Resource Summary Report

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B6;129S7-*Amhr2*$^{tm3(cre)Bhr}$/Mmnc

RRID:MMRRC_014245-UNC
Type: Organism

Proper Citation

RRID:MMRRC_014245-UNC

Organism Information

URL: https://www.mmrrc.org/catalog/sds.php?mmrrc_id=14245

Proper Citation: RRID:MMRRC_014245-UNC

Description: Mus musculus with name B6;129S7-*Amhr2*$^{tm3(cre)Bhr}$/Mmnc from MMRRC.

Species: Mus musculus

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

Phenotype: decreased hematocrit [MP:0000208]| extramedullary hematopoiesis [MP:0000240]| impaired fertilization [MP:0000242]| abnormal kidney development [MP:0000527]| abnormal uterus morphology [MP:0001120]| abnormal ovary morphology [MP:0001126]| impaired ovarian folliculogenesis [MP:0001129]| abnormal ovarian folliculogenesis [MP:0001130]| abnormal ovarian follicle morphology [MP:0001131]| absent corpus luteum [MP:0001134]| abnormal testis morphology [MP:0001146]| small testis [MP:0001147]| small seminiferous tubules [MP:0001153]| seminiferous tubule degeneration [MP:0001154]| arrest of spermatogenesis [MP:0001155]| abnormal spermatogenesis [MP:0001156]| increased metastatic potential [MP:0001272]| disheveled coat [MP:0001511]| anemia [MP:0001577]| abnormal placenta development [MP:0001712]| abnormal placenta labyrinth morphology [MP:0001716]| failure of embryo implantation [MP:0001728]| impaired embryo implantation [MP:0001729]| postnatal growth retardation [MP:0001732]| suppressed circulating follicle stimulating hormone level [MP:0001749]| increased circulating follicle stimulating hormone level [MP:0001750]| increased circulating luteinizing hormone level [MP:0001751]| edema [MP:0001785]| hemorrhage [MP:0001914]| reduced female fertility [MP:0001923]| infertility [MP:0001924]| male infertility [MP:0001925]| female infertility [MP:0001926]| abnormal ovulation [MP:0001928]| abnormal meiosis [MP:0001930]| decreased litter size [MP:0001935]| secondary sex reversal [MP:0001939]| testis hypoplasia

[MP:0001940]| ovary cysts [MP:0002016]| increased carcinoma incidence [MP:0002038]| premature death [MP:0002083]| abnormal sex determination [MP:0002210]| abnormal seminiferous tubule morphology [MP:0002216]| cryptorchism [MP:0002286]| abnormal pulmonary circulation [MP:0002295]| small uterus [MP:0002637]| uterus hyperplasia [MP:0002676]| decreased corpora lutea number [MP:0002680]| increased corpora lutea number [MP:0002681]| decreased mature ovarian follicle number [MP:0002682]| small adrenal glands [MP:0002768]| decreased circulating luteinizing hormone level [MP:0002773]| decreased circulating testosterone level [MP:0002780]| abnormal Sertoli cell morphology [MP:0002784]| male pseudohermaphroditism [MP:0002789]| testicular atrophy [MP:0003205]| abnormal placenta vasculature [MP:0003231]| decreased ovulation rate [MP:0003355]| absent sexual maturation [MP:0003379]| absent placental labyrinth [MP:0003403]| abnormal oviduct morphology [MP:0003574]| increased ovarian carcinoma incidence [MP:0003579]| abnormal ovary development [MP:0003582]| abnormal oviduct transport [MP:0003700]| abnormal Mullerian duct morphology [MP:0003826]| abnormal testis development [MP:0003830]| abnormal uterine environment [MP:0004014]| abnormal miscarriage rate [MP:0004244]| abnormal maternal decidual layer morphology [MP:0004256]| decreased renal glomerulus number [MP:0004505]| absent oocytes [MP:0004805]| ovary hemorrhage [MP:0004834]| decreased testis weight [MP:0004852]| increased ovary weight [MP:0004855]| decreased ovary weight [MP:0004856]| abnormal endometrium morphology [MP:0004896]| decreased male germ cell number [MP:0004901]| decreased uterus weight [MP:0004905]| abnormal trophoblast layer morphology [MP:0005031]| increased follicle stimulating hormone level [MP:0005131]| ovary hypoplasia [MP:0005158]| azoospermia [MP:0005159]| increased circulating estradiol level [MP:0005182]| decreased circulating progesterone level [MP:0005185]| increased circulating progesterone level [MP:0005186]| ascites [MP:0005324]| abnormal circulating hormone level [MP:0005418]| decreased oocyte number [MP:0005431]| hemoperitoneum [MP:0005435]| increased testis tumor incidence [MP:0006262]| abnormal testis cord formation [MP:0006418]| increased ovary tumor incidence [MP:0008000]| abnormal myometrium morphology [MP:0008256]| thin myometrium [MP:0008257]| arrest of male meiosis [MP:0008261]| abnormal placental labyrinth vasculature morphology [MP:0008803]| abnormal granulosa cell morphology [MP:0008868]| abnormal ovarian follicle number [MP:0008871]| decreased uterine NK cell number [MP:0008876]| abnormal DNA methylation [MP:0008877]| abnormal spongiotrophoblast cell morphology [MP:0008959]| early reproductive senescence [MP:0008995]| short oviduct [MP:0009071]| short uterine horn [MP:0009089]| endometrium hyperplasia [MP:0009092]| decreased endometrial gland number [MP:0009096]| failure of Mullerian duct regression [MP:0009139]| internal male genitalia hypoplasia [MP:0009207]| abnormal secondary ovarian follicle morphology [MP:0009363]| abnormal cumulus expansion [MP:0009373]| absent cumulus expansion [MP:0009374]| increased trophoblast giant cell number [MP:0009397]| polyovular ovarian follicle [MP:0009433]| ovarian follicular cyst [MP:0009444]| abnormal superovulation [MP:0009648]| abnormal pregnancy [MP:0009661]| embryonic lethality [MP:0011102]| incomplete penetrance [MP:0011750]| abnormal seminiferous tubule epithelium morphology [MP:0012411]| increased granulosa cell tumor incidence [MP:0013399]| endometrium fibrosis [MP:0013539]

