

Table S1: Sequences of qPCR Primers

Gene	Forward (5'→3')	Reverse (5'→3')
ACAD-L	TCTTTCCTCGGAGCATGACA	GACCTCTCTACTCACTTCTCCAG
ACAD-M	AAGCCACGAAGTATGCCCTG	CCATAGCCTCCGAAAATCTG
ACC	TGAGGAGGACCGCATTATC	GCATGGAATGGCAGTAAGGT
Aconitase	TCTCTAACCAACCTGCTCATCGG	TCATCTCCAATCACCACCCACC
ADH1	ACAAACCCTTCACCATCGAG	CCTTCTCCAACGCTCTCAAC
Adiponectin	TGTTGGAATGACAGGAGCTG	CGAATGGGTACATTGGGAAC
COX 8b	GAACCATGAAGCCAACGACT	GCGAAGTTCACAGTGGTTCC
COX II	TCTCCCCTCTCTACGCATTCTA	ACGGATTGGAAGTTCTATTGGC
CPT-1 β	GATCTGGGCTATCTGTGTCCG	ACGTTTGGAAGCTGTAGAGCATG
CRBP-I	GCTGAGCACTTTTCGGAACT	CCCTCAGCTCTCATTTCCAG
CYC	ATTTCAACCCTTACTTTCCCG	CCACTTATGCCGCTTCATGGC
Cyclophilin	CAAGACTGAATGGCTGGATG	ATGGGGTAGGGACGCTCTCC
FAS	TACTCAGCAGAAGATGTGCGG	TTTGCCAAGGAGGTGCGAAC
G6P	TGCAAGGGAGAACTCAGCAA	GGACCAAGGAAGCCACAATG
GLUT2	ACGGATGCCAATTACCGACA	TGCTGGGCCATGTGCA
Lpl	TCTGTACGGCACAGTGG	CCTCTCGATGACGAAGC
MGL	CAGAGAGGCCAACCTACTTTTC	ATGCGCCCCAAGGTCATATTT
PEPCK	TTGAACTGACAGACTCGCCCT	TGCCCATCCGAGTCATGA
PPAR α	GACAAGGCCTCAGGGTACCA	GCCGAATAGTTCGCCGAAA
PPAR γ	AACTCTGGGAGATTCTCCTGTTGA	TGGTAATTTCTTGTGAAGTGCTCATA
RALDH1	TTTGGCCACACACTCCAATA	GGGCTGACAAGATTCATGGT
RBP4	TCTGTGGACGAGAAGGGTCAT	CCAGTTGCTCAGAAGACGGAC
RetSDR1	CCAAAGCTGTCCGAGAGAAG	CAATATGGCCGTTCTGGAGT
SCD-1	CTACAAGCCTGGCCTCCTGC	GGACCCCAGGGAAACCAGGA
SREBP-1c	GCAGACTCACTGCTGCTGAC	AGGTACTGTGGCCAAGATGG
TGM2	ACAGCATCCCACTTCGAATC	CTTGATTTCCGGATTCTCCA
UCP-1	CAGAATGCAAGCCCAGAGC	AAGCATTGTAGGTCCCCGTGT

Table S2: Expression levels of genes in soleus muscle in wild-type (WT) and C-III-KO mice after being fed a high fat diet.

Gene	WT	C-III-KO	
CPT-1 β	0.89 \pm 0.31	0.80 \pm 0.16	n.d.
PPAR α	0.48 \pm 0.19	0.48 \pm 0.19	n.d.
PGC1 α	0.46 \pm 0.15	0.46 \pm 0.11	n.d.
ACAD-M	0.43 \pm 0.12	0.46 \pm 0.10	n.d.
ACAD-L	0.83 \pm 0.20	0.78 \pm 0.15	n.d.

Gene expression is presented as relative expression level (mean \pm SEM). n=4 each genotype; n.d., not different. CPT-1 β , Carnitine palmitoyltransferase-1 β ; PPAR α , peroxisome proliferator-activated receptor alpha; PGC1 α , PPAR γ coactivator 1 α ; ACAD, acyl-Coenzyme A dehydrogenase (M-medium; L-long).

Online Supplementary Data

Figure Legends for supplementary figures

Fig. S1. CRBP-III expression is regulated by PPAR γ . **(A)** Luciferase assays using different CRBP-III promoter constructs transfected into COS7 cells. Cells were co-transfected with expression vectors for PPAR γ and RXR α . Relative luciferase activity was assessed after treatment with vehicle (dark bar) or rosiglitazone (light bar). **(B)** The protein-DNA complex for PPRE1 and PPRE3 can be supershifted (light arrow) using specific antibodies against PPAR γ or RXR α . aP2-PPRE was used as a positive control.

Fig S2

CRBP-III is not expressed in the brain. Northern Blot Analysis of different regions of the brain. Top panel shows lack of expression of CRBP-III; bottom panel shows the ethidium stained RNA gel as loading control. 1, liver, 2, whole brain; 3, cerebral cortex; 4, basal ganglia; 5, hippocampus; 6, hypothalamus; 7, cerebellum; 8, brain stem.

Fig. S3

CRBP-III is expressed in brown adipose tissue (BAT). Expression of CRBP-III in BAT was analyzed in protein extracts from total BAT (whole), BAT stromal vascular fraction (SVF), BAT adipocytes (ADIPO) and white adipose tissue (WAT) as comparison. 75 μ g protein was loaded for each sample.