

Resource Summary Report

Generated by SPARC SAWG on Sep 3, 2026

RIPPLELAB

RRID:SCR_015876

Type: Tool

Proper Citation

RIPPLELAB (RRID:SCR_015876)

Resource Information

URL: <https://github.com/BSP-Uniandes/RIPPLELAB>

Proper Citation: RIPPLELAB (RRID:SCR_015876)

Description: Source code for processing continuous local field potentials (LFP). The interface implements different documented algorithms for HFO detection, and provides several tools for signal visualization and manipulation.

Synonyms: RIPPLELAB Multi Analysis EEG Project

Resource Type: data processing software, data visualization software, software application, software resource, source code

Keywords: lfp, local field potential, continuous local field potential, computing platform

Availability: Free, Available for download

Resource Name: RIPPLELAB

Resource ID: SCR_015876

License: GNU General Public License v2.0

Record Creation Time: 20220129T080327+0000

Record Last Update: 20260829T182524+0000

Ratings and Alerts

No rating or validation information has been found for RIPPLELAB.

No alerts have been found for RIPPLELAB.

Data and Source Information

Usage and Citation Metrics

We found 16 mentions in open access literature.

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

Shandra O, et al. (2026) Fast ripple-delta coupling as an early biomarker for post-traumatic epileptogenesis in repetitive brain injury. *Epilepsia open*, 11(2), 409.

Jean S, et al. (2025) Very High-Frequency Oscillations in Mesial Temporal Lobe Epilepsy: Identifying the Epileptogenic Zone. *Annals of clinical and translational neurology*, 12(6), 1151.

Hatano K, et al. (2025) Internal and External Validation of Comprehensive High-Frequency Activity Biomarkers for Epilepsy Surgery. *medRxiv : the preprint server for health sciences*.

Barrett GM, et al. (2024) Open-Source Tools to Analyze Temporal and Spatial Properties of Local Field Potentials. *bioRxiv : the preprint server for biology*.

Cho E, et al. (2024) Net synaptic drive of fast-spiking interneurons is inverted towards inhibition in human FCD I epilepsy. *Nature communications*, 15(1), 6683.

Zhang Y, et al. (2024) PyHFO: lightweight deep learning-powered end-to-end high-frequency oscillations analysis application. *Journal of neural engineering*, 21(3).

Tobochnik S, et al. (2024) Pilot Trial of Perampanel on Peritumoral Hyperexcitability in Newly Diagnosed High-grade Glioma. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 30(23), 5365.

Sakakura K, et al. (2023) Developmental atlas of phase-amplitude coupling between physiologic high-frequency oscillations and slow waves. *Nature communications*, 14(1), 6435.

Lisgaras CP, et al. (2022) Robust chronic convulsive seizures, high frequency oscillations, and human seizure onset patterns in an intrahippocampal kainic acid model in mice. *Neurobiology of disease*, 166, 105637.

Kuroda N, et al. (2021) Objective interictal electrophysiology biomarkers optimize prediction of epilepsy surgery outcome. *Brain communications*, 3(2), fcab042.

Zhou G, et al. (2021) HFOApp: A MATLAB Graphical User Interface for High-Frequency Oscillation Marking. *eNeuro*, 8(5).

Donos C, et al. (2020) Unsupervised Detection of High-Frequency Oscillations Using Time-Frequency Maps and Computer Vision. *Frontiers in neuroscience*, 14, 183.

Vicente AF, et al. (2020) In Vivo Characterization of Neurophysiological Diversity in the Lateral Supramammillary Nucleus during Hippocampal Sharp-wave Ripples of Adult Rats.

Neuroscience, 435, 95.

Santana-Gomez C, et al. (2019) Harmonization of pipeline for detection of HFOs in a rat model of post-traumatic epilepsy in preclinical multicenter study on post-traumatic epileptogenesis. *Epilepsy research*, 156, 106110.

Ferraris M, et al. (2018) The Nucleus Reuniens Controls Long-Range Hippocampo-Prefrontal Gamma Synchronization during Slow Oscillations. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 38(12), 3026.

Navarrete M, et al. (2016) RIPPLELAB: A Comprehensive Application for the Detection, Analysis and Classification of High Frequency Oscillations in Electroencephalographic Signals. *PloS one*, 11(6), e0158276.