

HRN™ CONDITIONAL KNOCK OUT

C57BL/6 Background

Nomenclature: B6.Cg-*Por*^{tm1Wolf} Tg(Alb-cre)21Mgn N7

- HRN™ stands for Hepatic cytochrome P450 Reductase Null
- Homozygous for both the floxed *Por* allele and the Alb-cre transgene
- Exhibits liver-specific conditional disruption of the *Por* gene; POR is the electron donating enzyme for all cytochrome P450 enzymes
- Lacks first pass metabolism by P450 enzymes in the liver
- Can be used to determine the role of hepatic P450 metabolism in drug disposition
- Useful for *in vivo* efficacy studies using smaller amounts of compound
- Can provide information on whether parent or metabolite compounds are responsible for observed efficacy or toxic effects
- Offered through a partnership with CXR Biosciences

Origin: The HRN™ mouse was developed in the laboratory of C. Roland Wolf of the Ninewells Hospital & Medical School. The 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 the 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. The HRN™ model was backcrossed to C57BL/6J a total of 6 generations (N6). Taconic received stock from CXR Biosciences in April 2007. The mice were backcrossed to C57BL/6NTac (N7) and embryo transfer derived. The colony is maintained through mating of male and female mice that are homozygous for the floxed *Por* allele and homozygous for the Alb-cre transgene.

Color: Black

Background Genetics: wildtype for *Nnt* mutation

| Model Number | Zygoty | Age (weeks) | Male or Female |
|--------------|----------------------------------|-----------------------------------------------------|----------------|
| 7353 | Homozygous Floxed/ Homozygous | 4 to 8 | €189.60 |
| | | 9 to 12 | €197.40 |
| | | Retired breeder | €189.60 |
| | | Discount for orders of 50+ animals per line item | €7.70/animal |



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