

ABCB11 KO mouse

Catalogue number: 157774

Tool type:

Contributor

Inventor: Victor Ling

Institute: BC Cancer

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: ABCB11 KO mouse

Alternate name: spgp/bsep

Class:

Conjugate:

Description: Can be used as a genetic model for human Progressive Familial Intrahepatic Cholestasis 2 (a rare and fatal deficiency in the human bile salt transporter). These mice can also be used to study bile formation due to their high sensitivity to bile salt challenge. They can also be used in preclinical screening of choleric agents.

Purpose:

Parental cell:

Organism:

Tissue:

Model: Knock-Out

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: The knockout mice were created using gene targeting. Two different ES cell lines were used. TL-1 embryonic stem cells and E14K embryonic stem cells from 129SvyEv mice were generous gifts from Dr. Patricia Labosky (University of Pennsylvania, Philadelphia) and Dr. Tak Mak (Amgen Institute, Toronto), respectively. Genomic DNA of murine spgp gene was isolated from a lambda phage library of 129/J genomic DNA by using rat spgp cDNA as probe. One of the obtained genomic

clones, 129J-9, and an additional fragment of 1.6 kb on the 59 end of 129J-9, which was cloned by PCR amplification, were used to generate the targeting vector (Ref 1, Fig. 1A). Positive selection cassette was pgk-NEO, but no negative cassette was used. The targeting vector was linearized with SstI and electroporated into TL-1 and E14k embryonic stem cells at 340 V and 250 mF of capacitance. ES cell clones surviving G418 selection were screened by Southern blot analysis. Four of the 11 targeted ES cell lines were subsequently used to produce chimeric mice and chimeric mice from three lines with germline transmission were used in this study. The heterozygous mutant mice from each generation were crossed into C57BL/6J. Homozygous mutant mice were produced by intercross of the heterozygous mice. Genotypes of the ES cells and mice were determined by Southern blot analysis using a 1-kb probe upstream of the 59 end.

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Patient details

Cancer subtype:

Cancer stage/grade:

Biopsy site:

Patient ethnicity:

Treatment history:

Engraftment details

Mice passaged?:

Engraftment site:

Sample type:

Host strain:

Histology:

Genetic data:

Target details

Target: Abcb11

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes:

Handling

Format:

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Embryo/Spermatozoa- Dry Ice

Related tools

Related tools:

References

References: Maeda et al. 2005. J Immunol. 175(7):4426-32. PMID: 16177084.

CancerTools.org