

Resource Summary Report

Generated by [dkNET](#) on Sep 8, 2026

SD-Dbh^{em1}(cre)Xyan

RRID:RGD_632518356

Type: Organism

Proper Citation

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Organism Information

URL: <https://rgd.mcw.edu/rgdweb/report/strain/main.html?id=632518356>

Proper Citation: RRID:RGD_632518356

Description: Rattus norvegicus with name SD-Dbh^{em1}(cre)Xyan from RGD.

Species: Rattus norvegicus

Notes: DBH-Cre knock-in (KI) rats, developed on the Sprague Dawley (SD) rat background, were generated using the CRISPR/Cas9 system. In this knock-in model, a gene cassette encoding 2A peptide, fused to Cre recombinase was introduced to replace the TAA stop codon in exon 12 of the rat Dbh gene. Additionally, a synonymous mutation p. T616= (ACG to ACA) was incorporated to prevent gRNA binding and recutting of the sequence following homology-directed repair. The gRNA targeting the rat DBH gene (gRNA-B1: 5'-TTACTCAGTGTCTGCCTCCGTGG-3'), the donor vector containing the "P2A-Cre" cassette, and a synonymous mutation p. T616= (ACG to ACA), along with Cas9 mRNA, were co-injected into fertilized rat embryos. F0 founders. DBH-Cre KI rats were bred with wild-type SD rats (Guangdong Vital River Laboratory Animal Technology Co., Ltd., China). Shenzhen Institute of Advanced Technology, Shenzhen, China

Catalog Number: 632518356

Background: mutant

Database: Rat Genome Database (RGD)

Database Abbreviation: RGD

Availability: Unknown

Alternate IDs: 632518356

Organism Name: SD-Dbh^{em1}(cre)Xyan

Record Creation Time: 20260211T064855+0000

Record Last Update: 20260905T135247+0000

Ratings and Alerts

No rating or validation information has been found for *SD-Dbh^{em1(cre)}Xyan*.

No alerts have been found for *SD-Dbh^{em1(cre)}Xyan*.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Rat Genome Database (RGD)

Usage and Citation Metrics

We have not found any literature mentions for this resource.