

Supplemental Methods: PCR probes.

(a) PAI-1 mRNA was determined in three different assays:

(i) **Wild type PAI-1** (ie excluding transgene) primers/probe:

Forward: 5'-TGCACAAGAAGGTACCGTGAAT-3'

Reverse: 5'-AGAAAAGCAAAAACACCAACATGA-3'

Probe: 5'-ATT-TCCTAGCAGGCCACTCTGCATCTGTT-3'

(ii) **Total PAI-1** (ie wild type and transgene) primers:

Forward: 5'-CATCAGGCCACCGACTTCGGAGTA-3'

Reverse: 5'-CTGCCGCCGGG- TTTTCCC-3'

(iii) **Transgenic PAI-1** (ie excluding wild type) primers:

Forward: 5'-CCACATTTGTAGAGGTTTTACTTGAT-3'

Reverse: 5'-TGTGSSSTTTGTGSTGCTATTGCTT-3'

(b) **GAPDH** mRNA primers:

Forward: 5'-TCTTGTGCAGTGCCAGCCTC-3'

Reverse: 5'- TGGCAGCCCTGGTGACCA-3'

(c) **Ghrelin** mRNA primers/probe:

Forward: 5'-GGCAGGCTCCAGCTTCCT-3'

Reverse: 5'-GCAGTTTAGCTGGTGGCTTCTT-3'

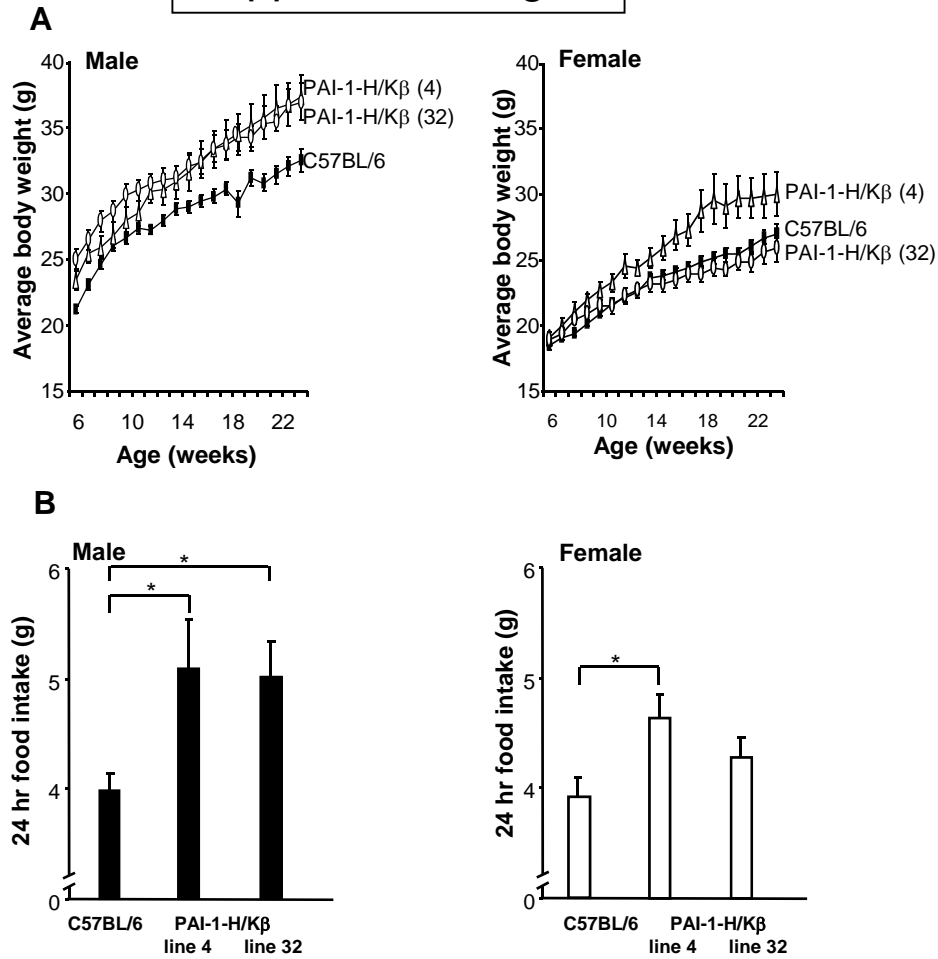
Probe: 5'³CACCAGAAAGCCCAGCAGAGAAAGGAATC -3'

(d) **uPAR** mRNA primers:

Forward: 5'-CCACAAACCTCTGCAACAGGC-3'

