fig. S3. Oral glucose tolerance tests on male *Cyp7b1*-deficient rats.** Glucose follow-up (A) of an oral glucose tolerance test (OGTT) in homozygous *Cyp7b1*-deficient (KO, n=3) and wild type rats (n=4). Area under the curve of OGTT (B) was calculated with curve fitting taking baseline for each condition. Data are means ± SD for each group.