

Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 2, 2025

STOCK *Bmpr1a*^{tm2.1Bhr}/Mmnc

RRID:MMRRC_030469-UNC

Type: Organism

Proper Citation

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Organism Information

URL: https://www.mmrc.org/catalog/sds.php?mmrc_id=30469

Proper Citation: RRID:MMRRC_030469-UNC

Description: Mus musculus with name STOCK *Bmpr1a*^{tm2.1Bhr}/Mmnc from MMRRC.

Species: Mus musculus

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

Phenotype: abnormal ear shape [MP:0000022]| delayed bone ossification [MP:0000060]| abnormal long bone epiphysis morphology [MP:0000131]| abnormal cartilage development [MP:0000164]| abnormal chondrocyte morphology [MP:0000166]| abnormal vascular development [MP:0000259]| abnormal heart morphology [MP:0000266]| absent atrioventricular cushions [MP:0000298]| decreased cell proliferation [MP:0000352]| short snout [MP:0000445]| short limbs [MP:0000547]| abnormal radius morphology [MP:0000552]| abnormal hindlimb morphology [MP:0000556]| absent hindlimb [MP:0000557]| polydactyly [MP:0000562]| syndactyly [MP:0000564]| ectopic digits [MP:0000568]| short tail [MP:0000592]| abnormal joint capsule morphology [MP:0000997]| abnormal lung morphology [MP:0001175]| abnormal lung development [MP:0001176]| abnormal eye development [MP:0001286]| anophthalmia [MP:0001293]| abnormal retina morphology [MP:0001325]| abnormal skeleton physiology [MP:0001533]| abnormal osteoclast physiology [MP:0001541]| internal hemorrhage [MP:0001634]| decreased embryo size [MP:0001698]| abnormal visceral yolk sac morphology [MP:0001718]| pale yolk sac [MP:0001722]| embryonic growth arrest [MP:0001730]| hemorrhage [MP:0001914]| secondary sex reversal [MP:0001939]| respiratory distress [MP:0001954]| postnatal lethality [MP:0002082]| premature death [MP:0002083]| abnormal digit morphology [MP:0002110]| abnormal skeleton development [MP:0002113]| abnormal respiratory system physiology [MP:0002133]| no abnormal

phenotype detected [MP:0002169]| small heart [MP:0002188]| abnormal tricuspid valve morphology [MP:0002624]| persistent truncus arteriosus [MP:0002633]| chondrodystrophy [MP:0002657]| abnormal vein morphology [MP:0002725]| male pseudohermaphroditism [MP:0002789]| abnormal notochord morphology [MP:0002825]| abnormal impulse conducting system conduction [MP:0003137]| fused joints [MP:0003189]| abnormal cardiomyocyte apoptosis [MP:0003221]| abnormal vascular branching morphogenesis [MP:0003227]| abnormal vitelline vasculature morphology [MP:0003229]| osteoarthritis [MP:0003560]| abnormal fetal cardiomyocyte proliferation [MP:0003567]| pallor [MP:0003717]| abnormal bone structure [MP:0003795]| vascular smooth muscle hypoplasia [MP:0003814]| abnormal pituitary gland development [MP:0003816]| decreased fetal size [MP:0004200]| increased squamous cell carcinoma incidence [MP:0004207]| enlarged parietal bone [MP:0004421]| decreased length of long bones [MP:0004686]| abnormal vertebral column morphology [MP:0004703]| decreased osteoclast cell number [MP:0004985]| abnormal ulna morphology [MP:0005108]| decreased cardiac muscle contractility [MP:0005140]| abnormal retinal pigment epithelium morphology [MP:0005201]| abnormal vertebrae development [MP:0005225]| pericardial effusion [MP:0005312]| osteosclerosis [MP:0005422]| abnormal skeleton morphology [MP:0005508]| increased bone mass [MP:0005605]| mitral valve regurgitation [MP:0006045]| abnormal digit development [MP:0006280]| abnormal lung epithelium morphology [MP:0006382]| abnormal epiphyseal plate morphology [MP:0006395]| abnormal articular cartilage morphology [MP:0006433]| abnormal retinal ganglion cell morphology [MP:0008056]| abnormal joint mobility [MP:0008069]| failure of endochondral bone ossification [MP:0008275]| abnormal osteoclast differentiation [MP:0008396]| decreased grip strength [MP:0010053]| abnormal thoracic cage shape [MP:0010099]| small thoracic cage [MP:0010103]| increased salivary gland tumor incidence [MP:0010318]| absent PR interval [MP:0010512]| Ebstein's malformation of tricuspid valve [MP:0010536]| abnormal mitral valve cusp morphology [MP:0010614]| abnormal tricuspid valve cusp morphology [MP:0010622]| decreased type II pneumocyte number [MP:0010811]| postnatal lethality [MP:0011085]| complete penetrance [MP:0011098]| embryonic lethality during organogenesis [MP:0011099]| complete penetrance [MP:0011100]| lethality throughout fetal growth and development [MP:0012110]| complete penetrance [MP:0013351]| preweaning lethality [MP:0014105]| complete penetrance [MP:0020040]| increased hair follicle number [MP:0020080]| abnormal Rathke's pouch development [MP:0020084]| abnormal chondrocyte differentiation [MP:0030005]

Affected Gene: Bmpr1a

Catalog Number: 030469-UNC

Background: Targeted Mutation

Database: Mutant Mouse Resource and Research Center (MMRRC)

Database Abbreviation: MMRRC

Source References: [PMID:11857780](https://pubmed.ncbi.nlm.nih.gov/11857780/)

Alternate IDs: MMRRC_30469-UNC, MMRRC_030469, MMRRC_3469

Organism Name: STOCK *Bmpr1a^{tm2.1Bhr}*/Mmnc

Record Creation Time: 20230308T055119+0000

Record Last Update: 20250225T012508+0000

Ratings and Alerts

No rating or validation information has been found for STOCK *Bmpr1a^{tm2.1Bhr}*/Mmnc.

No alerts have been found for STOCK *Bmpr1a^{tm2.1Bhr}*/Mmnc.

Data and Source Information

Source: [Integrated Animals](#)

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

Usage and Citation Metrics

We found 2 mentions in open access literature.

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

Ihle CL, et al. (2020) Loss of Myeloid BMPR1a Alters Differentiation and Reduces Mouse Prostate Cancer Growth. *Frontiers in oncology*, 10, 357.

Kim S, et al. (2019) Epigenetic regulation of mammalian Hedgehog signaling to the stroma determines the molecular subtype of bladder cancer. *eLife*, 8.