

Resource Summary Report

Generated by [PRECISE-TBI](#) on Sep 8, 2026

SOCK

RRID:SCR_002544

Type: Tool

Proper Citation

SOCK (RRID:SCR_002544)

Resource Information

URL: <http://www.nitrc.org/projects/sock/>

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Description: A software toolbox that can automatically identify many of the artifact components that are often present in independent component analysis (ICA) of functional MRI (fMRI). The method: * Does not require temporal information about the fMRI paradigm. * Does not require the user to train the algorithm. * Requires only the EPI images (additional acquisition of anatomical images is not required). * Is able to identify a high proportion of artifact-related ICs without removing components that are likely to be of neuronal origin. * Can be applied to resting-state fMRI. * Is automated, requiring minimal or no human intervention.

Abbreviations: SOCK

Synonyms: Spatially Organized Component Klassifikator

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

Defining Citation: [PMID:23847511](#)

Keywords: matlab, magnetic resonance, independent component analysis, fmri, artifact, automated classification, automatic, independent component labeling, resting-state fmri

Funding: National Health and MRC of Australia project grant 368650;
National Health and MRC of Australia project grant 318900;
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National Health and MRC of Australia practitioner fellowship 527800;
Austin Hospital Medical Research Foundation ;
State Government of Victoria Australia ;
Operational Infrastructure Support Program

Availability: Free, Available for download, Freely available

Resource Name: SOCK

Resource ID: SCR_002544

Alternate IDs: nlx_155951

License: GNU General Public License

Record Creation Time: 20220129T080214+0000

Record Last Update: 20260905T133038+0000

Ratings and Alerts

No rating or validation information has been found for SOCK.

No alerts have been found for SOCK.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 2 mentions in open access literature.

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

Abdeen AH, et al. (2025) Parkinson-like wild-type superoxide dismutase 1 pathology induces nigral dopamine neuron degeneration in a novel murine model. Acta neuropathologica, 149(1), 22.

Bhaganagarapu K, et al. (2014) De-noising with a SOCK can improve the performance of event-related ICA. Frontiers in neuroscience, 8, 285.