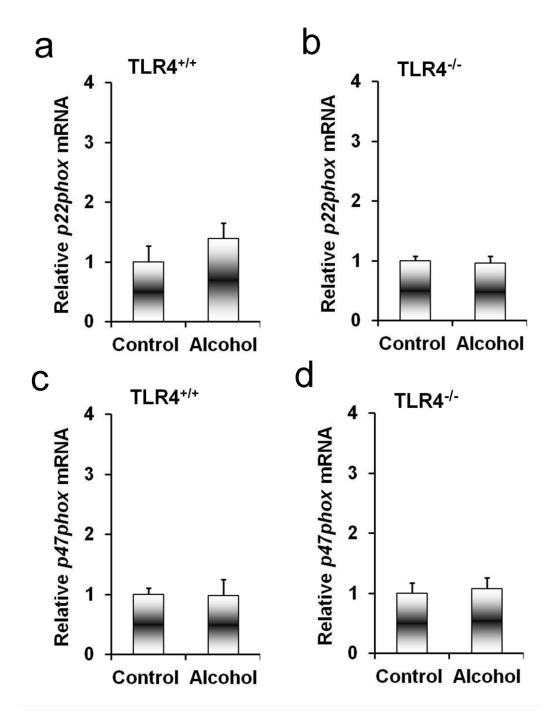
## Supplementary information

*Tlr4*-mutant mice are resistant to acute alcohol-induced sterol-regulatory element binding protein activation and hepatic lipid accumulation

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Supplementary Figure S1. Effects of acute alcohol exposure on hepatic NADPH oxidase subunits. All mice except controls were administered with ethanol (4 g/kg) by gavage. Liver tissue was collected at 2 h after alcohol. The expression of hepatic (**a**,**b**) *p22phox* and (**c**,**d**) *p47phox* mRNA was determined using real-time RT-PCR. Data were expressed as means  $\pm$  SEM (N=6).

Genes	Forward (5'-3')	Reverse (5'-3')	
18S	GTAACCCGTTGAACCCCATT	CCATCCAATCGGTAGTAGCG	
fas	CGCTCGGCTCGATGGCTCAG	CCAGCACCACGGCATGCTCA	
acc	CCGTTGGCCAAAACTCTGGAGCTAA	GAGCTGACGGAGGCTGGTGACA	
scd-1	CGGTCATCCCATCGCCTGCTCT	GTAGGCGAGTGGCGGAACTGC	
dgat-2	GGATGCCTGTGCTTCGCGAGT	GCTGCACCTCCCACCACGATG	
irs-1	AAAAGCCACTTTCCCCGCCCG	CCACCAGCCGCCCAAATACCA	
irs-2	GCGGAGTGTGTGGGGGGTCCA	GGGGCTGGTAGCGCTTCACT	
ho-1	CGTCACTTCGTCAGAGGCCTGC	TCTGGGGTTTCCCTCGGGGTG	
sod-2	AGCGAACGGCCGTGTTCTGAG	AGCGCGCCATAGTCGTAAGGC	
p67phox	CTGTGGTGTGAGCATACGGT	TTAGGCTGAGGCTCCGTAGT	
gp91phox	GGGAACTGGGCTGTGAATGA	CAGTGCTGACCCAAGGAGTT	
p22phox	AGTGAGGACTTGCGAAGTGG	GAGTAGGCGCCGAAATACCA	
p47phox	CCAGGGCACTCTCACTGAATA	ATCAGGCCGCACTTTGAAGAA	

## Supplementary Table S1. Oligonucleotide sequence of primers for real-time RT-PCR

## Supplementary Table S2. The effects of acute alcohol exposure on mRNA level of housekeeping genes in mouse liver

Housekeeping genes	Cycle numbers		<i>P</i> value
	Control	Alcohol	F value
$\beta$ -actin	24.39±0.59	22.08±0.52	0.001
Gapdh	17.45±0.82	15.92±0.41	0.016
18S	10.41±0.17	10.49±0.25	0.589

All mice except controls were administered with ethanol (4 g/kg) by gavage. Liver tissue was collected at 6 h after alcohol. The expression of hepatic housekeeping genes were determined using real-time RT-PCR. Data were expressed as means  $\pm$  SEM (N=6).