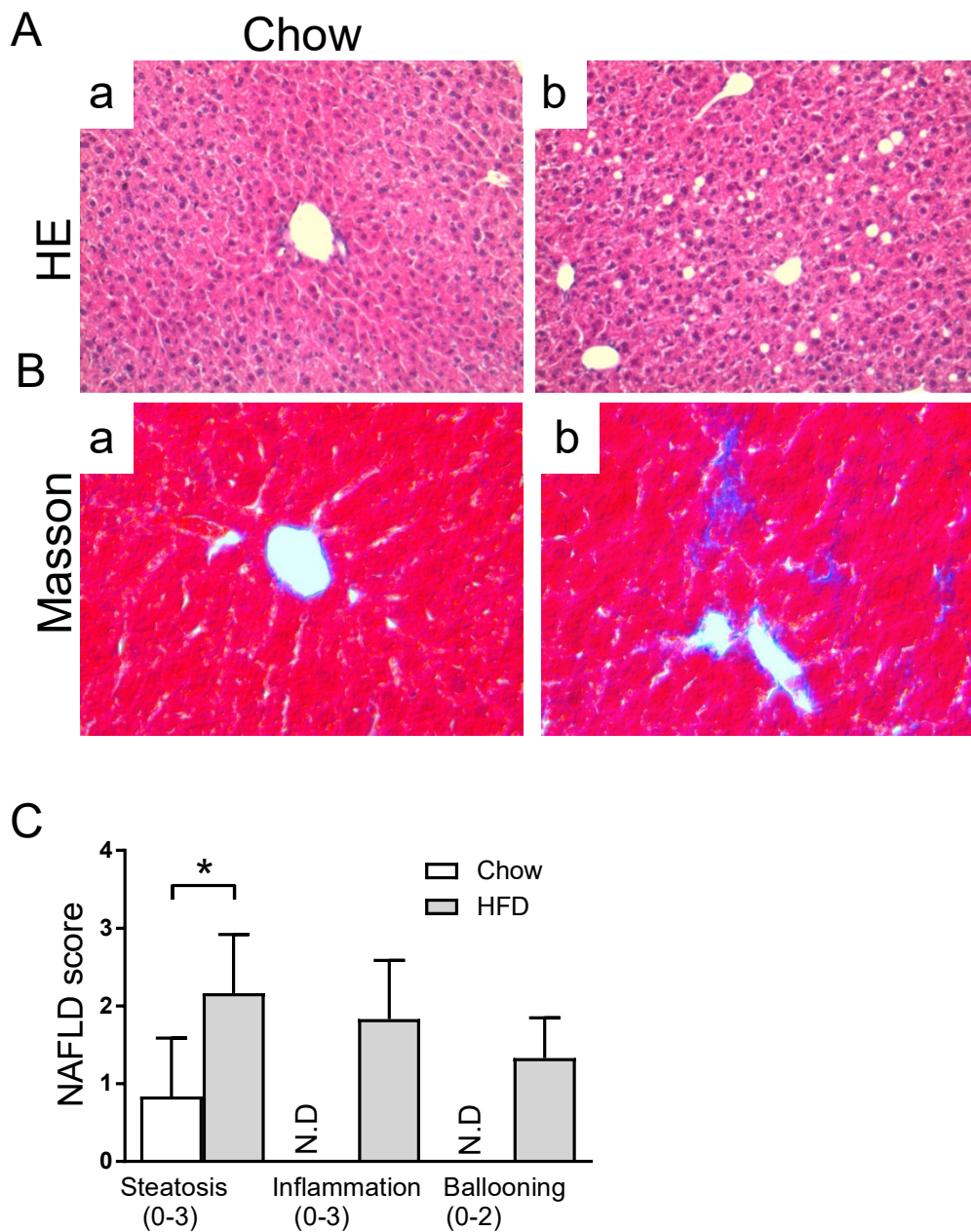


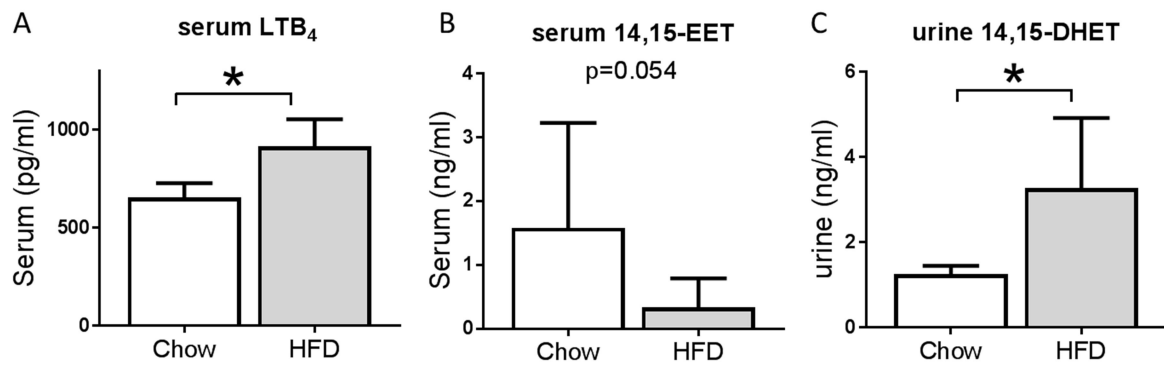
**The effects of farnesoid X receptor activation on arachidonic acid metabolism,
NF- κ B signaling and hepatic inflammation**

