

Resource Summary Report

Generated by [kravitz2](#) on Sep 6, 2026

WKY-Col4a5^{em1}Matsu

RRID:RGD_329845597

Type: Organism

Proper Citation

RRID:RGD_329845597

Organism Information

URL: <https://rgd.mcw.edu/rgdweb/report/strain/main.html?id=329845597>

Proper Citation: RRID:RGD_329845597

Description: Rattus norvegicus with name WKY-Col4a5^{em1}Matsu from RGD.

Species: Rattus norvegicus

Notes: Genome editing was performed using the rGONAD method to produce three different lines of KO rats due to three different genome mutations thus different in protein expression predication. The genetic background is WKY/NCrI CrIj (Charles River Laboratories Japan) (RGD:61119). Tandem STOP codons were designed to integrate into 27 bases after the first ATG in the rat Col4a5 gene This em1 mutant carries a premature stop coden after 9 amino acids due to the insertion of a 20 bp stop codon. Col4a5 KO rats have urinary protein and hematuria from early on, and males begin to die at 18 weeks of age and all die by 28 weeks of age. [National BioResource Project for the Rat in Japan](#)

Catalog Number: 329845597

Background: mutant

Database: Rat Genome Database (RGD)

Database Abbreviation: RGD

Availability: Cryopreserved Embryo (as of 2023-05-30)

Alternate IDs: 329845597

Organism Name: WKY-Col4a5^{em1}Matsu

Record Creation Time: 20230823T202702+0000

Record Last Update: 20260905T135245+0000

Ratings and Alerts

No rating or validation information has been found for WKY-*Col4a5^{em1Matsu}*.

No alerts have been found for WKY-*Col4a5^{em1Matsu}*.

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.