

Resource Summary Report

Generated by [kravitz2](#) on Aug 3, 2026

LE-Elov14 em1cgen-/-

RRID:RGD_617154644

Type: Organism

Proper Citation

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Organism Information

URL: <https://rgd.mcw.edu/rgdweb/report/strain/main.html?id=617154644>

Proper Citation: RRID:RGD_617154644

Description: Rattus norvegicus with name LE-Elov14 *em1cgen-/-* from RGD.

Species: Rattus norvegicus

Notes: The CRISPR/Cas9 genetic editing approach was used to generate a homozygous Long-Evans rat model of human SCA34. The human Cas9 D10A (hCas9-D10A) nickase was used to knock-in the c.736T>G mutation by targeting exon 6 of the rat Elov14 (Ensembl: ENSRNOG00000009773) located on rat chromosome 8. The hCas9 mRNA, sgRNA(CCTTCCCCAAGTGGATGCAC), and single-strand oligonucleotide donor (ssODN: TTCCATGTGACCATTGGGCACACAGCACTGTCTCTCTACACCGACTGCCCCTTCCCCAAGGGG) were co-injected into Long-Evans rat zygotes at the laboratories of Cyagen Bioscience Inc. The heterozygous F0 rats carrying c.736T>G, p.W246G, mutation were bred with with WT Long-Evans rats over several generations to breed out any potential off-target effects and to establish the heterozygous SCA34 Long-Evans rat model. Successfully generation of homozygous SCA34 rats (MUT) by breeding heterozygous rats from the different F0 lines.

Catalog Number: 617154644

Background: mutant

Database: Rat Genome Database (RGD)

Database Abbreviation: RGD

Availability: Unknown

Alternate IDs: 617154644

Organism Name: LE-Elov14 *em1cgen-/-*

Record Creation Time: 20250716T074554+0000

Record Last Update: 20260801T194054+0000

Ratings and Alerts

No rating or validation information has been found for LE-*Elovl4* *em1cgen*^{-/-}.

No alerts have been found for LE-*Elovl4* *em1cgen*^{-/-}.

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.