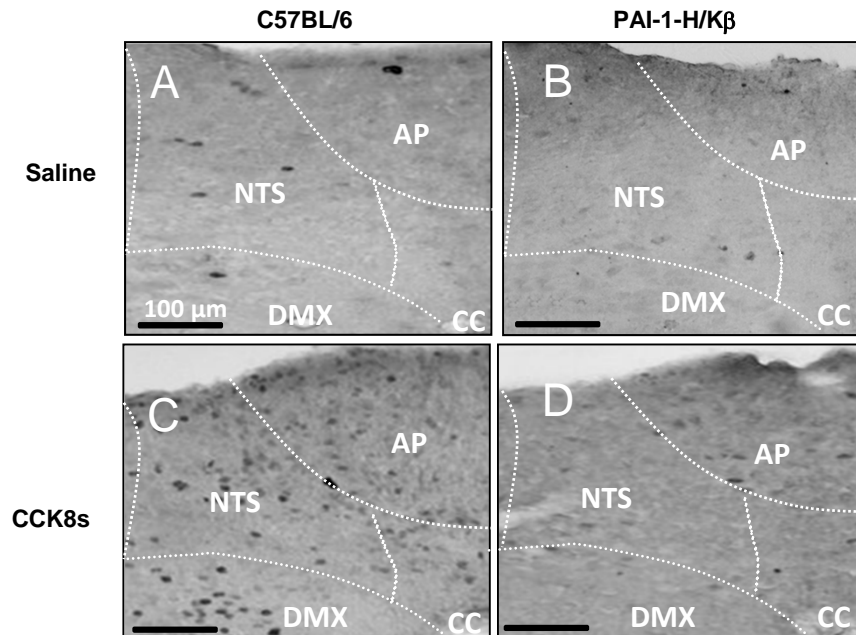
Reverse: 5'-ATTCATTGGTCCCCGGCA-3'

Supplemental Fig. 1



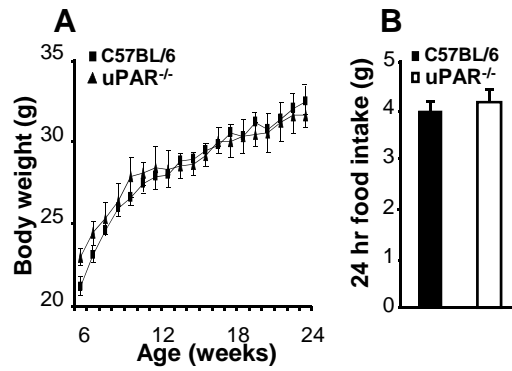
SUPPLEMENTAL Fig 1. A, Body weight from 6-24 week male and female C57BL/6, PAI-1-H/K β (line 4) and PAI-1-H/K β (line32) mice. B, 24 hr food intake for 12 week C57BL/6, PAI-1-H/K β (line 4) and PAI-1-H/K β (line 32) mice. *, $p < 0.05$, $n = 8$.

Supplemental Fig. 2



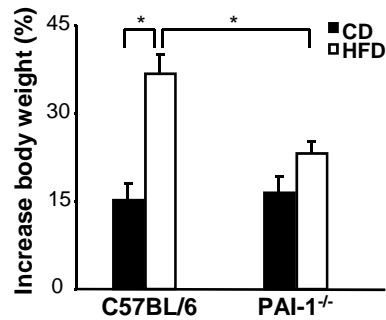
SUPPLEMENTAL Fig 2. Suppressed stimulation of c-fos in NTS neurons in PAI-1-H/K β mice in response to CCK8s. A, Saline-injected C57BL/6 mouse. B, Saline injected PAI-1-H/K β mouse. C, CCK8s (2.5 nmol/kg, ip) injected C57BL/6 mouse. D, CCK8s (2.5 nmol/kg, ip) injected PAI-1-H/K β mouse. Neurons with stained nuclei (in focus in a single focal plane) in the NTS were counted for quantitative studies. NTS, nucleus tractus solitarius; AP, area postrema; DMX, dorsal motor nucleus of the vagus; CC, central canal. Scale bar 100 μ m

