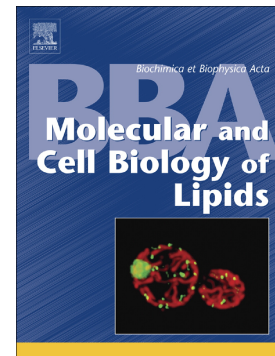


Accepted Manuscript

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PII: S1388-1981(17)30186-5
DOI: doi: [10.1016/j.bbalip.2017.09.001](https://doi.org/10.1016/j.bbalip.2017.09.001)
Reference: BBAMCB 58199

To appear in:

Received date: 24 January 2017
Revised date: 28 August 2017
Accepted date: 5 September 2017

Please cite this article as: Li Jiao, Hongying Gan-Schreier, Xingya Zhu, Wang Wei, Sabine Tuma-Kellner, Gerhard Liebisch, Wolfgang Stremmel, WaleeChamulitrat, Ageing sensitized by iPLA2 β deficiency induces liver fibrosis and intestinal atrophy involving suppression of homeostatic genes and alteration of intestinal lipids and bile acids, (2017), doi: [10.1016/j.bbalip.2017.09.001](https://doi.org/10.1016/j.bbalip.2017.09.001)

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Ageing Sensitized by iPLA₂β Deficiency Induces Liver Fibrosis and Intestinal Atrophy Involving
Suppression of Homeostatic Genes and Alteration of Intestinal Lipids and Bile Acids

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Abbreviations: ACC, acetyl-CoA carboxylase; ATF6, activating transcription factor6; AB-PAS, alcian blue-periodic acid-schiff; ACSL, long-chain acyl-CoA synthetase; Bad, Bcl-2-associated death promoter; Bax, Bcl-2-like protein 4; Bcl-2, B-cell lymphoma 2; Bcl-xL, B-cell lymphoma extralarge; BiP, binding immunoglobulin protein; CA, cholic acid; CCL, chemokine ligand; Cctα, cytidylyltransferase 1 choline; CCR, chemokine receptor; CDCA, chenodeoxycholic acid; Cept, choline/ethanolamine phosphotransferase; CHOL, cholesterol; CHOP, CCAAT-enhancer-binding protein homologous protein; Ck, choline kinase; CK19, cytokeratin 19; ConA, concanavalinA; DCA, deoxycholic acid; DHA, docosahexaenoic acid; ER, endoplasmic reticulum; Ek, ethanolamine kinase; elf2α, eukaryotic translation initiation factor 2α; Fas, fatty acid synthase; FATP4, fatty acid transport protein 4; FXR, farnesoid X-activated receptor; FGF-15, fibroblast growth factor 15; H&E, hematoxylin-eosin; HNF1α, hepatic nuclear factor 1α; IEC, intestinal epithelial cells; IHC, immunohistochemistry; IRE1α, inositol-requiring enzyme 1α; PERK, protein kinase RNA-like ER kinase; iPLA₂β, group VIA calcium-independent PLA₂; LCA, lithocholic acid; LC-MS/MS, liquid-chromatography mass spectrometry; LPC, lysophosphatidylcholine; Lpcat, lysophosphatidylcholine acyltransferase; LPE, lysophosphatidyl ethanolamine; LPS, lipopolysaccharides; LXR, liver X receptor; MCA, muricholic acid; MUFA, monounsaturated fatty acids; NEFA, non-esterified fatty acids; PC, phosphatidylcholine; PE, phosphatidylethanolamine; PI, phosphatidylinositol; PS, phosphatidylserine; PUFA, polyunsaturated fatty acids; q-RT-PCR, quantitative real-time polymerase chain reaction; ROS, reactive oxygen species; SCD-1, stearoyl-CoA desaturase 1; SM, sphingomyelin; SREBP-1, sterol regulatory element-binding protein-1; TG, triglycerides; TNFα, tumor necrosis factorα; UDCA, ursodeoxycholic acid; UPR, unfolded protein response; VCAM1, vascular cell adhesion molecule1; XBP1, X-box binding protein1; WT, wild-type; ZO-1, zonula occludens-1; α-SMA, α-smooth muscle actin

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