

HRN Mouse

Catalogue number: 152669

Sub-type: Mouse

Images:

Contributor

Inventor: Roland Wolf

Institute: University of Dundee

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: HRN Mouse

Alternate name:

CancerTools.org

Class:

Conjugate:

Description: The HRN mouse model lacks P450 activity in the liver and can be used to study the role of hepatic P450 in drug metabolism and to determine the efficacy or toxicity of pharmacological compounds. HRN mice are homozygous for the floxed Por allele and the Alb-Cre transgene. POR is the electron donating enzyme for all of cytochrome P450 enzymes.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: The HRN model was created by targeting the Por gene to generate a floxed allele in GK129/1 embryonic stem cells derived from 129P2 mice and injecting the targeted cells into C57BL/6 blastocysts. Resultant chimeras were backcrossed to C57BL/6 for one generation. Mice heterozygous for the floxed Por allele were intercrossed to generate mice homozygous for the floxed Por allele on a mixed B6;129P2 background. The Alb-cre transgene was developed in the laboratory of Mark A. Magnuson at Vanderbilt University School of Medicine by microinjecting Cre recombinase gene under the control of the rat albumin enhancer/promoter into B6D2F2 zygotes. Mice homozygous for the floxed Por allele were bred to carriers for the Alb-cre transgene to generate HRN mice.

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: HRN stands for Hepatic Cytochrome P450 Reductase Null The publication refers to the HRN parent strain

Target details

Target: Cytochrome P450 (POR)

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: Vasey et al. 2008. Toxicol Appl Pharmacol. 227(3):440-50. PMID: 18215733.