

Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 4, 2026

[aBEAT](#)

RRID:SCR_002238

Type: Tool

Proper Citation

aBEAT (RRID:SCR_002238)

Resource Information

URL: <http://www.med.unc.edu/bric/ideagroup/free-sofwares/abeat-a-toolbox-for-consistent-analysis-of-longitudinal-adult-brain-mri>

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Description: A 4D adult brain extraction and analysis toolbox with graphical user interfaces to consistently analyze 4D adult brain MR images. Single-time-point images can also be analyzed. Main functions of the software include image preprocessing, 4D brain extraction, 4D tissue segmentation, 4D brain labeling, ROI analysis. Linux operating system (64 bit) is required. A computer with 8G memory (or more) is recommended for processing many images simultaneously. The graphical user interfaces and overall framework of the software are implemented in MATLAB. The image processing functions are implemented with the combination of C/C++, MATLAB, Perl and Shell languages. Parallelization technologies are used in the software to speed up image processing.

Abbreviations: aBEAT

Synonyms: aBEAT: A Toolbox for Consistent Analysis of Longitudinal Adult Brain MRI, Adult Brain Extraction and Analysis Toolbox

Resource Type: image processing software, software toolkit, software application, data processing software, image analysis software, software resource

Defining Citation: [PMID:23577105](#)

Keywords: analyze, atlas application, magnetic resonance, segmentation, visualization, adult, mri, brain

Resource Name: aBEAT

Resource ID: SCR_002238

Alternate IDs: nlx_155840, nlx_155542

Alternate URLs: <http://www.nitrc.org/projects/abeat>

License: aBEAT license

Record Creation Time: 20220129T080212+0000

Record Last Update: 20260804T043143+0000

Ratings and Alerts

No rating or validation information has been found for aBEAT.

No alerts have been found for aBEAT.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

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

Huang M, et al. (2019) Spatial correlations exploitation based on nonlocal voxel-wise GWAS for biomarker detection of AD. NeuroImage. Clinical, 21, 101642.