Resource Summary Report

Generated by PRECISE-TBI on Jul 31, 2026

Cry1^{tm1Jhjh}/Cry1^{+}; Cry2^{tm1Jhjh}/Cry2^{tm1Jhjh}

RRID:MGI:4943717
Type: Organism

Proper Citation

RRID:MGI:4943717

Organism Information

URL:

Proper Citation: RRID:MGI:4943717

Description: Allele Detail: Targeted This is a legacy resource.

Species: Mus musculus

Notes: Allele Detail: Targeted This is a legacy resource.

Phenotype: abnormal circadian behavior period

Affected Gene: Cry2, Cry1

Genomic Alteration: tm1Jhjh

Catalog Number: 4943717

Background: involves: 129P2/OlaHsd * C57BL/6

Database: MGI, Mouse Genome Informatics MGI

Database Abbreviation: MGI

Availability: Availability unknown check source stock center

Source References: PMID:10217146

Organism Name: Cry1^{tm1Jhjh}/Cry1^{+}; Cry2^{tm1Jhjh}/Cry2^{tm1Jhjh}

Record Creation Time: 20240120T190228+0000

Record Last Update: 20240130T201805+0000

Ratings and Alerts

No rating or validation information has been found for $Cry1^{tm1Jhjh}/Cry1^{+}$; $Cry2^{tm1Jhjh}/Cry2^{tm1Jhjh}$.

No alerts have been found for $Cry1^{tm1Jhjh}/Cry1^{+}$; $Cry2^{tm1Jhjh}/Cry2^{tm1Jhjh}$.

Data and Source Information

Source: Integrated Animals

Source Database: MGI, Mouse Genome Informatics MGI

Usage and Citation Metrics

We found 24 mentions in open access literature.

Listed below are recent publications. The full list is available at PRECISE-TBI .

Cox SL, et al. (2023) Circadian disruption in lung fibroblasts enhances NF-?B activity to exacerbate neutrophil recruitment. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 37(2), e22753.

Tone D, et al. (2022) Distinct phosphorylation states of mammalian CaMKII? control the induction and maintenance of sleep. PLoS biology, 20(10), e3001813.

Chen Z, et al. (2022) The Function and Photoregulatory Mechanisms of Cryptochromes From Moso Bamboo (Phyllostachys edulis). Frontiers in plant science, 13, 866057.

Mo W, et al. (2022) Arabidopsis cryptochrome 2 forms photobodies with TCP22 under blue light and regulates the circadian clock. Nature communications, 13(1), 2631.

Beatrice P, et al. (2022) Photoreceptors' gene expression of Arabidopsis thaliana grown with biophilic LED-sourced lighting systems. PloS one, 17(6), e0269868.

Abo SMC, et al. (2021) Modeling the circadian regulation of the immune system: Sexually dimorphic effects of shift work. PLoS computational biology, 17(3), e1008514.

Chan AB, et al. (2020) Cryptochromes modulate E2F family transcription factors. Scientific reports, 10(1), 4077.

Rai N, et al. (2019) How do cryptochromes and UVR8 interact in natural and simulated sunlight? Journal of experimental botany, 70(18), 4975.

Zoltowski BD, et al. (2019) Chemical and structural analysis of a photoactive vertebrate cryptochrome from pigeon. Proceedings of the National Academy of Sciences of the United States of America, 116(39), 19449.

Correia SP, et al. (2019) The circadian E3 ligase complex SCFFBXL3+CRY targets TLK2. Scientific reports, 9(1), 198.

Dufor T, et al. (2019) Neural circuit repair by low-intensity magnetic stimulation requires cellular magnetoreceptors and specific stimulation patterns. Science advances, 5(10), eaav9847.

Rosensweig C, et al. (2018) An evolutionary hotspot defines functional differences between CRYPTOCHROMES. Nature communications, 9(1), 1138.

Wang S, et al. (2018) CRY1 interacts directly with HBI1 to regulate its transcriptional activity and photomorphogenesis in Arabidopsis. Journal of experimental botany, 69(16), 3867.

Doi M, et al. (2016) Gpr176 is a Gz-linked orphan G-protein-coupled receptor that sets the pace of circadian behaviour. Nature communications, 7, 10583.

Hamada T, et al. (2016) In vivo imaging of clock gene expression in multiple tissues of freely moving mice. Nature communications, 7, 11705.

Hand LE, et al. (2016) The circadian clock regulates inflammatory arthritis. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 30(11), 3759.

Papp SJ, et al. (2015) DNA damage shifts circadian clock time via Hausp-dependent Cry1 stabilization. eLife, 4.

Pauls S, et al. (2014) Differential contributions of intra-cellular and inter-cellular mechanisms to the spatial and temporal architecture of the suprachiasmatic nucleus circadian circuitry in wild-type, cryptochrome-null and vasoactive intestinal peptide receptor 2-null mutant mice. The European journal of neuroscience, 40(3), 2528.

De Bundel D, et al. (2013) Cognitive dysfunction, elevated anxiety, and reduced cocaine response in circadian clock-deficient cryptochrome knockout mice. Frontiers in behavioral neuroscience, 7, 152.

Ono D, et al. (2013) Postnatal constant light compensates Cryptochrome1 and 2 double deficiency for disruption of circadian behavioral rhythms in mice under constant dark. PloS one, 8(11), e80615.