

# AHR knockout rat

<b>MODEL</b>	AHR knockout rat
<b>STRAIN</b>	HsdSage: SD-Ahr <sup>em1Sage</sup>
<b>LOCATION</b>	U.S.
<b>AVAILABILITY</b>	Cryopreserved



## CHARACTERISTICS/HUSBANDRY

- Background strain: Sprague Dawley
- Biallelic deletion of AHR

## ZYGOSITY GENOTYPE

- Homozygous

## RESEARCH USE

- Xenobiotic sensor
- Cytochrome p450 pathways
- Drug metabolism
- Hepatotoxicity
- Cholestasis

## ORIGIN

The AHR knockout rat model was originally created at SAGE Labs, Inc., in St. Louis, MO. The animal inventory was acquired by Envigo in 2019 and then by Inotiv in 2021. The line continues to be maintained through the original SAGE Labs animal inventory and is distributed out of the Boyertown, PA, facility.

## DESCRIPTION

AHR is involved in the induction of cytochrome p450s and is abundantly expressed in the liver and intestine. This model is useful for studying metabolism of xenobiotic compounds and hepatotoxicity.

Figure 1: Loss of Cyp1a1, Cyp1a2 and Mrp3 (Abcc3) induction in AHR knockout rats after TCDD treatment

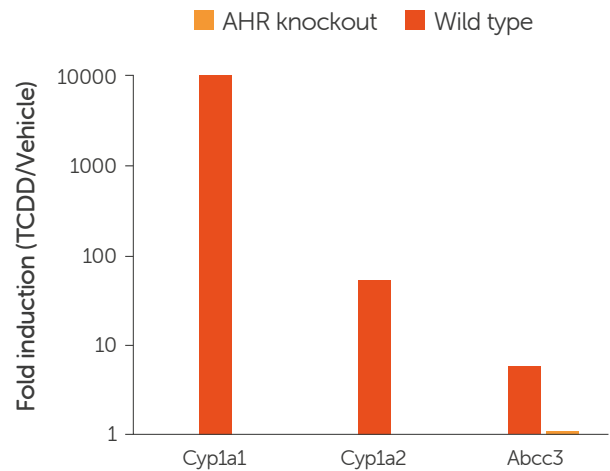


Figure 2: Weight and age comparison chart

