



Abstract

(F S),
 27. I
 HO-1,
 SIRT1
 N SH
 HO-1
 SIRT1
 HO-1-
 SIRT1
 N SH
 F
 N SH
 I

Material and Methods

Experimental design for *i* β β β experiment

C (ML12, CRL-22)
 T C C (TCC)
 D M E M (DMEM)
 H² F12 S
 12
 7 - 2
 2 10
 (00 M)
 C
 (C PP) (M), RN SIRT1 (RN),
 T (S MP) (M). O SIRT1
 S S RN SIRT1,
 RN F
 SIRT1 1
 (G ID937 9) J603
 J603-GFP
 DN 2.0 I
 F GENE HD

Experimental design for *i* β β β experiment

C U C
 N I H C U
 L F C 7B 6
 (HF) M
 1) 2) HF 3) HF
 C PP (/)
 HF C PP (/) S MP (20 /)
 (36 38°C) 10
 8 (6 /) G
 (L I
 M C) ELIS (C M)
 B K3EDT

(LT)
 H
 -80°C

Analysis of isoprostane and heme

L
 (CM) ELIS

Analysis of superoxide levels for *i* β β β experiment

H 96- 70%
 S (00
 M) C PP (M) S MP
 (M) 2. O (DHE) 37±C 30
 F P -E L
 S (/ : 30/620)

Analysis of triglyceride levels for *i* β β β experiment

H 7 - 70%
 00 M
 C PP (M) S MP (M),
 (PBS), (C M)

Analysis of homeostasis model assessment of insulin resistance (HOMA-IR)

HOM -IR = HOM -IR =
 (U/ L) (/L) / 22. ,

Analysis of triglyceride and cholesterol content in hepatic tissue

(1:2) %
 T
 (C M)

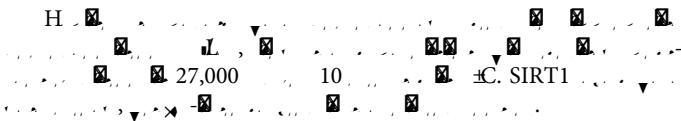
Analysis of free fatty acids levels in hepatic tissue

10 1% T
 -100
 FF
 S (S L , MO)

RNA extraction and real-time PCR for *i* β β β and *i* β β β experiments

T RN
 RN P M K (QI GEN, M , US)
 (PCR)
 S BR G PCR M M B 7 00 HT F
 R -T PCR S P HO-1, F S, SIRT1,
 C (CC), (/ (S) 2M, 9-

Western blot analysis



Statistical analysis

S. ... T. ... 9 (G ... P, S, D, C, US). S ... <0.0 ... <0.01, ... SE

Results

HO-1 induction improves oxidative stress and increases SIRT1 expression in cultured murine hepatocytes treated with high-fructose

O ... H ... C PP ... S MP, ... HO-1 ... F ... ID, HF ... C PP ... HO-1 ... S MP ... HO-1 ... S MP ... 28,29. I ... SIRT1 ... HF ... I ... HO-1 ... C PP, ... SIRT1 ... SNMP ... C PP ... SIRT1. (F ... 1E).

HO-1 induction improves lipid accumulation in cultured murine hepatocytes

F ... (F ... 2, 2B). H ... C PP ... SIRT1, RN ... F S ... HO-1 ... SIRT1 ... HO-1 ... U ... SIRT1 ... SIRT1 ... HF ... F ... S MP, ... SIRT1 ... C PP, ... SIRT1 ... (F ... 2, 2B). O ... SIRT1 ... HO-1 ... SIRT1.

HO-1 induction improves the metabolic profile and liver function in mice fed a high-fructose diet

HO-1 ... M ... HF ... (F ... 3, 3B). H ... C PP ... S MP ... C PP ... HOM -IR ... HF ... (F ... 3C). C PP ... HOM -IR ... HF ... LT ... (F ... 3D). C PP ... LT ... S MP ... C PP ... HF ... (F ... 3E, 3F). C PP ... S MP ... C PP ...

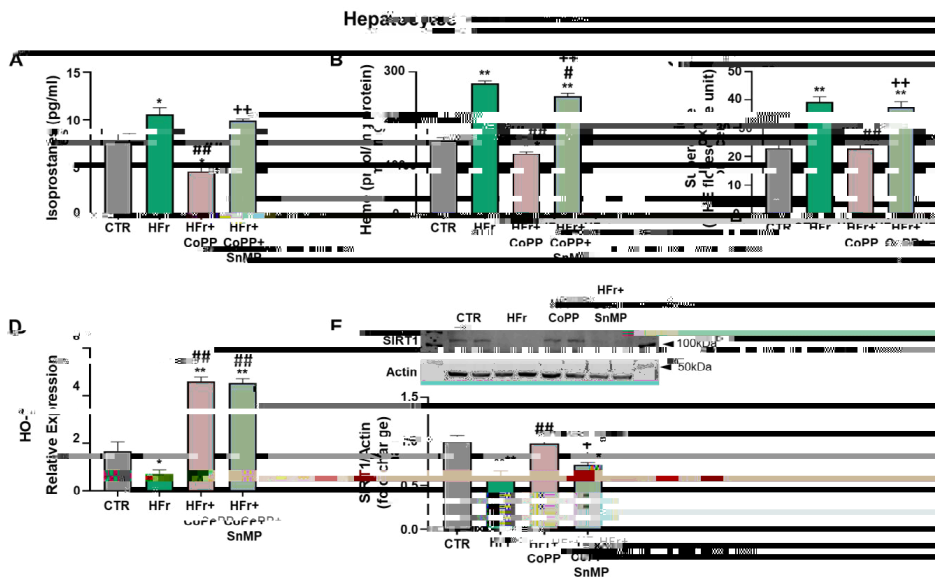


Figure 1:

A B C D E

HO-1 induction improves hepatic lipogenesis in mice fed a high-fructose diet

FF (F...), C PP (F...), HF (F...), RN (F...), S...-1, E... 6, CC, SCD-1, HF (F... B-E), C PP (F...), S MP (F...), C PP (F...)

HO-1 induction improves hepatic oxidative stress and increases SIRT1 expression in mice fed a high-fructose diet

O (F...), HO-1 (F...), HF (F...), C PP (F...), S MP (F...), HO (F...)

... HF ...

Citation:

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