Supplemental Fig. 3



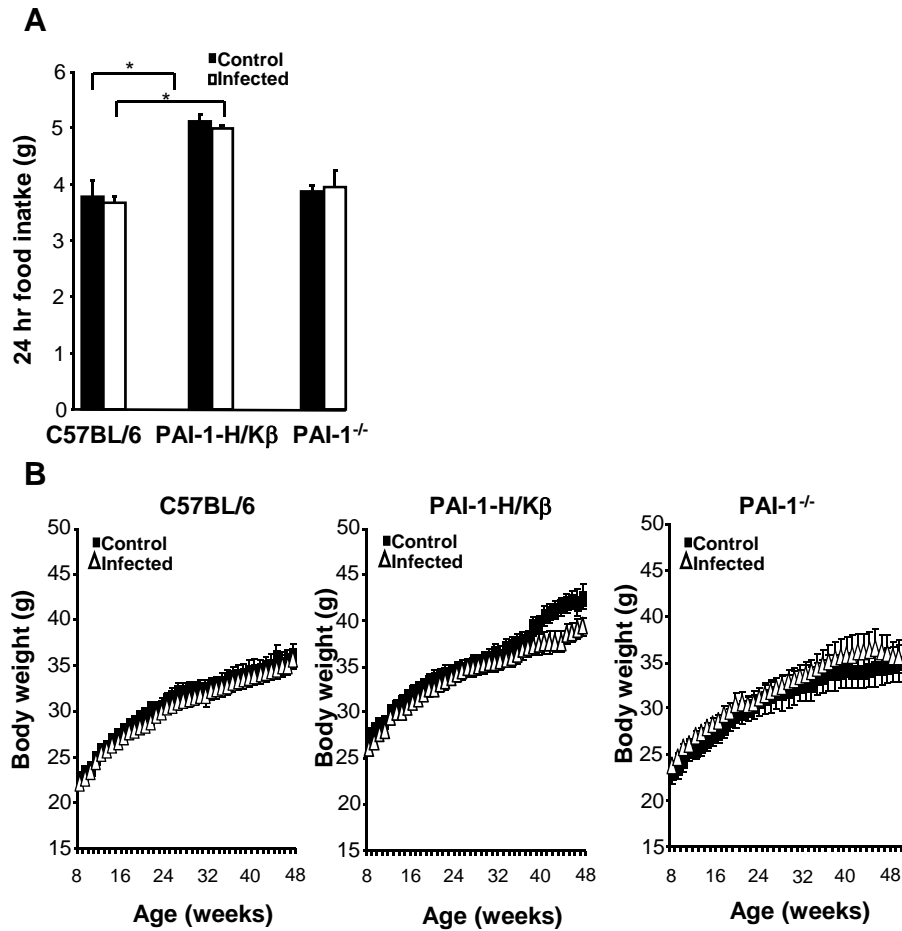
SUPPLEMENTAL Fig 3. Body weight and food intake in uPAR^{-/-} mice is similar to C57BL/6 mice A, Body weight of male C57BL/6 and uPAR^{-/-} mice from 6 to 24 weeks of age. B, 24 hr food intake in 12 week old C57BL/6 and uPAR^{-/-} male mice. n=8.

Supplemental Fig. 4



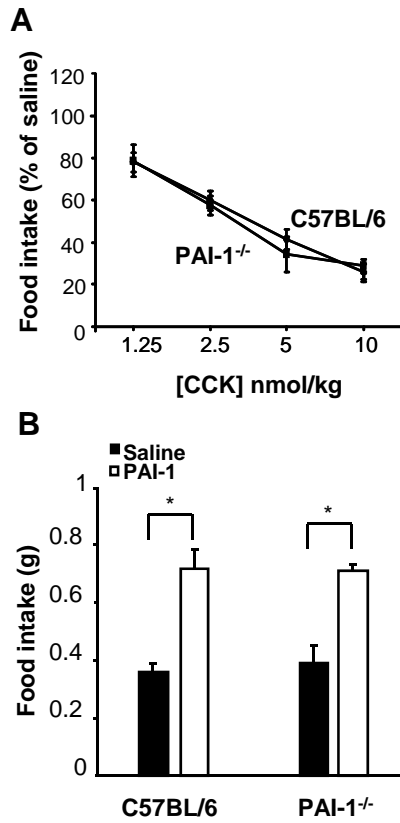
SUPPLEMENTAL Fig 4. Effect of high fat diet on body weight in PAI-1^{-/-} mice. PAI-1^{-/-} mice showed a significantly decreased weight gain (expressed as a % of initial weight) compared to C57BL/6 mice after feeding a high fat diet (HFD) for 4 weeks. However, the weight gain in the two strains was similar on a control diet (CD). At the start of the experiment the average body weight of C57BL/6 and PAI-1^{-/-} mice was 21.98 ± 0.31 g and 20.27 ± 0.77 g respectively *, $p < 0.05$, $n = 7$ per group.

Supplemental Fig. 5



SUPPLEMENTAL Fig 5. Food intake and body weight of control and *H.felis* infected mice. A, 24 hr food intake of control and *H.felis* infected C57BL/6, PAI-1-H/Kβ and PAI-1^{-/-} mice 6 months postinfection. B, Body weight data from ages 8-47 weeks in infected and control C57BL/6, PAI-1-H/Kβ and PAI-1^{-/-} mice.

Supplemental Fig. 6



SUPPLEMENTAL Fig 6. Effect of CCK8s and exogenous PAI-1 on food intake in PAI-1^{-/-} mice. A, The satiety action of CCK8s in PAI-1^{-/-} mice is similar to that in C57BL/6 mice. B, Food intake (30 min) following an over-night fast is increased in both C57BL/6 and PAI-1^{-/-} mice in response to exogenous PAI-1 (2.5 nmol/kg, ip). *, $p < 0.05$, $n = 6$.