

Oct2 knockout rat



MODEL	Oct2 knockout rat
STRAIN	HsdSage: SD-Slc22a2 ^{em1Sage}
LOCATION	U.S.
AVAILABILITY	Cryopreserved

CHARACTERISTICS/HUSBANDRY

- A related model Oct1 knockout rats have increased exposure to specific substrates

ZYGOSITY GENOTYPE

- Heterozygous

RESEARCH USE

- Drug transport
- Drug-drug interactions
- Drug metabolism
- Hepatotoxicity

ORIGIN

The Oct2 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

This model contains a biallelic deletion within the Slc22a2 solute carrier family 22 (organic cation transporter), member 2, encoding for the basolateral hepatocyte uptake transporter Oct2.

Oct2 is involved in disposition and excretion through its role in xenobiotic uptake in the basolateral membrane of the liver. Polymorphisms within the gene also have clinical relevance - making this a useful model for studying drug-drug interactions, toxicity and metabolism in the liver.