

Resource Summary Report

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B6;129S4-Myh10^{tm2Rsad}/Mmnc

RRID:MMRRC_016991-UNC

Type: Organism

Proper Citation

RRID:MMRRC_016991-UNC

Organism Information

URL: https://www.mmrrc.org/catalog/sds.php?mmrrc_id=16991

Proper Citation: RRID:MMRRC_016991-UNC

Description: Mus musculus with name B6;129S4-Myh10^{tm2Rsad}/Mmnc from MMRRC.

Species: Mus musculus

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

Phenotype: abnormal heart morphology [MP:0000266] abnormal heart development [MP:0000267] overriding aortic valve [MP:0000273] abnormal heart shape [MP:0000277] abnormal myocardial fiber morphology [MP:0000278] ventricular hypoplasia [MP:0000279] thin ventricular wall [MP:0000280] domed cranium [MP:0000440] abnormal liver morphology [MP:0000598] abnormal fourth ventricle morphology [MP:0000828] abnormal spinal cord morphology [MP:0000955] abnormal retina morphology [MP:0001325] abnormal suckling behavior [MP:0001436] cardiac hypertrophy [MP:0001625] hydroencephaly [MP:0001891] abnormal aortic valve morphology [MP:0002747] increased cardiomyocyte apoptosis [MP:0003222] abnormal body size [MP:0003956] abnormal mitosis [MP:0004046] abnormal myocardium compact layer morphology [MP:0004056] dilated heart right atrium [MP:0004062] abnormal myocardial fiber physiology [MP:0004215] enlarged myocardial fiber [MP:0004564] cardiomyopathy [MP:0005330] abnormal retinal bipolar cell morphology [MP:0006073] congestive heart failure [MP:0006138] abnormal mitotic spindle morphology [MP:0009760] perimembraneous ventricular septal defect [MP:0010418] heart right ventricle outflow tract stenosis [MP:0010449] absent coronary vessels [MP:0010561] neonatal lethality [MP:0011087] complete penetrance [MP:0011092] embryonic lethality [MP:0011099] complete penetrance [MP:0011101]

Affected Gene: Myh10

Catalog Number: 016991-UNC

Background: Targeted Mutation

Database: Mutant Mouse Resource and Research Center (MMRRC)

Database Abbreviation: MMRRC

Source References: [PMID:9356462](#), [PMID:11283949](#), [PMID:12893741](#)

Alternate IDs: MMRRC_16991-UNC, MMRRC_016991, MMRRC_16991

Organism Name: B6;129S4-Myh10^{tm2Rsad}/Mmnc

Record Creation Time: 20230308T054945+0000

Record Last Update: 20250419T223245+0000

Ratings and Alerts

No rating or validation information has been found for B6;129S4-Myh10^{tm2Rsad}/Mmnc.

No alerts have been found for B6;129S4-Myh10^{tm2Rsad}/Mmnc.

Data and Source Information

Source: [Integrated Animals](#)

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

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

Ma X, et al. (2020) Nonmuscle myosin 2 regulates cortical stability during sprouting angiogenesis. Molecular biology of the cell, 31(18), 1974.

Ma X, et al. (2017) Nonmuscle myosin IIB regulates epicardial integrity and epicardium-derived mesenchymal cell maturation. Journal of cell science, 130(16), 2696.

Ma X, et al. (2014) A point mutation in Myh10 causes major defects in heart development and body wall closure. Circulation. Cardiovascular genetics, 7(3), 257.

Wang H, et al. (2012) Myosin II is a negative regulator of oligodendrocyte morphological

differentiation. Journal of neuroscience research, 90(8), 1547.