

Resource Summary Report

Generated by [NIF](#) on Sep 4, 2026

STOCK Tg(ACTA1-cre/Esr1*)2Kesr/J

RRID:IMSR_JAX:025750

Type: Organism

Proper Citation

RRID:IMSR_JAX:025750

Organism Information

URL: <https://www.jax.org/strain/025750>

Proper Citation: RRID:IMSR_JAX:025750

Description: Mus musculus with name STOCK Tg(ACTA1-cre/Esr1*)2Kesr/J from IMSR.

Species: Mus musculus

Synonyms: B6.Cg-Tg(ACTA1-cre/Esr1*)2Kesr/J

Notes: gene symbol note: Cre recombinase and estrogen receptor 1 fusion gene|transgene insertion 2; Karyn A Esser|actin; alpha 1; skeletal muscle; mutant stock: cre/Esr1|Tg(ACTA1-cre/Esr1*)2Kesr|ACTA1

Affected Gene: Cre recombinase and estrogen receptor 1 fusion gene|transgene insertion 2; Karyn A Esser|actin; alpha 1; skeletal muscle

Genomic Alteration: transgene insertion 2; Karyn A Esser

Catalog Number: JAX:025750

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: STOCK Tg(ACTA1-cre/Esr1*)2Kesr/J

Record Creation Time: 20250513T053755+0000

Record Last Update: 20260829T045106+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Tg(ACTA1-cre/Esr1*)2Kesr/J.

No alerts have been found for STOCK Tg(ACTA1-cre/Esr1*)2Kesr/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 21 mentions in open access literature.

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

Mishima T, et al. (2026) UNC45B Reduction With Aging: A Myofiber-Intrinsic Promoting Factor for Sarcopenia. Aging cell, 25(5), e70502.

Galvan M, et al. (2026) Adr² in skeletal muscle cells is required for exercise-induced Pgc1[?] but not for metabolic benefits of exercise on diet-induced obesity. bioRxiv : the preprint server for biology.

Mori K, et al. (2026) Muscle-derived Mimecan regulates hypothalamus-brown adipose tissue communication and promotes health and lifespan in mice. Cell metabolism, 38(7), 1425.

Galvan M, et al. (2025) Development and Characterization of a Sf-1-Flp Mouse Model. bioRxiv : the preprint server for biology.

Kalenta H, et al. (2025) Constitutively active mTORC1 signaling modifies the skeletal muscle metabolome and lipidome response to exercise. Journal of applied physiology (Bethesda, Md. : 1985), 138(5), 1173.

Qu Q, et al. (2024) Lithocholic acid binds TULP3 to activate sirtuins and AMPK to slow down ageing. Nature.

Roy A, et al. (2023) Targeted regulation of TAK1 counteracts dystrophinopathy in a DMD mouse model. JCI insight, 8(10).

Fordjour FK, et al. (2023) Exomap1 mouse: a transgenic model for in vivo studies of exosome biology. bioRxiv : the preprint server for biology.

Araki H, et al. (2023) LSD1 defines the fiber type-selective responsiveness to environmental stress in skeletal muscle. eLife, 12.

Harrigan ME, et al. (2023) Lesion level-dependent systemic muscle wasting after spinal cord injury is mediated by glucocorticoid signaling in mice. Science translational medicine, 15(727), eadh2156.

Roy A, et al. (2022) Supraphysiological activation of TAK1 promotes skeletal muscle growth and mitigates neurogenic atrophy. *Nature communications*, 13(1), 2201.

Meyer GA, et al. (2022) Tenotomy-induced muscle atrophy is sex-specific and independent of NF- κ B. *eLife*, 11.

Alves de Souza RW, et al. (2021) Skeletal muscle heme oxygenase-1 activity regulates aerobic capacity. *Cell reports*, 35(3), 109018.

Xirouchaki CE, et al. (2021) Skeletal muscle NOX4 is required for adaptive responses that prevent insulin resistance. *Science advances*, 7(51), eabl4988.

Steinert ND, et al. (2021) Mapping of the contraction-induced phosphoproteome identifies TRIM28 as a significant regulator of skeletal muscle size and function. *Cell reports*, 34(9), 108796.

Masson SWC, et al. (2020) β -catenin regulates muscle glucose transport via actin remodelling and M-cadherin binding. *Molecular metabolism*, 42, 101091.

Gnad T, et al. (2020) Adenosine/A2B Receptor Signaling Ameliorates the Effects of Aging and Counteracts Obesity. *Cell metabolism*, 32(1), 56.

Zhang ZK, et al. (2018) Long Noncoding RNA lncMUMA Reverses Established Skeletal Muscle Atrophy following Mechanical Unloading. *Molecular therapy : the journal of the American Society of Gene Therapy*, 26(11), 2669.

Martins VF, et al. (2018) Calorie Restriction-Induced Increase in Skeletal Muscle Insulin Sensitivity Is Not Prevented by Overexpression of the p53 Subunit of Phosphoinositide 3-Kinase. *Frontiers in physiology*, 9, 789.

Ehlen JC, et al. (2017) Bmal1 function in skeletal muscle regulates sleep. *eLife*, 6.