Zhibo Gai, Michele Visentin, Ting Gui, Lin Zhao, Wolfgang E. Thasler, Stephanie Häusler, Ivan Hartling, Alessio Cremonesi, Christian Hiller and Gerd A. Kullak-Ublick

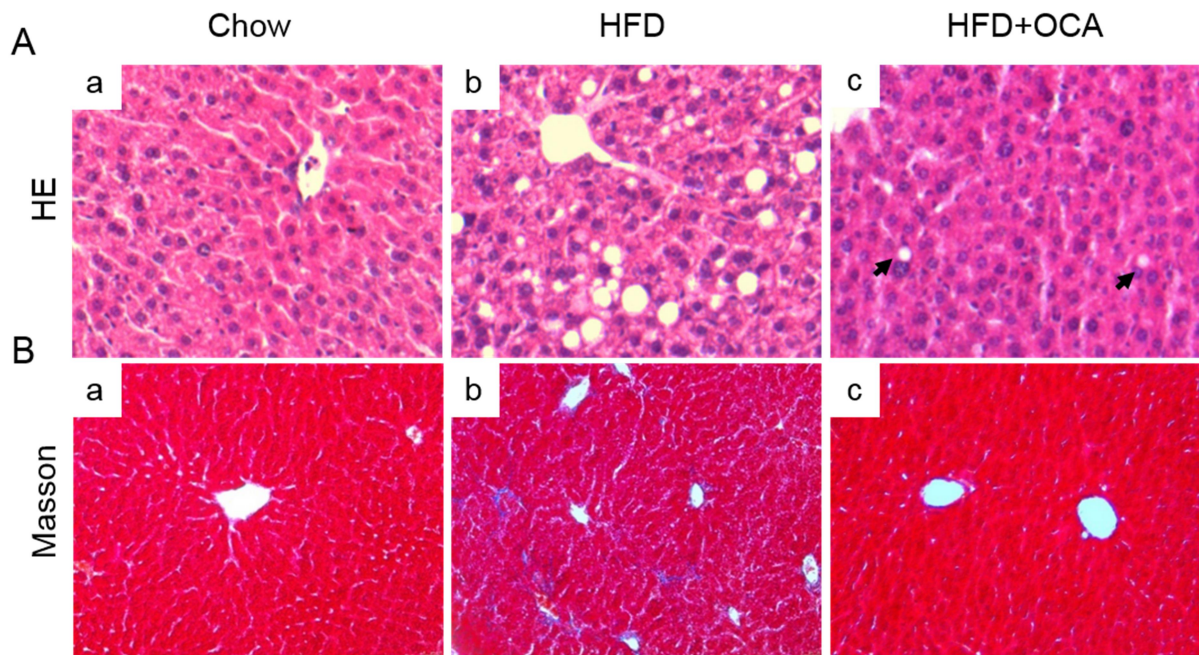
Molecular Pharmacology

Results**Supplementary Fig. 1. NASH assessment in mice fed a HFD.**

Representative images of hematoxylin-eosin (**A**) and Masson (**B**) staining in liver sections from chow and HFD groups. NAFLD score, $n=6$ mice/group. Data are the means \pm SD, Student's t test, $* < 0.05$ (**C**).

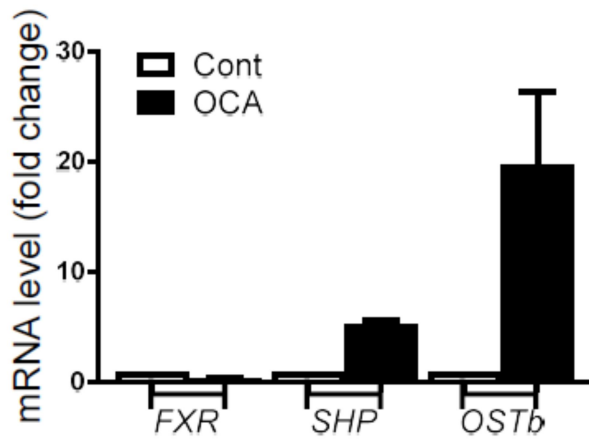
Supplementary Fig. 2. Arachidonic acid metabolism in mice fed a HFD.