Affected Gene: creAmhr2

Catalog Number: 014245-UNC

Background: Targeted Mutation

Database: Mutant Mouse Resource and Research Center (MMRRC)

Database Abbreviation: MMRRC

Source References: PMID:12368913, PMID:14701941, PMID:15118069

Alternate IDs: MMRRC_14245-UNC, MMRRC_014245, MMRRC_14245

Organism Name: B6;129S7-*Amhr2*$^{tm3(cre)Bhr}$/Mmnc

Record Creation Time: 20230308T054927+0000

Record Last Update: 20250419T223117+0000

Ratings and Alerts

No rating or validation information has been found for B6;129S7-*Amhr2*$^{tm3(cre)Bhr}$/Mmnc.

No alerts have been found for B6;129S7-*Amhr2*$^{tm3(cre)Bhr}$/Mmnc.

Data and Source Information

Source: Integrated Animals

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

Usage and Citation Metrics

We found 9 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Granados-Aparici S, et al. (2024) SMAD4 promotes somatic-germline contact during murine oocyte growth. eLife, 13.

Douglas JC, et al. (2024) Normal Ovarian Function in Subfertile Mouse with Amhr2-Cre-Driven Ablation of Insr and Igf1r. Genes, 15(5).

Wang Y, et al. (2023) Biallelic Dicer1 Mutations in the Gynecologic Tract of Mice Drive Lineage-Specific Development of DICER1 Syndrome-Associated Cancer. Cancer research, 83(21), 3517.

Chauvin M, et al. (2023) Cancer-associated mesothelial cells are regulated by the anti-

Müllerian hormone axis. Cell reports, 42(7), 112730.

Ghosh A, et al. (2020) In Vivo Cell Fate Tracing Provides No Evidence for Mesenchymal to Epithelial Transition in Adult Fallopian Tube and Uterus. Cell reports, 31(6), 107631.

Saatcioglu HD, et al. (2019) Single-cell sequencing of neonatal uterus reveals an Misr2+ endometrial progenitor indispensable for fertility. eLife, 8.

Wang Y, et al. (2016) Follicle Depletion Provides a Permissive Environment for Ovarian Carcinogenesis. Molecular and cellular biology, 36(18), 2418.

Kyrönlahti A, et al. (2011) GATA4 regulates Sertoli cell function and fertility in adult male mice. Molecular and cellular endocrinology, 333(1), 85.

Kyrönlahti A, et al. (2011) GATA4 deficiency impairs ovarian function in adult mice. Biology of reproduction, 84(5), 1033.