

Abcb4-KO(FVB)

系統名	FVB- <i>Abcb4</i> ^{em15moc}
SMOC番号	NM-KO-200584
維持形態	Repository Live

遺伝子の概要

Gene Symbol Abcb4	Synonyms	Mdr2; Pgy2; Pgy-2; mdr-2
	NCBI ID	18670
	MGI ID	97569
	Ensembl ID	ENSMUSG00000042476
	Human Ortholog	ABCB4

説明

Exon 3-4 of *Abcb4* gene was deleted to generate *Abcb4* knockout mice.

応用分野: Diseases associated with ABCB4 include Cholestasis, Progressive Familial Intrahepatic, 3 and Gallbladder Disease 1.

*Literature published using this strain should indicate: *Abcb4*-KO(FVB) mice (Cat. NO. NM-KO-200584) were purchased from Shanghai Model Organisms Center, Inc..

病気の予測

Cholecystitis	表現型	MGI:3840644
	参考文献	Lammert F, Wang DQ, Hillebrandt S, Geier A, Fickert P, Trauner M, Matern S, Paigen B, Carey MC, Spontaneous cholecysto- and hepatolithiasis in <i>Mdr2</i> ^{-/-} mice: a model for low phospholipid-associated cholelithiasis. <i>Hepatology</i> . 2004 Jan;39(1):117-28

Cholestasis	表現型	MGI:5526018
	参考文献	Hochrath K, Ehnert S, Ackert-Bicknell CL, Lau Y, Schmid A, Krawczyk M, Hengstler JG, Dunn J, Hiththetiya K, Rathkolb B, Micklich K, Hans W, Fuchs H, Gailus-Durner V, Wolf E, de Angelis MH, Dooley S, Paigen B, Wildemann B, Lammert F, Nussler AK, Modeling hepatic osteodystrophy in Abcb4 deficient mice. Bone. 2013 Aug;55(2):501-11
Hepatocellular Carcinoma	表現型	MGI:2653844
	参考文献	Mauad TH, van Nieuwkerk CM, Dingemans KP, Smit JJ, Schinkel AH, Notenboom RG, van den Bergh Weerman MA, Verkruisen RP, Groen AK, Oude Elferink RP, van der Valk MA, Borst P, Offerhaus GJ, Mice with homozygous disruption of the mdr2 P-glycoprotein gene. A novel animal model for studies of nonsuppurative inflammatory cholangitis and hepatocarcinogenesis. Am J Pathol. 1994 Nov;145(5):1237-45
Intrahepatic Cholestasis	表現型	MGI:3694478
	参考文献	Li Z, Agellon LB, Vance DE, The role of phosphatidylethanolamine methyltransferase in a mouse model of intrahepatic cholestasis. Biochim Biophys Acta. 2011 Apr;1811(4):278-83
Primary Sclerosing Cholangitis	表現型	MGI:5618431
	参考文献	Strack I, Schulte S, Varnholt H, Schievenbusch S, Tox U, Wendland K, Steffen HM, Drebber U, Dienes HP, Odenthal M, beta-Adrenoceptor blockade in sclerosing cholangitis of Mdr2 knockout mice: antifibrotic effects in a model of nonsinusoidal fibrosis. Lab Invest. 2011 Feb;91(2):252-61

表現型データ

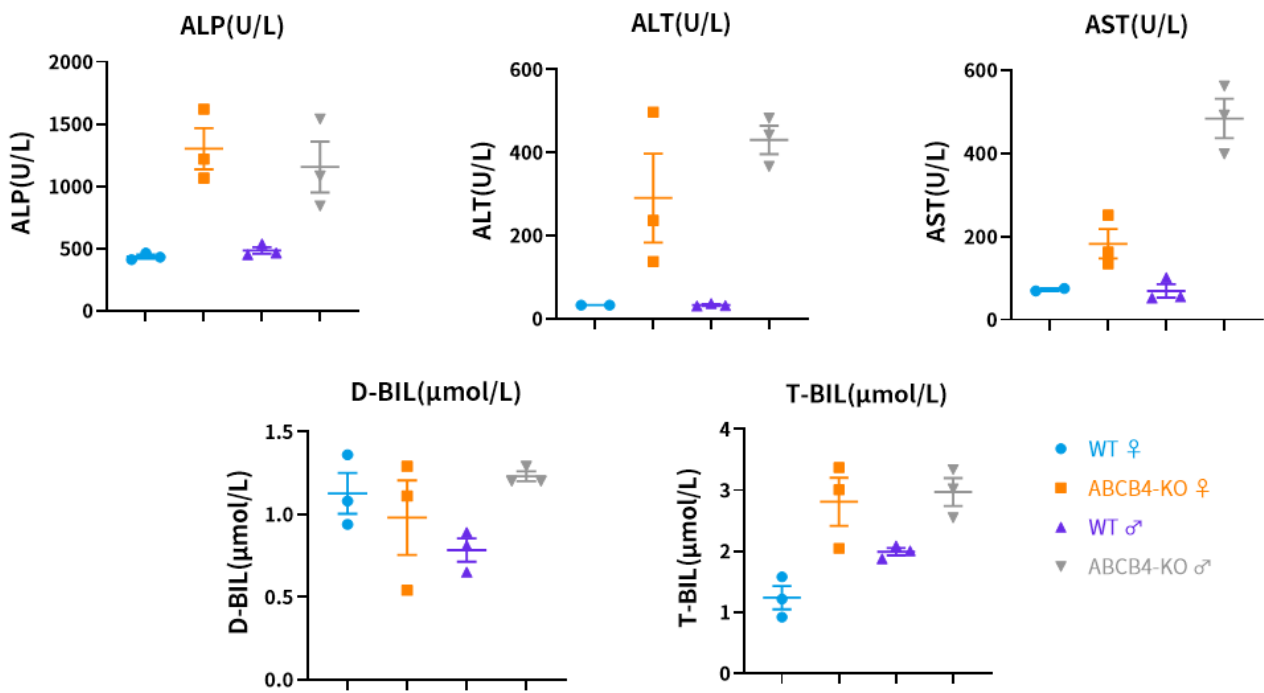


Fig1. Serum biochemistry of Abcb4-KO mice (n=3 female and 3 male).

