

HBV-Tg

品系全名	B6.Cg-Tg(HBV)Smoc
目录号	NM-TG-00003
品系状态	活体

基因信息

基因名	基因曾用名
	NCBI ID
	MGI ID
	Ensembl ID

品系描述

将c1型HBV病毒1.0拷贝全长DNA转入小鼠，该转基因小鼠血清中HBsAg呈阳性，但无HBeAg、anti-HBs、anti-HBe或antiHBc表达，无HBV DNA复制。在该转基因小鼠模型的血清、肝脏和肾脏中可以检测到稳定表达的人乙肝病毒表面抗原，该小鼠模型为研究人类“乙型肝炎”的发病机制、治疗方法与药物筛选，提供了理想的动物模型和新型研究手段，具有重要的医药应用价值。

应用领域：乙型肝炎

*使用本品系发表的文献需注明: HBV-Tg mice (Cat. NO. NM-TG-00003) were purchased from Shanghai Model Organisms Center, Inc..

验证数据

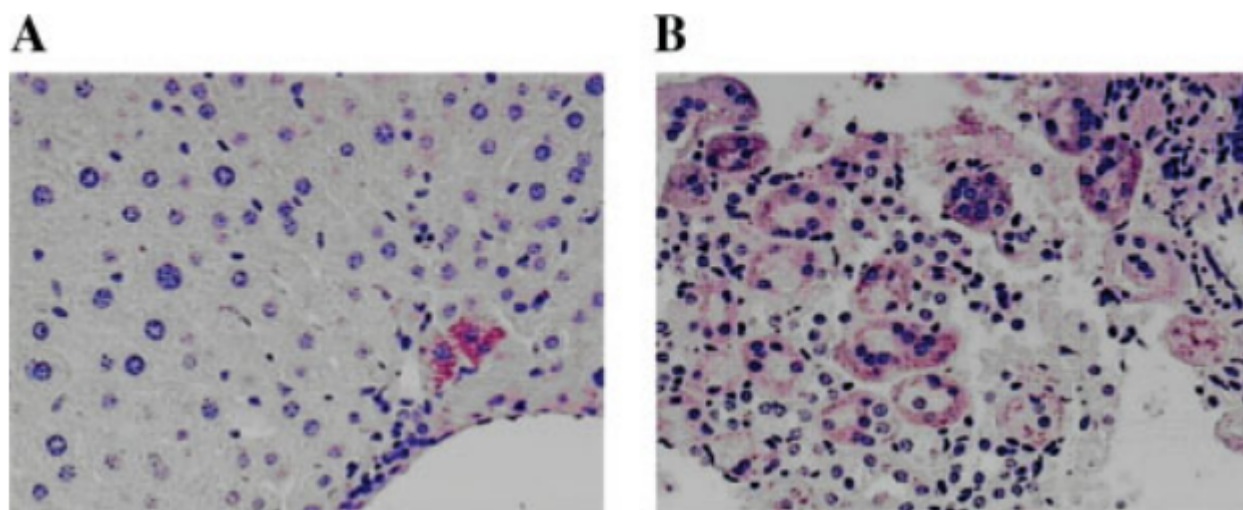


Fig1. Immuno-histochemical staining of HBsAg in the liver and kidney sections of #59 transgenic mice. Sections of liver (A) or kidney (B) tissues from #59 transgenic mice were stained for HBsAg.

