Resource Summary Report

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Zebra Finch Expression Brain Atlas

RRID:SCR_012988 Type: Tool

Proper Citation

Zebra Finch Expression Brain Atlas (RRID:SCR_012988)

Resource Information

URL: http://www.zebrafinchatlas.org

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Description: Expression atlas of in situ hybridization images from large collection of genes expressed in brain of adult male zebra finches. Goal of ZEBrA project is to develop publicly available on-line digital atlas that documents expression of large collection of genes within brain of adult male zebra finches.

Abbreviations: ZEBrA

Synonyms: zebra, , Zebra Finch Expression Brain Atlas, atlas, Zebra Finch Brain Atlas, ZEBrA, finch

Resource Type: expression atlas, data or information resource, atlas, database

Keywords: gene, expression, brain, in-situ, hybridization, taeniopygia, vocal learning, anatomical, atlas, data set, molecular neuroanatomy, adult, male, gene, image, bird, image, avian

Funding: NINDS R03 NS059755; NIGMS R24 GM092842

Availability: Free, Freely available

Resource Name: Zebra Finch Expression Brain Atlas

Resource ID: SCR_012988

Alternate IDs: nif-0000-24345, SCR_000641, nlx_152091

Old URLs: http://ignrhnet.ohsu.edu/finch/songbird/index.php

Record Creation Time: 20220129T080313+0000

Record Last Update: 20250513T061425+0000

Ratings and Alerts

No rating or validation information has been found for Zebra Finch Expression Brain Atlas.

No alerts have been found for Zebra Finch Expression Brain Atlas.

Data and Source Information

Source: <u>SciCrunch Registry</u>

Usage and Citation Metrics

We found 37 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Antonson ND, et al. (2024) Functional neurogenomic responses to acoustic threats, including a heterospecific referential alarm call and its referent, in the auditory forebrain of red-winged blackbirds. Scientific reports, 14(1), 2155.

Chen G, et al. (2024) Adaptive expansion of ERVK solo-LTRs is associated with Passeriformes speciation events. Nature communications, 15(1), 3151.

Radic R, et al. (2024) The role of cerebellum in learned vocal communication in adult songbirds. Scientific reports, 14(1), 8168.

Zemel BM, et al. (2023) Motor cortex analogue neurons in songbirds utilize Kv3 channels to generate ultranarrow spikes. eLife, 12.

Nevue AA, et al. (2023) Cell type specializations of the vocal-motor cortex in songbirds. Cell reports, 42(11), 113344.

Colquitt BM, et al. (2023) Neural circuit-wide analysis of changes to gene expression during deafening-induced birdsong destabilization. eLife, 12.

Wang AS, et al. (2023) Cross-species conservation in the regulation of parvalbumin by perineuronal nets. Frontiers in neural circuits, 17, 1297643.

Biegler MT, et al. (2022) Induction of an immortalized songbird cell line allows for gene characterization and knockout by CRISPR-Cas9. Scientific reports, 12(1), 4369.

Dominoni DM, et al. (2022) Integrated molecular and behavioural data reveal deep circadian disruption in response to artificial light at night in male Great tits (Parus major). Scientific reports, 12(1), 1553.

Kersten Y, et al. (2022) A brain atlas of the carrion crow (Corvus corone). The Journal of comparative neurology, 530(17), 3011.

Alcami P, et al. (2021) Extensive GJD2 Expression in the Song Motor Pathway Reveals the Extent of Electrical Synapses in the Songbird Brain. Biology, 10(11).

Zemel BM, et al. (2021) Resurgent Na+ currents promote ultrafast spiking in projection neurons that drive fine motor control. Nature communications, 12(1), 6762.

Gedman G, et al. (2021) As above, so below: Whole transcriptome profiling demonstrates strong molecular similarities between avian dorsal and ventral pallial subdivisions. The Journal of comparative neurology, 529(12), 3222.

Choe HN, et al. (2021) Estrogen and sex-dependent loss of the vocal learning system in female zebra finches. Hormones and behavior, 129, 104911.

Bentz AB, et al. (2021) Prenatal testosterone triggers long-term behavioral changes in male zebra finches: unravelling the neurogenomic mechanisms. BMC genomics, 22(1), 158.

de Bournonville C, et al. (2021) Aromatase and nonaromatase neurons in the zebra finch secondary auditory forebrain are indistinct in their song-driven gene induction and intrinsic electrophysiological properties. The European journal of neuroscience, 54(9), 7072.

Nevue AA, et al. (2020) Molecular specializations of deep cortical layer analogs in songbirds. Scientific reports, 10(1), 18767.

Hamaide J, et al. (2020) In vivo assessment of the neural substrate linked with vocal imitation accuracy. eLife, 9.

Lovell PV, et al. (2020) ZEBrA: Zebra finch Expression Brain Atlas-A resource for comparative molecular neuroanatomy and brain evolution studies. The Journal of comparative neurology, 528(12), 2099.

Gogola JV, et al. (2019) Inhibitory cell populations depend on age, sex, and prior experience across a neural network for Critical Period learning. Scientific reports, 9(1), 19867.