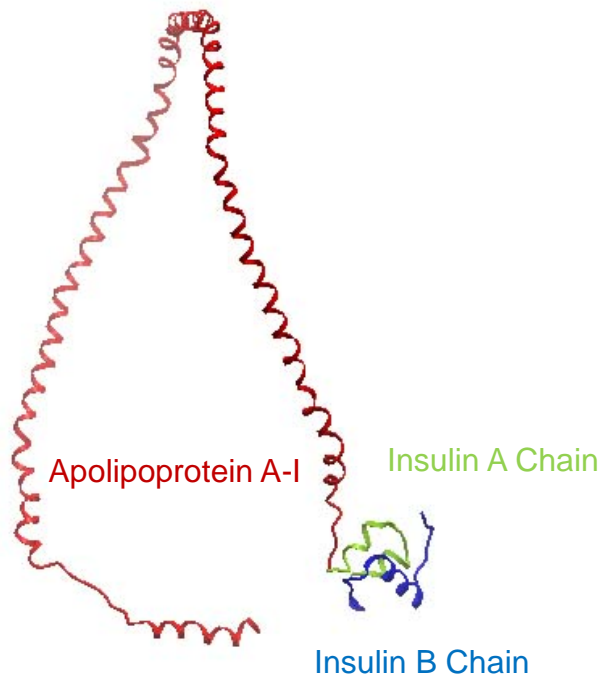


Supplementary Material

1 Supplementary Figures

A

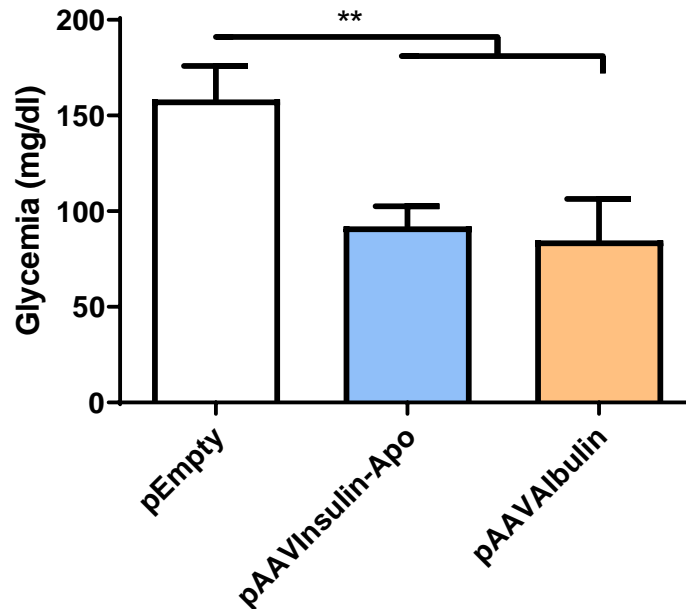


B

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1  MFVNQHLCGS HLVEALYLVC GERGFFYTPK TQRGGGGGQR GIVEQCCTSI CSLYQLENYC
61  NGAPDEPPQS PWDRVKDLAT VYVDVLKDSG RDYVSQFEGS ALGKQLNLKL LDNWDSVTST
121 FSKLREQLGP VTQEFWDNLE KETEGLRQEM SKDLEEVKAK VQPYLDDFQK KWQEEMELYR
181 QKVEPLRAEL QEGARQKLHE LQEKLSPLGE EMRDRARAHV DALRTHLAPY SDELRQLAA
241 RLEALKENGG ARLAEYHAKA TEHLSTLSEK AKPALEDLRQ GLLPVLESFK VSFLSALEEY
301 TKKLNTQHHH HHH
  
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Supplementary Figure 1. Fusion protein of a single chain insulin and apolipoprotein A-I. (A) Representation of the apolipoprotein A-I (red) fused to the insulin A chain (green) and the insulin B chain (blue). (B) Aminoacid sequence of the fusion protein using the previous color code.



Supplementary Figure 2. In vivo activity of AAV constructs. C57BL/6 mice were treated with a hydrodynamic injection of a control plasmid (pEmpty), a plasmid harboring the genome of the AAV encoding insulin-apo (pAAVInsulin-Apo) or a plasmid harboring the genome of the AAV encoding albumin (pAAVAIbulin). 24h later, glycemia was analyzed with a glucometer. ** P<0.01.

2 Supplementary Tables

Name	Sequence
Insulin-Fw	5'-CTACTGGCCAACCTGCTCTC-3'
Insulin-Rv	5'-CTGGCCACCGCCACC-3'
ACACA-Fw	5'-TTCTAACAGGAGCTGGAGCC-3'
ACACA -Rv	5'-AGTGGGTCACCCATTGTT-3'
ACLY-Fv	5'-TCTTTGTGCTGGGAAGGAGT-3'
ACLY -Rv	5'-CATCCACGGATGACGATAC-3'
FASN-Fw	5'-AACTCCAAGGACACAGTCACCAT-3'
FASN-Rv	5'-CAGCTGCTCCACGAACTCAA-3'
CYP7A1-Fw	5'-GCTGTGGTAGTGAGCTGTTGCA-3'
CYP7A1-Rv	5'-CACAGCCCAGGTATGGAATCA-3'
RPLP0-Fw	5'-AACATCTCCCCCTTCTCCTT-3'
RPLP0-Rv	5'-GAAGGCCTTGACCTTTTCAG-3'

Supplementary Table 1. List of primers.