

Resource Summary Report

Generated by [Kravitz](#) on Sep 18, 2026

B6;129S4-Olig1^{tm1}(cre)Rth/J

RRID:IMSR_JAX:011105

Type: Organism

Proper Citation

RRID:IMSR_JAX:011105

Organism Information

URL: <https://www.jax.org/strain/011105>

Proper Citation: RRID:IMSR_JAX:011105

Description: Mus musculus with name B6;129S4-Olig1^{tm1}(cre)Rth/J from IMSR.

Species: Mus musculus

Synonyms: B6.129S4-Olig1/J. B6.129S4-Olig1/J

Notes: gene symbol note: oligodendrocyte transcription factor 1|; mutant strain|congenic strain: Olig1|

Affected Gene: oligodendrocyte transcription factor 1|

Genomic Alteration: targeted mutation 1; David H Rowitch

Catalog Number: JAX:011105

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6;129S4-Olig1^{tm1}(cre)Rth/J

Record Creation Time: 20250513T053719+0000

Record Last Update: 20260912T060504+0000

Ratings and Alerts

No rating or validation information has been found for B6;129S4-Olig1^{tm1}(cre)Rth/J.

No alerts have been found for B6;129S4-Olig1^{tm1(cre)Rth/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 [Kravitz](#) .

Li D, et al. (2026) A gain-of-function Retsat variant from high-altitude adaptation promotes myelination via a neuronal dihydroretinoic acid-RXR- γ pathway. *Neuron*, 114(10), 1782.

Dai W, et al. (2025) A neuronal Slit1-dependent program rescues oligodendrocyte differentiation and myelination under chronic hypoxic conditions. *Cell reports*, 44(4), 115467.

Fu XQ, et al. (2024) Comparative transcriptomic profiling reveals a role for Olig1 in promoting axon regeneration. *Cell reports*, 43(7), 114514.

Li L, et al. (2023) Nuclear import carrier Hkeshi cooperates with HSP70 to promote murine oligodendrocyte differentiation and CNS myelination. *Developmental cell*, 58(21), 2275.

Marechal D, et al. (2022) N-myc downstream regulated family member 1 (NDRG1) is enriched in myelinating oligodendrocytes and impacts myelin degradation in response to demyelination. *Glia*, 70(2), 321.

Moyon S, et al. (2021) TET1-mediated DNA hydroxymethylation regulates adult remyelination in mice. *Nature communications*, 12(1), 3359.

Ma Q, et al. (2020) Oligodendrocyte-specific Argonaute profiling identifies microRNAs associated with experimental autoimmune encephalomyelitis. *Journal of neuroinflammation*, 17(1), 297.

Fernández-Castañeda A, et al. (2020) The active contribution of OPCs to neuroinflammation is mediated by LRP1. *Acta neuropathologica*, 139(2), 365.

Chavali M, et al. (2020) Wnt-Dependent Oligodendroglial-Endothelial Interactions Regulate White Matter Vascularization and Attenuate Injury. *Neuron*, 108(6), 1130.

Voskuhl RR, et al. (2019) Gene expression in oligodendrocytes during remyelination reveals cholesterol homeostasis as a therapeutic target in multiple sclerosis. *Proceedings of the National Academy of Sciences of the United States of America*, 116(20), 10130.

Kim RY, et al. (2018) Oestrogen receptor α ligand acts on CD11c⁺ cells to mediate protection in experimental autoimmune encephalomyelitis. *Brain : a journal of neurology*,

141(1), 132.

González-Fernández E, et al. (2018) PTEN negatively regulates the cell lineage progression from NG2⁺ glial progenitor to oligodendrocyte via mTOR-independent signaling. *eLife*, 7.