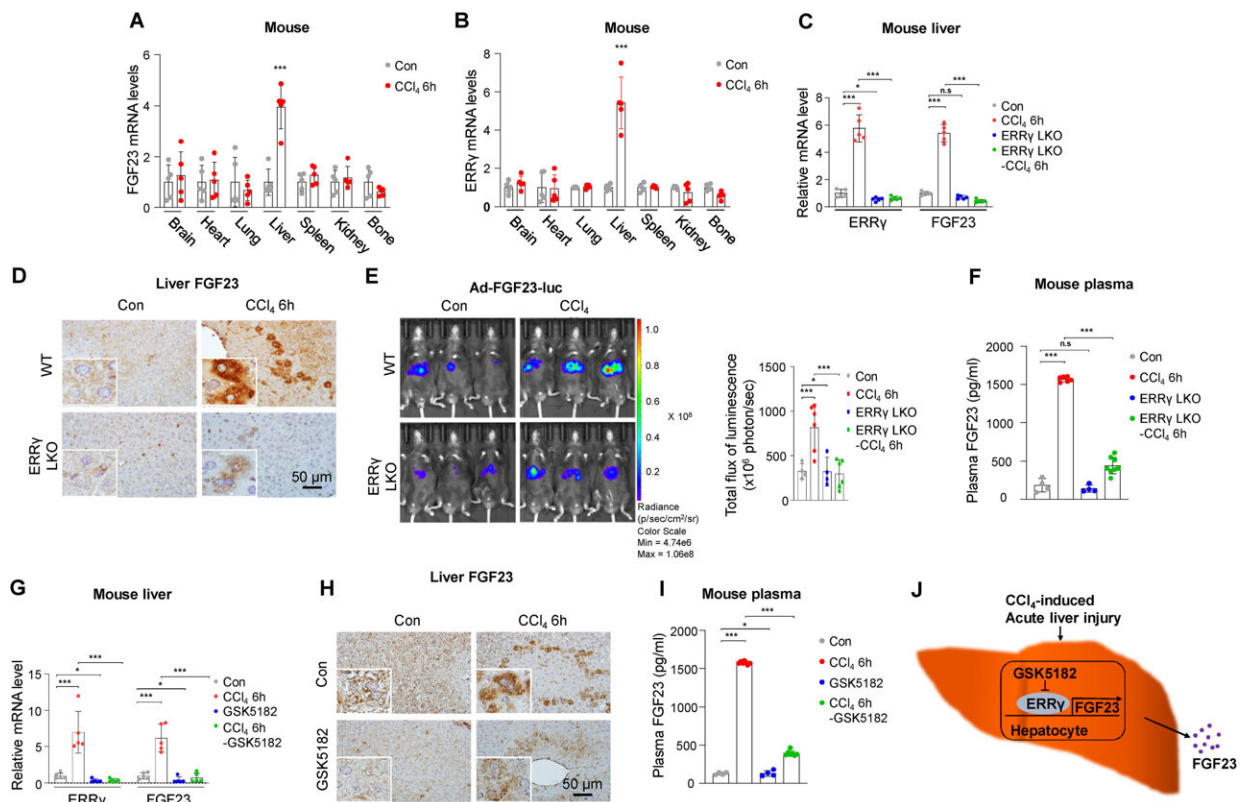


Study reveals the role of ERR γ in the regulation of FGF23 gene expression following acute liver injury

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CCl₄-induced acute liver injury increases FGF23 gene expression and secretion in mouse liver through ERR γ . (A, B) Quantitative PCR analysis of total RNA obtained from the livers of mice injected with CCl₄ (1 mL/kg body weight of 10% CCl₄ dissolved in corn oil) for 6 h (n = 5 per group). (C–F) WT and ERR γ -LKO mice were injected with CCl₄ for 6 h (n = 5 per groups). (C) Quantitative PCR analysis of total RNA isolated from livers. (D) Representative images of FGF23 immunohistochemical analysis in liver sections. (E) Representative in

vivo images of hepatic FGF23 promoter WT-luciferase (Ad-FGF23-luc) activity in WT and ERR γ -LKO mice injected with or without CCl₄ (n = 4 for WT-Con and ERR γ -LKO Con; n = 6 for WT-CCl₄ and ERR γ -LKO CCl₄ group). (F) Plasma FGF23 levels measured by ELISA. (G–I) WT mice were injected with CCl₄ in the presence or the absence of GSK5182 and sacrificed after 6 h (n = 5 per group). (G) Quantitative PCR analysis of total RNA isolated from liver. (H) Representative images of FGF23 immunohistochemical analysis in liver sections. (I) Plasma FGF23 levels measured by ELISA. (J) Schematic diagram of ERR γ -mediated hepatic FGF23 gene expression and secretion in CCl₄-induced acute liver injury. Data indicate mean \pm SEM values. Data in (A) and (B) were analyzed by two-tailed Student's t test. Data in C, E, F, G and I were analyzed by ordinary one-way ANOVA with Tukey's multiple comparisons test. Significance levels denoted as *P

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