

Resource Summary Report

Generated by [kravitz2](#) on Aug 23, 2026

B6.129S7(Cg)-Polg^{tm1Prol}/J

RRID:IMSR_JAX:017341

Type: Organism

Proper Citation

RRID:IMSR_JAX:017341

Organism Information

URL: <https://www.jax.org/strain/017341>

Proper Citation: RRID:IMSR_JAX:017341

Description: Mus musculus with name B6.129S7(Cg)-Polg^{tm1Prol}/J from IMSR.

Species: Mus musculus

Synonyms: B6.129S7(Cg)-Polg/J

Notes: gene symbol note: polymerase (DNA directed); gamma; mutant strain|congenic strain: Polg

Affected Gene: polymerase (DNA directed); gamma

Genomic Alteration: targeted mutation 1; Tomas A Prolla

Catalog Number: JAX:017341

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129S7(Cg)-Polg^{tm1Prol}/J

Record Creation Time: 20250513T053732+0000

Record Last Update: 20260815T050643+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S7(Cg)-Polg^{tm1Prol}/J.

No alerts have been found for B6.129S7(Cg)-Polg^{tm1Prol}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Wu S, et al. (2026) Persistence of large mtDNA rearrangements linked to premature aging in Pol γ exonuclease-deficient mice. Nucleic acids research, 54(12).

Cararo Lopes E, et al. (2025) Respiration defects limit serine synthesis required for lung cancer growth and survival. Nature communications, 16(1), 7621.

Gorr MW, et al. (2022) Molecular signature of cardiac remodeling associated with Polymerase Gamma mutation. Life sciences, 298, 120469.

Scheuren AC, et al. (2020) Effects of long-term in vivo micro-CT imaging on hallmarks of osteopenia and frailty in aging mice. PloS one, 15(9), e0239534.

Giorgetti E, et al. (2019) Modulation of Microglia by Voluntary Exercise or CSF1R Inhibition Prevents Age-Related Loss of Functional Motor Units. Cell reports, 29(6), 1539.

Nissanka N, et al. (2018) The mitochondrial DNA polymerase gamma degrades linear DNA fragments precluding the formation of deletions. Nature communications, 9(1), 2491.