Serum levels of LTB₄ (**A**) and 14,15-EET (**B**). Urine levels of 14,15-DHET (**C**). $n=6$ mice/group. means \pm SD, Student's t test, $*<0.05$.

Supplementary Fig. 3. Effect of OCA on HFD-induced NASH.

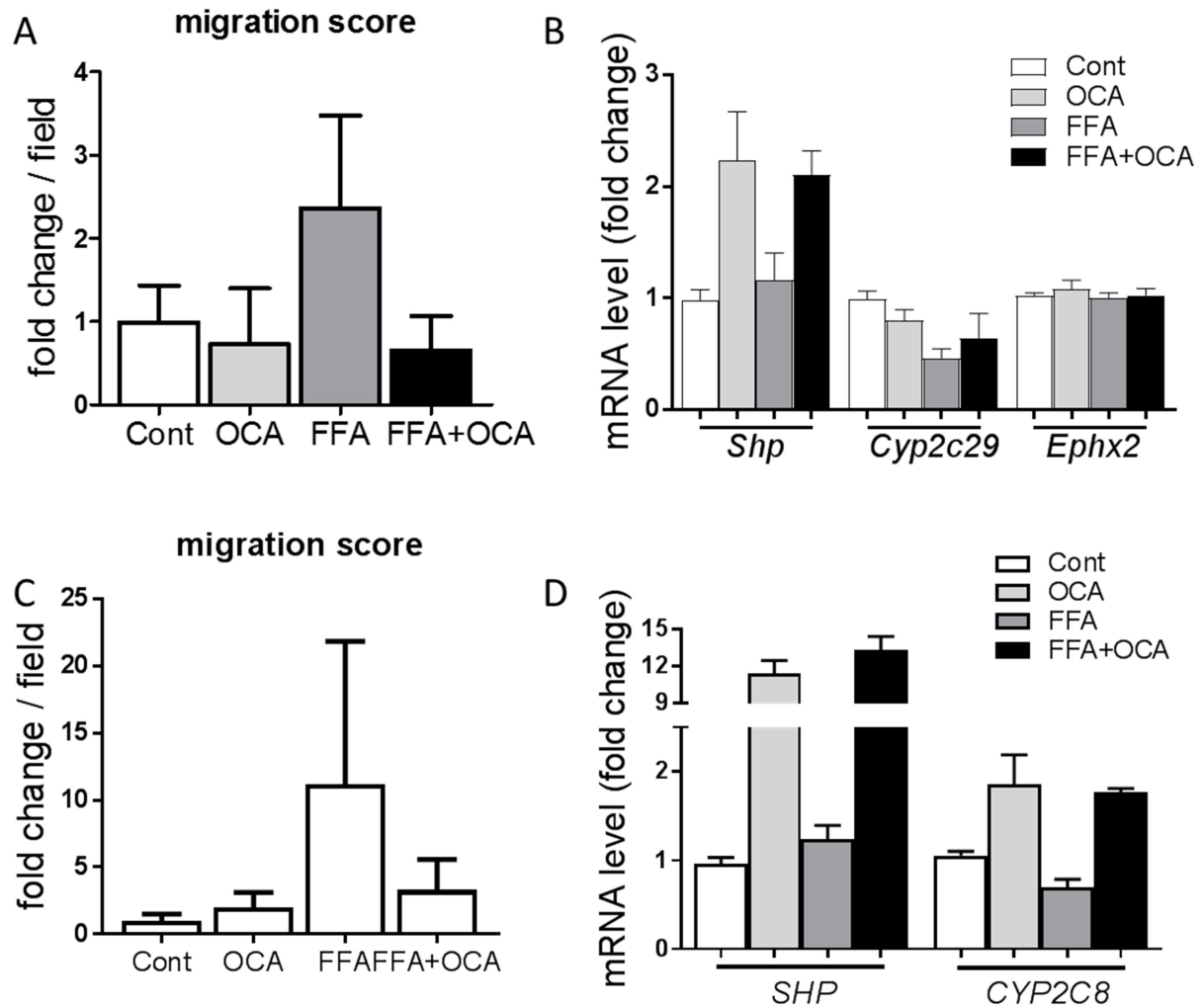
Representative images of hematoxylin-eosin (**A**) and Masson (**B**) staining in liver sections from chow (a), HFD (b) and HFD+OCA groups (c).

Supplementary Fig. 4. Effect of OCA on the expression of FXR target genes in Huh7 cells.



