

Resource Summary Report

Generated by [kravitz2](#) on Aug 10, 2026

STOCK Eif2ak3^{tm1.2Drc}/J

RRID:IMSR_JAX:023066

Type: Organism

Proper Citation

RRID:IMSR_JAX:023066

Organism Information

URL: <https://www.jax.org/strain/023066>

Proper Citation: RRID:IMSR_JAX:023066

Description: Mus musculus with name STOCK Eif2ak3^{tm1.2Drc}/J from IMSR.

Species: Mus musculus

Synonyms: B6.129S6(FVB)-Eif2ak3/J

Notes: gene symbol note: eukaryotic translation initiation factor 2 alpha kinase 3; mutant stock: Eif2ak3

Affected Gene: eukaryotic translation initiation factor 2 alpha kinase 3

Genomic Alteration: targeted mutation 1.2; Douglas R Cavener

Catalog Number: JAX:023066

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: STOCK Eif2ak3^{tm1.2Drc}/J

Record Creation Time: 20250513T053747+0000

Record Last Update: 20260808T050950+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Eif2ak3^{tm1.2Drc}/J.

No alerts have been found for STOCK Eif2ak3^{tm1.2Drc/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 12 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#).

Somasundaram P, et al. (2026) Coordinated stimulation of axon regenerative and neurodegenerative transcriptional programs by ATF4 following optic nerve injury. eLife, 12.

Chen K, et al. (2025) Selective removal of astrocytic PERK protects against glymphatic impairment and decreases toxic aggregation of γ -amyloid and tau. Neuron, 113(15), 2438.

Vanhoutte D, et al. (2024) Thbs1 regulates skeletal muscle mass in a TGF β -Smad2/3-ATF4-dependent manner. Cell reports, 43(5), 114149.

Lahiri A, et al. (2023) Astrocytic deletion of protein kinase R-like ER kinase (PERK) does not affect learning and memory in aged mice but worsens outcome from experimental stroke. Journal of neuroscience research, 101(10), 1586.

Yung HW, et al. (2023) Perturbation of placental protein glycosylation by endoplasmic reticulum stress promotes maladaptation of maternal hepatic glucose metabolism. iScience, 26(1), 105911.

Latorre-Muro P, et al. (2021) A cold-stress-inducible PERK/OGT axis controls TOM70-assisted mitochondrial protein import and cristae formation. Cell metabolism, 33(3), 598.

Liu X, et al. (2021) Notch-induced endoplasmic reticulum-associated degradation governs mouse thymocyte γ -selection. eLife, 10.

Nowery JD, et al. (2021) Nitric Oxide Induces a Janus Kinase-1-Dependent Inflammatory Response in Primary Murine Astrocytes. ASN neuro, 13, 17590914211033650.

Stone S, et al. (2020) The UPR preserves mature oligodendrocyte viability and function in adults by regulating autophagy of PLP. JCI insight, 5(5).

Lei Z, et al. (2020) NF- κ B Activation Accounts for the Cytoprotective Effects of PERK Activation on Oligodendrocytes during EAE. The Journal of neuroscience : the official journal of the Society for Neuroscience, 40(33), 6444.

Mohamed E, et al. (2020) The Unfolded Protein Response Mediator PERK Governs Myeloid Cell-Driven Immunosuppression in Tumors through Inhibition of STING Signaling. Immunity, 52(4), 668.

Xiong G, et al. (2017) The PERK arm of the unfolded protein response regulates satellite cell-mediated skeletal muscle regeneration. *eLife*, 6.