

Resource Summary Report

Generated by [dkNET](#) on Sep 13, 2026

SD-Esr1^{em1Bra}-/-

RRID:RGD_405649860

Type: Organism

Proper Citation

RRID:RGD_405649860

Organism Information

URL: <https://rgd.mcw.edu/rgdweb/report/strain/main.html?id=405649860>

Proper Citation: RRID:RGD_405649860

Description: Rattus norvegicus with name SD-Esr1^{em1Bra}-/- from RGD.

Species: Rattus norvegicus

Notes: Two target sequences (GCCGTGTTCAACTACCCCGAGGG and GCTGCGCAAGTGTTACGAAGTGG) within the second and third exon, respectively, of the coding sequence of Esr1 (the rat gene encoding ER??) were selected. gRNAs targeting these sequences were synthesized via in vitro transcription. gRNAs (25 ng/ul each) were co- microinjected with Cas9 protein (40 ng/ul) into Sprague-Dawley rat embryos, and embryos were transferred into pseudo-pregnant recipients. Animals heterozygous for a 25 base pair deletion in Esr1 exon 3 were used to establish an ER alpha mutant colony and subsequent homozygous mutant offspring were obtained for study. Department of Medicine, Division of Pulmonary, Critical Care, Sleep and Occupational Medicine, Indiana University School of Medicine, Indianapolis, Indiana, USA.

Catalog Number: 405649860

Background: mutant

Database: Rat Genome Database (RGD)

Database Abbreviation: RGD

Availability: Unknown

Alternate IDs: 405649860

Organism Name: SD-Esr1^{em1Bra}-/-

Record Creation Time: 20240716T195757+0000

Record Last Update: 20260912T202541+0000

Ratings and Alerts

No rating or validation information has been found for SD-*Esr1^{em1Bra}-/-*.

No alerts have been found for SD-*Esr1^{em1Bra}-/-*.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Rat Genome Database (RGD)

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at [dkNET](#) .

Mesples M, et al. (2026) Sex-specific lymphatic responses to estrogen shape atherosclerosis in high-risk mice. *Frontiers in cardiovascular medicine*, 13, 1699372.