

Resource Summary Report

Generated by [NIF](#) on Aug 19, 2026

[ACQ4](#)

RRID:SCR_016444

Type: Tool

Proper Citation

ACQ4 (RRID:SCR_016444)

Resource Information

URL: <http://www.acq4.org/>

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Description: Python-based software for experimental neurophysiology. It includes support for patch-clamp electrophysiology, multiphoton imaging, scanning laser photostimulation, and many other experimental techniques.

Synonyms: Acquisition4, ACQ4 Neurophysiology Acquisition and Analysis System, Acquisition 4, Neurophysiology acquisition and analysis for Python

Resource Type: data acquisition software, software application, software resource, data analysis software, data processing software

Defining Citation: [PMID:24523692](#)

Keywords: neuroscience, neuroanatomy, neurophysiology, clamp, eeg, neuroimaging, acquisition, python

Availability: Free, Available for download

Resource Name: ACQ4

Resource ID: SCR_016444

Alternate URLs: <https://github.com/acq4/acq4>

License: MIT License

Record Creation Time: 20220129T080330+0000

Record Last Update: 20260819T044439+0000

Ratings and Alerts

No rating or validation information has been found for ACQ4.

No alerts have been found for ACQ4.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Edwards RJ, et al. (2025) Fusiform Cells in the Dorsal Cochlear Nucleus Change Intrinsic Electrophysiological Properties and Morphologically Remodel Their Basal Dendrites with Age. bioRxiv : the preprint server for biology.

Abdelfattah AS, et al. (2023) Sensitivity optimization of a rhodopsin-based fluorescent voltage indicator. Neuron, 111(10), 1547.

Kim MH, et al. (2023) Target cell-specific synaptic dynamics of excitatory to inhibitory neuron connections in supragranular layers of human neocortex. eLife, 12.

Hage TA, et al. (2022) Synaptic connectivity to L2/3 of primary visual cortex measured by two-photon optogenetic stimulation. eLife, 11.

Mohan V, et al. (2019) Close Homolog of L1 Regulates Dendritic Spine Density in the Mouse Cerebral Cortex Through Semaphorin 3B. The Journal of neuroscience : the official journal of the Society for Neuroscience, 39(32), 6233.

Zhang X, et al. (2017) NCAM Regulates Inhibition and Excitability in Layer 2/3 Pyramidal Cells of Anterior Cingulate Cortex. Frontiers in neural circuits, 11, 19.

Penn AC, et al. (2017) Hippocampal LTP and contextual learning require surface diffusion of AMPA receptors. Nature, 549(7672), 384.

Kratz MB, et al. (2015) Spatial organization of excitatory synaptic inputs to layer 4 neurons in mouse primary auditory cortex. Frontiers in neural circuits, 9, 17.