

Resource Summary Report

Generated by [NIF](#) on Aug 29, 2026

B6.129S4(FVB)-*Grn*^{tm1.1Far}/Mmjax

RRID:MMRRC_036771-JAX

Type: Organism

Proper Citation

RRID:MMRRC_036771-JAX

Organism Information

URL: https://www.mmrrc.org/catalog/sds.php?mmrrc_id=36771

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Description: Mus musculus with name B6.129S4(FVB)-*Grn*^{tm1.1Far}/Mmjax from MMRRC.

Species: Mus musculus

Notes: Research areas: Cancer, Cell Biology, Developmental Biology, Diabetes, Immunology and Inflammation, Metabolism, Models for Human Disease, Neurobiology; Mutation Type: Targeted Mutation ; Collection:

Phenotype: neurodegeneration [MP:0002229] abnormal macrophage physiology [MP:0002451] loss of dopaminergic neurons [MP:0003244] abnormal cone electrophysiology [MP:0004022] abnormal neuron physiology [MP:0004811] abnormal retinal nerve fiber layer morphology [MP:0006303] abnormal retinal ganglion cell morphology [MP:0008056] retinal ganglion cell degeneration [MP:0008067] increased tumor necrosis factor secretion [MP:0008560] increased interleukin-1 beta secretion [MP:0008657] increased interleukin-10 secretion [MP:0008660] increased interleukin-6 secretion [MP:0008705] microgliosis [MP:0008918] increased susceptibility to dopaminergic neuron neurotoxicity [MP:0011451] decreased a wave amplitude [MP:0012143] decreased b wave amplitude [MP:0012144]

Affected Gene: Grn

Catalog Number: 036771-JAX

Background: Targeted Mutation

Database: Mutant Mouse Resource and Research Center (MMRRC)

Database Abbreviation: MMRRC

Source References: [PMID:23041626](#), [PMID:21368173](#), [PMID:21943601](#)

Alternate IDs: MMRRC_36771-JAX, MMRRC_036771, MMRRC_36771

Organism Name: B6.129S4(FVB)-*Grn*^{tm1.1Far}/Mmjax

Record Creation Time: 20230308T055147+0000

Record Last Update: 20260829T123615+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S4(FVB)-*Grn*^{tm1.1Far}/Mmjax.

No alerts have been found for B6.129S4(FVB)-*Grn*^{tm1.1Far}/Mmjax.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Mutant Mouse Resource and Research Center (MMRRC)

Usage and Citation Metrics

We found 5 mentions in open access literature.

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

Sajan MP, et al. (2026) Progranulin deficiency in the brain activates an insulin signaling pathway that may promote neurodegeneration. *iScience*, 29(5), 115720.

Cook AK, et al. (2026) Human TDP-43 expression worsens FTD-related phenotypes in progranulin-insufficient mice. *Neurobiology of disease*, 227, 107475.

Boyle NR, et al. (2025) Reduction of sphingomyelinase activity associated with progranulin deficiency and frontotemporal dementia. *Neurobiology of disease*, 213, 107024.

Hasan S, et al. (2023) Multi-modal Proteomic Characterization of Lysosomal Function and Proteostasis in Progranulin-Deficient Neurons. *bioRxiv : the preprint server for biology*.

Hasan S, et al. (2023) Multi-modal proteomic characterization of lysosomal function and proteostasis in progranulin-deficient neurons. *Molecular neurodegeneration*, 18(1), 87.