

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](https://fdi-lab.github.io/SciCrunch.org) on Apr 13, 2025

PreSurgMapp

RRID:SCR_014427

Type: Tool

Proper Citation

PreSurgMapp (RRID:SCR_014427)

Resource Information

URL: <https://github.com/missy139/PreSurgMapp>

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Description: A MATLAB toolbox for processing the functional areas of the brain using multi-modal fMRI data for pre-surgical mapping. It is composed of three types of individual-level ICA analyses for user use. Traditional ICA (task) can be used for task fMRI. Either Traditional ICA (rest) or ICA with DICI (rest) can be used for rs-fMRI. Traditional ICA (rest) is designed for users who already have a hypothesis of the pattern of the target component and want to have manually set components by themselves. ICA with DICI (rest) is completely automatic, given that the user provides a template (provided). The software utilizes an automatic component identification method that is based on the discriminatory-index. All the components from multiple ICA runs with multiple component settings are ranked and compiled.

Resource Type: software toolkit, software resource

Keywords: fmri, ica, dici, rs-fmri, dici, matlab, software toolkit, toolbox, multi modal, pre surgical, map

Funding:

Availability: Open source

Resource Name: PreSurgMapp

Resource ID: SCR_014427

Alternate URLs: <http://restfmri.net/forum/node/2382>.

License: GNU General Public License

Record Creation Time: 20220129T080320+0000

Record Last Update: 20250412T055803+0000

Ratings and Alerts

No rating or validation information has been found for PreSurgMapp.

No alerts have been found for PreSurgMapp.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Barrière DA, et al. (2020) Paracetamol is a centrally acting analgesic using mechanisms located in the periaqueductal grey. *British journal of pharmacology*, 177(8), 1773.

Huang H, et al. (2018) Tumor Tissue Detection using Blood-Oxygen-Level-Dependent Functional MRI based on Independent Component Analysis. *Scientific reports*, 8(1), 1223.

Lu J, et al. (2017) An automated method for identifying an independent component analysis-based language-related resting-state network in brain tumor subjects for surgical planning. *Scientific reports*, 7(1), 13769.

Huang H, et al. (2016) PreSurgMapp: a MATLAB Toolbox for Presurgical Mapping of Eloquent Functional Areas Based on Task-Related and Resting-State Functional MRI. *Neuroinformatics*, 14(4), 421.