High fat diet-induced oxidative stress blocks hepatocyte nuclear factor 4α and leads to hepatic steatosis in mice

Running title: Oxidative stress blocks hepatocyte nucleus factor 4α

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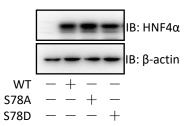
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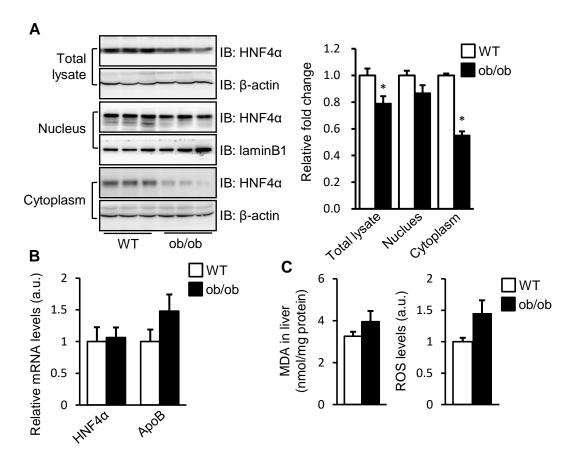
Supplemental Figure S1. The expression levels of exogenous WT HNF4 α , S78A and S78D compared to that of the endogenous HNF4 α in COS-7 cells.

Supplemental Figure S2. The regulation of HNF4α functions in ob/ob mice.

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Supplemental Figure S1. The expression levels of exogenous WT HNF4 α , S78A and S78D compared to that of the endogenous HNF4 α in COS-7 cells. COS-7 cells were transfected with expressing vectors of WT HNF4 α , S78A and S78D mutants. Cells were harvested after 24 h. Proteins from cell extracts were immunoblotted by antibodies of HNF4 α or β -actin.



Supplemental Figure S2. The regulation of HNF4 α functions in ob/ob mice. Male WT and ob/ob mice were fed with chow diet until 20 weeks old. (A) Proteins from nucleus, cytoplasm and liver extracts were immunoblotted by antibodies of HNF4 α , laminB1 or β-actin. (B) Total RNA was isolated from livers to detect mRNA level of HNF4 α by RT-qPCR and normalized to 36B4 mRNA level. Data are expressed as fold-change relative to the level of WT mice, n=6 per group. (C) MDA and ROS in liver were assayed (n=6 per group) with kit. The data are expressed as the mean ± S.E., *p < 0.05. a.u., arbitrary units.