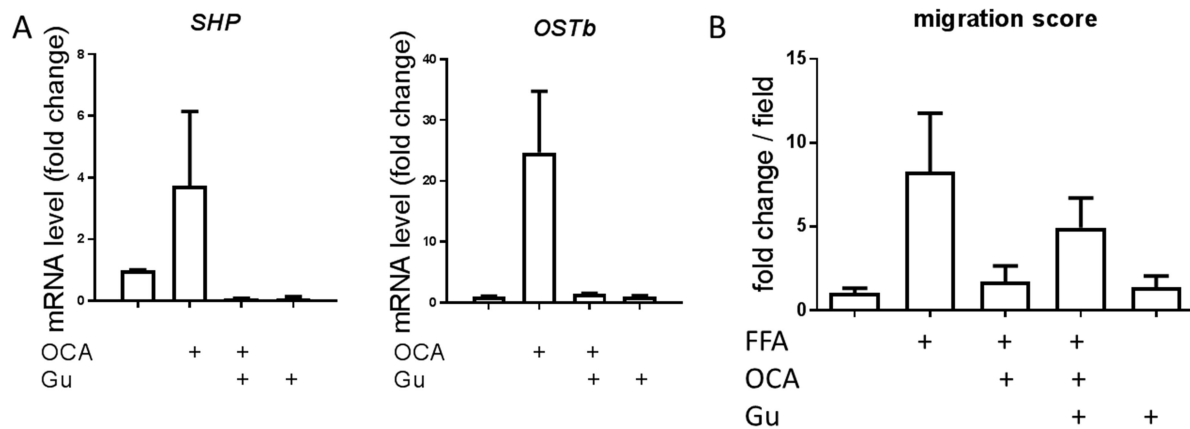
mRNA expression levels of FXR, SHP and OSTb in Huh7 cells exposed for 24h to OCA at the extracellular concentration of 2 μ M. $n=3$ /group. Data are means \pm SD.

Supplementary Fig. 5. Impact of FXR activation on FFA-induced monocyte migration and EET metabolism-related gene expression levels in primary cultured hepatocytes from mouse (A and B) and human (C and D).



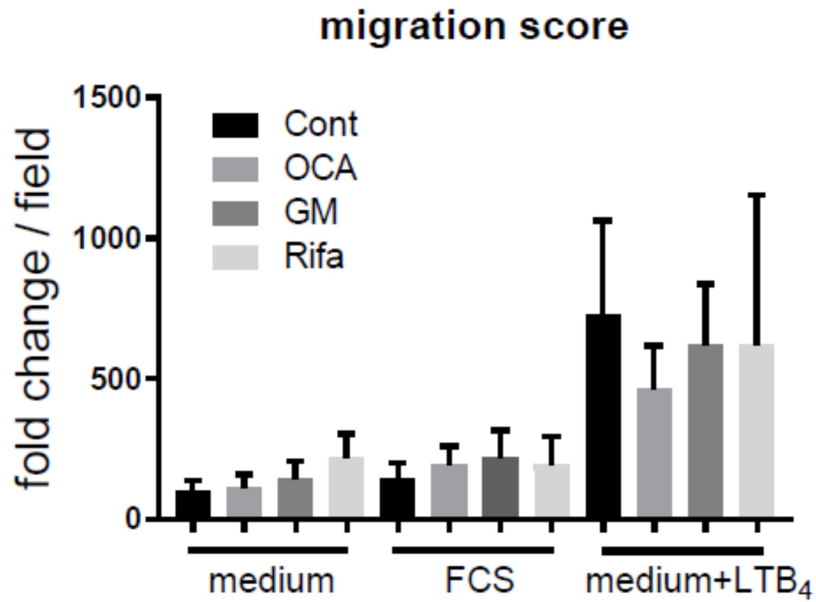
Migration score of J774 cells (**A**) and mRNA expression levels of *Shp*, *Cyp2c29* and *Ephx2* in primary cultured hepatocytes treated for 48h with the indicated conditions. $n=3$ /group (**B**). Migration score of THP-1 cells (**C**) and mRNA expression levels of *SHP* and *CYP2C8* in primary cultured human hepatocytes treated for 48h with the indicated conditions. Data represents the mean \pm SD from 3 technical replicate of one donor (**D**).

Supplementary Fig. 6. Effect of the co-incubation with OCA and the FXR antagonist z-Guggulsterone (Gu) on FXR activation and FFA-induced monocyte migration.



mRNA expression levels of *SHP* and *OSTb* and in Huh7 cells co-exposed for 48h to OCA (2 μ M) and Gu (25 μ M) (**A**). Migration score of monocyte-like J773 cells at the indicated conditions. $n=2$ /group (**B**). Data are expressed as means \pm SD.

Supplementary Fig. 7. Effect of OCA, Gemfibrozil (GM) or Rifampicin (Rifa) on THP-1 cell migration induced by serum or exogenous LTB₄.



Migration score of THP-1 cells exposed for 48h with the indicated conditions. $n=3$ /group. Data represents the mean \pm SD from 3 independent experiments.