

Resource Summary Report

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B6J.129-Atoh7^{tm1Gla}/Mmucd

RRID:MMRRC_042298-UCD

Type: Organism

Proper Citation

RRID:MMRRC_042298-UCD

Organism Information

URL: https://www.mmrrc.org/catalog/sds.php?mmrrc_id=42298

Proper Citation: RRID:MMRRC_042298-UCD

Description: Mus musculus with name B6J.129-Atoh7^{tm1Gla}/Mmucd from MMRRC.

Species: Mus musculus

Notes: Research areas: Cell Biology, Developmental Biology, Models for Human Disease, Neurobiology, Research Tools, Sensorineural; Mutation Type: Targeted Mutation ; Collection:

Phenotype: abnormal retinal cone cell morphology [MP:0001006]| abnormal eye development [MP:0001286]| abnormal retina morphology [MP:0001325]| abnormal optic nerve morphology [MP:0001330]| abnormal optic nerve innervation [MP:0001332]| absent optic nerve [MP:0001333]| absent optic tract [MP:0001334]| abnormal blood vessel morphology [MP:0001614]| abnormal retinal vasculature morphology [MP:0002792]| abnormal cell cycle [MP:0003077]| abnormal optic vesicle formation [MP:0003425]| abnormal amacrine cell morphology [MP:0005240]| abnormal retinal ganglion layer morphology [MP:0005241]| abnormal eye electrophysiology [MP:0005551]| abnormal retinal bipolar cell morphology [MP:0006073]| abnormal retinal rod bipolar cell morphology [MP:0006074]| abnormal retinal cone bipolar cell morphology [MP:0006075]| abnormal retinal nerve fiber layer morphology [MP:0006303]| absent retinal ganglion cell [MP:0008068]| increased retinal cone cell number [MP:0008445]| decreased retinal rod cell number [MP:0008453]| absent retinal ganglion layer [MP:0008510]| thin retinal inner nuclear layer [MP:0008511]| thin retinal inner plexiform layer [MP:0008513]| thin retinal outer nuclear layer [MP:0008515]| thin retinal outer plexiform layer [MP:0008519]| decreased total retina thickness [MP:0011965]| abnormal circadian behavior entrainment [MP:0020476]

Affected Gene: Atoh7

Catalog Number: 042298-UCD

Background: Targeted Mutation

Database: Mutant Mouse Resource and Research Center (MMRRC)

Database Abbreviation: MMRRC

Alternate IDs: MMRRC_42298-UCD, MMRRC_042298, MMRRC_42298

Organism Name: B6J.129-*Atoh7*^{tm1Gla}/Mmucd

Record Creation Time: 20230308T055224+0000

Record Last Update: 20250419T224348+0000

Ratings and Alerts

No rating or validation information has been found for B6J.129-*Atoh7*^{tm1Gla}/Mmucd.

No alerts have been found for B6J.129-*Atoh7*^{tm1Gla}/Mmucd.

Data and Source Information

Source: [Integrated Animals](#)

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

Usage and Citation Metrics

We found 6 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Kozlowski C, et al. (2024) Retinal neurons establish mosaic patterning by excluding homotypic somata from their dendritic territories. *Cell reports*, 43(8), 114615.

Kozlowski C, et al. (2023) Retinal neurons establish mosaic patterning by excluding homotypic somata from their dendritic territory. *bioRxiv : the preprint server for biology*.

Whyland KL, et al. (2022) The parabigeminal nucleus is a source of "retinogeniculate replacement terminals" in mice that lack retinofugal input. *The Journal of comparative neurology*, 530(18), 3179.

Somaiya RD, et al. (2022) Sonic hedgehog-dependent recruitment of GABAergic

interneurons into the developing visual thalamus. eLife, 11.

Sabbagh U, et al. (2018) Distribution and development of molecularly distinct perineuronal nets in visual thalamus. Journal of neurochemistry, 147(5), 626.

Monavarfeshani A, et al. (2018) LRRTM1 underlies synaptic convergence in visual thalamus. eLife, 7.