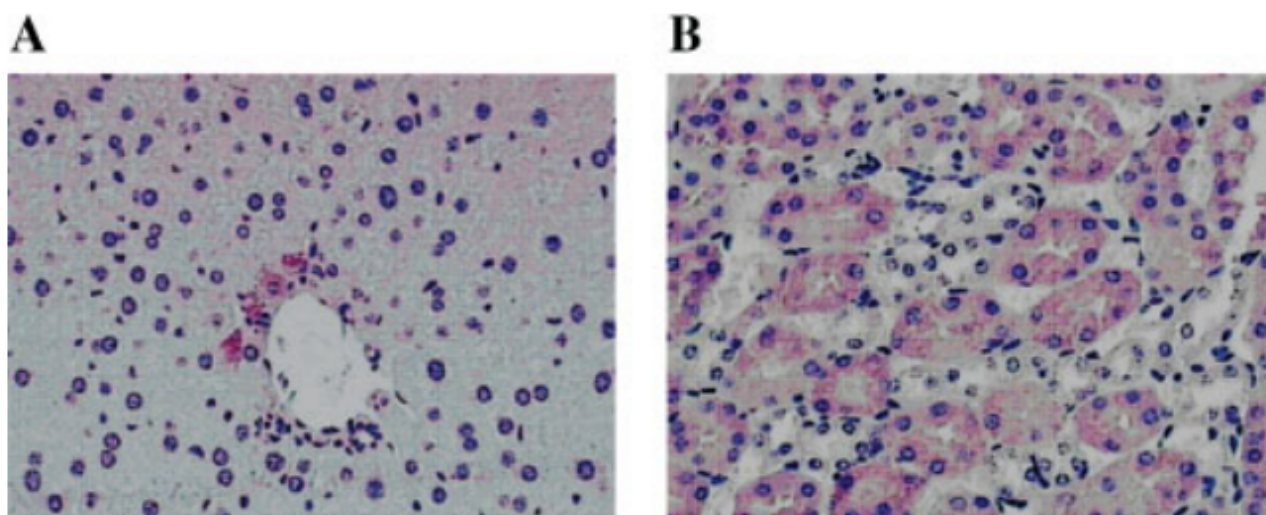


Fig2. Immuno-histochemical staining of HBcAg in the liver and kidney sections of #59 transgenic mice.

Sections of liver (A) or kidney (B) tissues from #59 transgenic mice were stained for HBcAg.

Gene	Microarray ^a	Real-time PCR ^a
Complement component 3 (C3)	32	251
C-reactive protein (CRP)	48	>1,000
Fibrinogen (FGG)	60	138
FBJ osteosarcoma oncogene (Fos)	-8	-5
Mannose binding lectin (MBL2)	128	192
Mitochondrial ribosomal protein L15 (Mrpl15)	-6	1
Plasminogen (PLG)	446	1,000
Serum amyloid A 1 and 2 (Saa1 and 2)	60	287

^aThe numbers represent the folds of mRNA of the genes being up- or down-regulated.

Tab1. Eight Selected Genes From the Kidney of #59 Mice Assayed by Microarray and Real-Time PCR

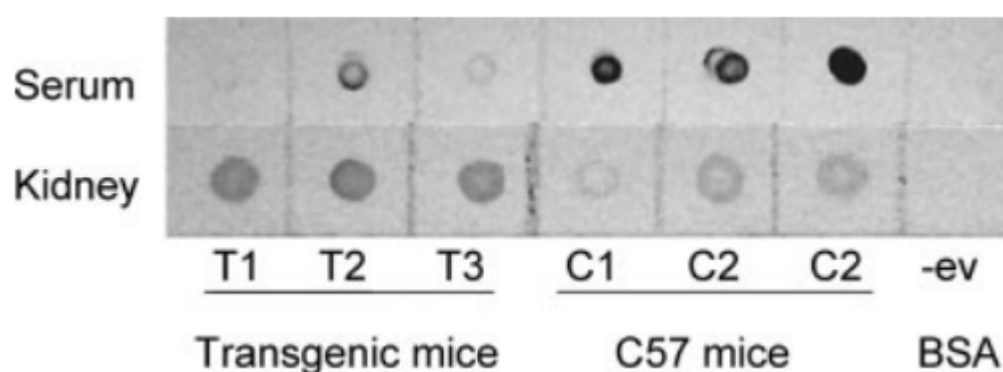


Fig3. Dot blot immunoassay of complement C3 component in mouse serum and kidney tissue extract.

Reference

1. Ren J, Wang L, Chen Z, Ma ZM, Zhu HG, Yang DL, Li XY, Wang BI, Fei J, Wang ZG, Wen YM. Gene expression profile of transgenic mouse kidney reveals pathogenesis of hepatitis B virus associated nephropathy. J Med Virol. 2006 May;78(5):551-60. doi: 10.1002/jmv.20575. PMID: 16555286.

发表文献

[Expression of hepatitis B virus proteins in transgenic mice alters lipid metabolism and induces oxidative stress in the liver](#)

来源杂志: JOURNAL OF HEPATOLOGY

[An Altered Pattern of Liver Apolipoprotein A-I Isoforms Is Implicated in Male Chronic Hepatitis B Progression](#)

来源杂志: ACS Publications

[Hepatitis B virus \(HBV\) surface antigen interacts with and promotes cyclophilin a secretion: possible link to pathogenesis of HBV infection](#)

来源杂志: Journal of Virology

[Proteomic analysis of hepatitis B surface antigen positive transgenic mouse liver and decrease of cyclophilin A](#)

来源杂志: Journal of Medical Virology

[Transcriptional analysis of immune-related genes in dendritic cells from hepatitis B surface antigen \(HBsAg\)-positive transgenic mice and regulation of Fc gamma receptor IIB by HBsAg-anti-HBs complex](#)

来源杂志: Journal of Medical Virology