



**Additional data 4. Gene expression at loci investigated by 3C-qPCR.** Total RNA from 30 day-old mouse liver was prepared and mRNA levels were determined by RT-qPCR relative to Gapdh mRNA level. The *Usp22*, *Lnp* and *Mtx2* genes were found to be expressed. Very low level of expression were found for the *Gtlf3b*, *Aldh3a2* and *Emb* genes. The other genes (*Kcnj12*, *Tnfrsf13b*, *Gtl2*, *Dlk1* and *HoxD13*) are fully repressed.