

HBV-Tg

Nomenclature	B6.Cg-Tg(HBV)Smoc
Cat. NO.	NM-TG-00003
Strain State	Repository Live

Gene Summary

Gene Symbol	Synonyms	Hepatitis B virus isolate C8 complete genome
	NCBI ID	AF461363
	MGI ID	Null
	Ensembl ID	Null

Model Description

Full-length HBV genome (adrsubtype,C genotype) was used to establish the transgenic mice. HBsAg was positive in transgenic mice serum; no serum HBeAg anti-HBs, anti-HBe, or antiHBc was detected. No anti-HBs or anti-HBe was detected in the polyethylene gly.

Research Application: HBV

*Literature published using this strain should indicate: HBV-Tg mice (Cat. NO. NM-TG-00003) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

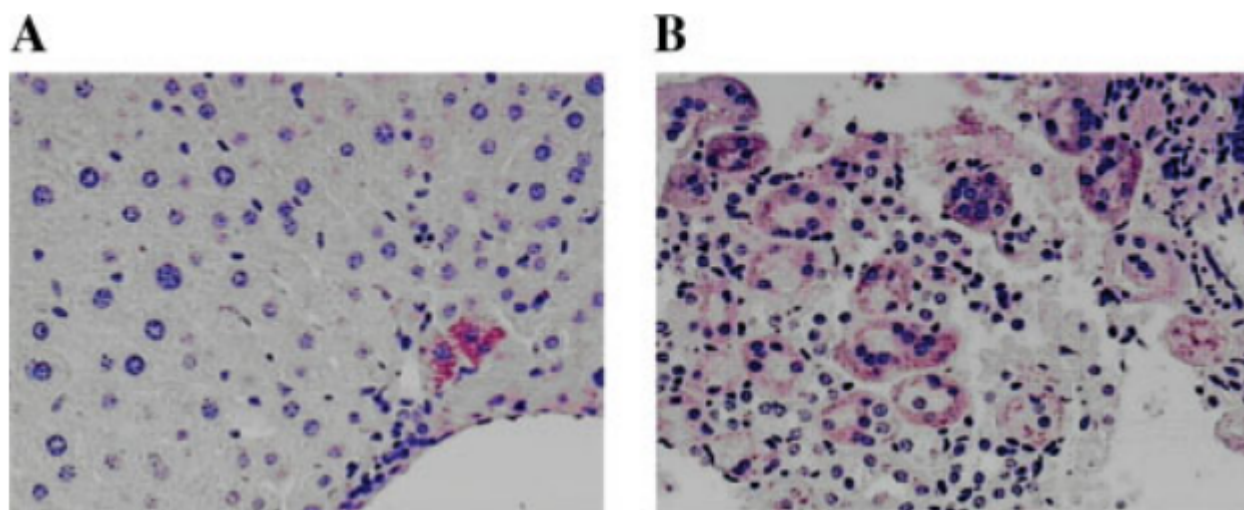


Fig1. Immuno-histochemical staining of HBsAg in the liver and kidney sections of #59 transgenic mice. Sections of liver (A) or kidney (B) tissues from #59 transgenic mice were stained for HBsAg.

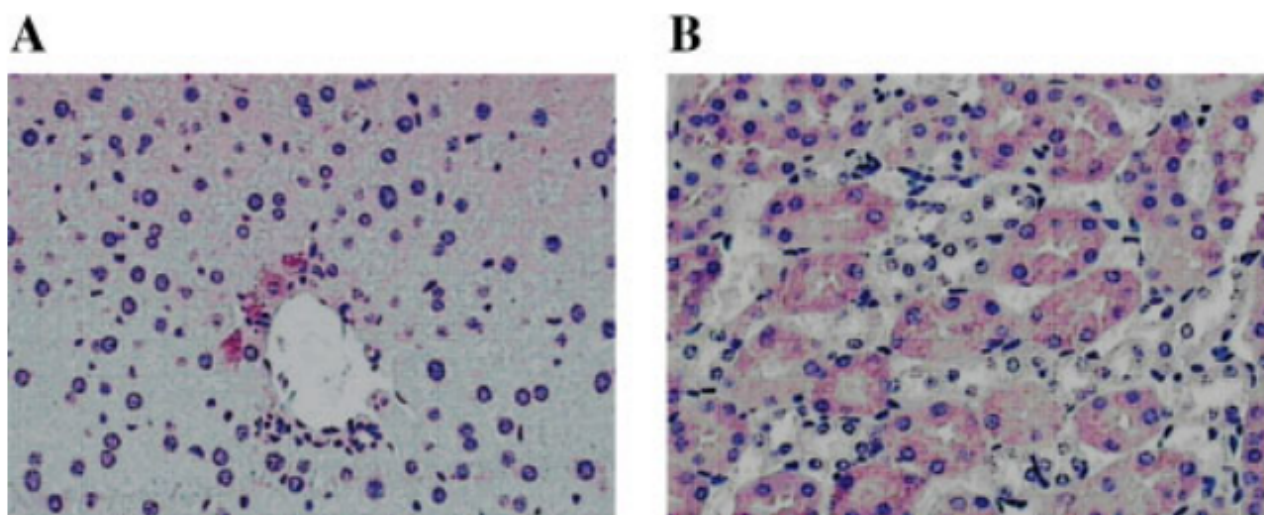


Fig2. Immuno-histochemical staining of HBcAg in the liver and kidney sections of #59 transgenic mice.

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

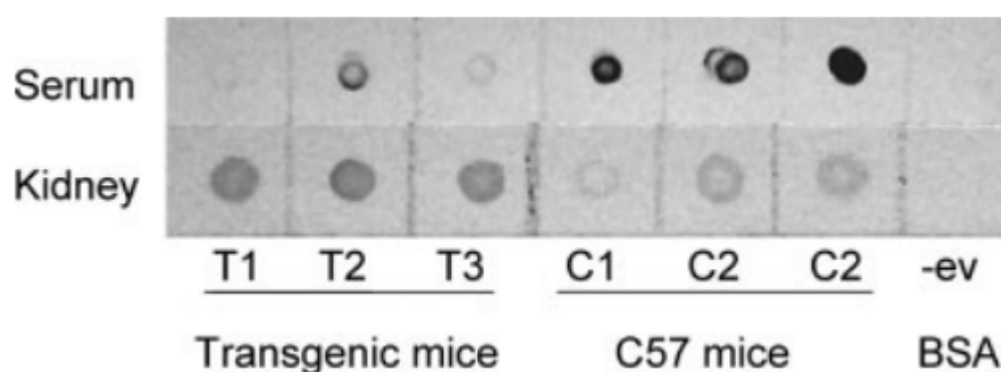


Fig3. Dot blot immunoassay of complement C3 component in mouse serum and kidney tissue extract.

Publications

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

References: JOURNAL OF HEPATOLOGY

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

References: ACS Publications

[Hepatitis B virus \(HBV\) surface antigen interacts with and promotes cyclophilin a secretion:](#)

[possible link to pathogenesis of HBV infection](#)

References: Journal of Virology

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

References: 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](#)

References: Journal of Medical Virology