Resource Summary Report

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Hippocampome.org

RRID:SCR_009023 Type: Tool

Proper Citation

Hippocampome.org (RRID:SCR_009023)

Resource Information

URL: http://hippocampome.org

Proper Citation: Hippocampome.org (RRID:SCR_009023)

Description: A curated knowledge base of the circuitry of the hippocampus of normal adult, or adolescent, rodents at the mesoscopic level of neuronal types. Knowledge concerning dentate gyrus, CA3, CA2, CA1, subiculum, and entorhinal cortex is distilled from published evidence and is continuously updated as new information becomes available. Each reported neuronal property is documented with a pointer to, and excerpt from, relevant published evidence, such as citation quotes or illustrations. Please note: This is an alpha-testing site. The content is still being vetted for accuracy and has not yet undergone peer-review. As such, it may contain inaccuracies and should not (yet) be trusted as a scholarly resource. The content does not yet appear uniformly across all combinations of browsers and screen resolutions.

Abbreviations: Hippocampome

Synonyms: Hippocampome Portal

Resource Type: data or information resource, database

Keywords: interneuron, classification, neuroinformatics, network, hippocampus, neuron, property, morphology, molecular marker, electrophysiology, adult, adolescent, dentate gyrus, ca3, ca2, ca1, subiculum, entorhinal cortex, bio.tools

Related Condition: Normal

Funding: Air Force Office of Scientific Research ; Office of Naval Research MURI N00014-10-1-0198; NINDS R01NS39600; NINDS R21NS58816

Availability: Except otherwise noted, Creative Commons Attribution-ShareAlike License

Resource Name: Hippocampome.org

Resource ID: SCR_009023

Alternate IDs: nlx_152892, biotools: Hippocampome.org

Alternate URLs: http://www.nitrc.org/projects/hippocampome, https://bio.tools/Hippocampome.org

Record Creation Time: 20220129T080250+0000

Record Last Update: 20250507T060640+0000

Ratings and Alerts

No rating or validation information has been found for Hippocampome.org.

No alerts have been found for Hippocampome.org.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 31 mentions in open access literature.

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

Wheeler DW, et al. (2024) Hippocampome.org 2.0 is a knowledge base enabling data-driven spiking neural network simulations of rodent hippocampal circuits. eLife, 12.

Kopsick JD, et al. (2024) Formation and Retrieval of Cell Assemblies in a Biologically Realistic Spiking Neural Network Model of Area CA3 in the Mouse Hippocampus. bioRxiv : the preprint server for biology.

Romani A, et al. (2024) Community-based reconstruction and simulation of a full-scale model of the rat hippocampus CA1 region. PLoS biology, 22(11), e3002861.

Wheeler DW, et al. (2024) Hippocampome.org v2.0: a knowledge base enabling data-driven spiking neural network simulations of rodent hippocampal circuits. bioRxiv : the preprint server for biology.

Sutton N, et al. (2024) A Continuous Attractor Model with Realistic Neural and Synaptic Properties Quantitatively Reproduces Grid Cell Physiology. bioRxiv : the preprint server for biology.

Kopsick JD, et al. (2024) Formation and retrieval of cell assemblies in a biologically realistic spiking neural network model of area CA3 in the mouse hippocampus. Journal of computational neuroscience, 52(4), 303.

Diamantaki M, et al. (2024) Gather your neurons and model together: Community times ahead. PLoS biology, 22(11), e3002839.

Gandolfi D, et al. (2023) Full-scale scaffold model of the human hippocampus CA1 area. Nature computational science, 3(3), 264.

Hawrylycz M, et al. (2023) A guide to the BRAIN Initiative Cell Census Network data ecosystem. PLoS biology, 21(6), e3002133.

Gillespie TH, et al. (2022) The Neuron Phenotype Ontology: A FAIR Approach to Proposing and Classifying Neuronal Types. Neuroinformatics, 20(3), 793.

Moradi K, et al. (2022) Normalized unitary synaptic signaling of the hippocampus and entorhinal cortex predicted by deep learning of experimental recordings. Communications biology, 5(1), 418.

Attili SM, et al. (2022) Quantification of neuron types in the rodent hippocampal formation by data mining and numerical optimization. The European journal of neuroscience, 55(7), 1724.

Rapti G, et al. (2021) Open Frontiers in Neural Cell Type Investigations; Lessons From Caenorhabditis elegans and Beyond, Toward a Multimodal Integration. Frontiers in neuroscience, 15, 787753.

Sanchez-Aguilera A, et al. (2021) An update to Hippocampome.org by integrating single-cell phenotypes with circuit function in vivo. PLoS biology, 19(5), e3001213.

Mehta K, et al. (2021) Neuronal classification from network connectivity via adjacency spectral embedding. Network neuroscience (Cambridge, Mass.), 5(3), 689.

Sáray S, et al. (2021) HippoUnit: A software tool for the automated testing and systematic comparison of detailed models of hippocampal neurons based on electrophysiological data. PLoS computational biology, 17(1), e1008114.

White CM, et al. (2020) Molecular expression profiles of morphologically defined hippocampal neuron types: Empirical evidence and relational inferences. Hippocampus, 30(5), 472.

Ecker A, et al. (2020) Data-driven integration of hippocampal CA1 synaptic physiology in silico. Hippocampus, 30(11), 1129.

Bjerke IE, et al. (2020) Database of literature derived cellular measurements from the murine basal ganglia. Scientific data, 7(1), 211.

Komendantov AO, et al. (2019) Quantitative firing pattern phenotyping of hippocampal neuron types. Scientific reports, 9(1), 17915.