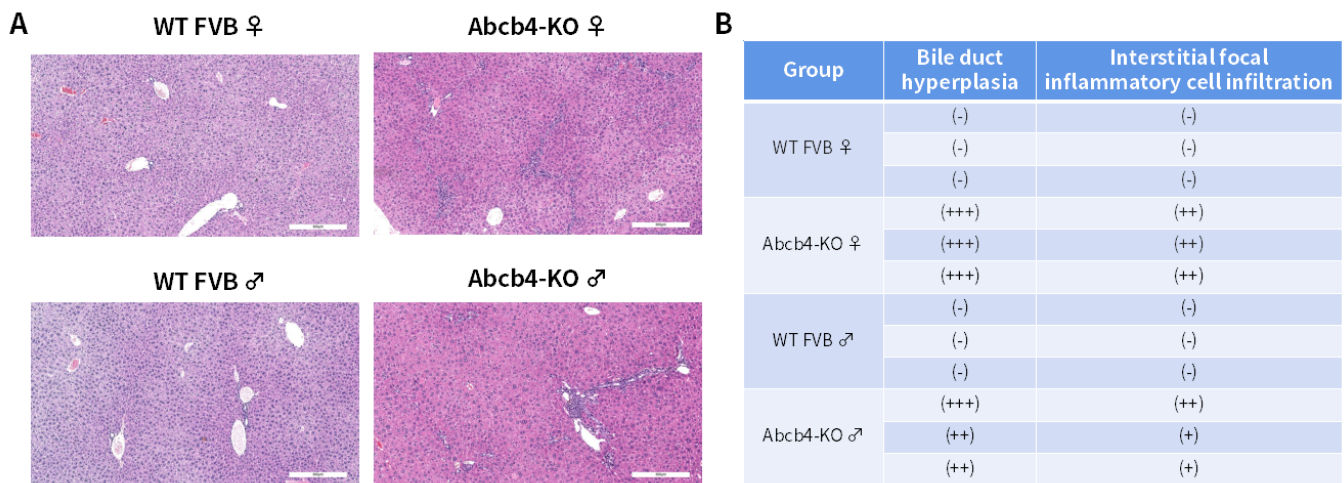


Fig2. Significant bile duct hyperplasia and interstitial focal cell infiltration were observed in the liver of Abcb4-KO mice.

(A) Liver were collected from FVB wild-type (+/+) and Abcb4-KO mice, and analyzed by HE staining. (B) Pathological analysis of the liver in Abcb4-KO mice.

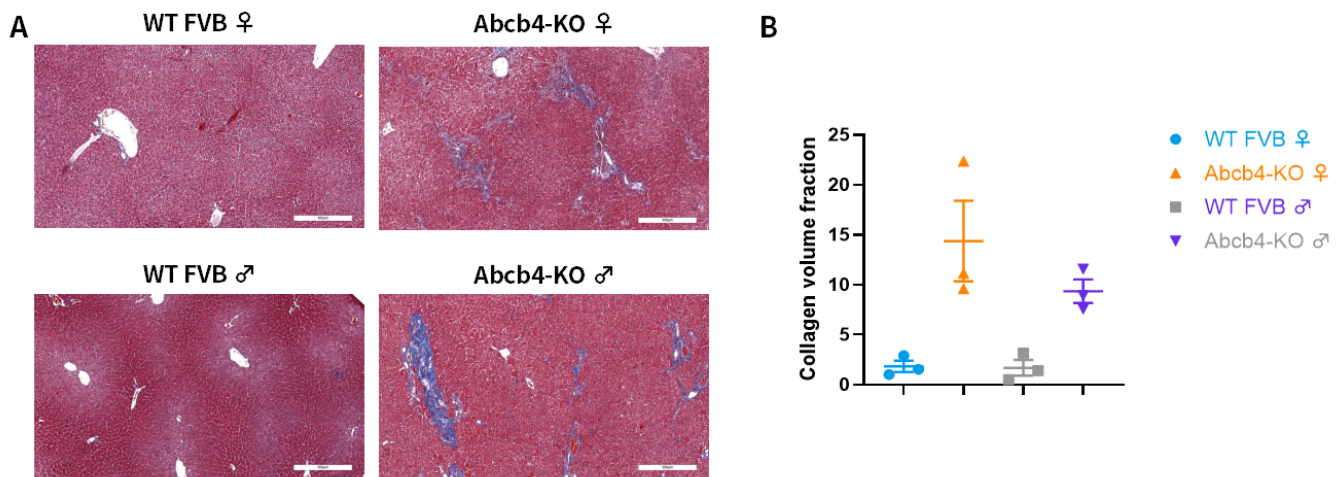


Fig3. Collagen fiber hyperplasia were observed in the liver of Abcb4-KO mice.

(A) Liver were collected from FVB wild-type (+/+) and Abcb4-KO mice, and analyzed by Masson staining. (B) Quantification of the Collagen volume fraction (CVF) .