

Resource Summary Report

Generated by PRECISE-TBI on Jul 31, 2026

Cortical Box Method: Quantitative analysis for gene expressions in rodent cortex

RRID:SCR_013387

Type: Tool

Proper Citation

Cortical Box Method: Quantitative analysis for gene expressions in rodent cortex
(RRID:SCR_013387)

Resource Information

URL: <http://www.nibb.ac.jp/cortex/>

Proper Citation: Cortical Box Method: Quantitative analysis for gene expressions in rodent cortex (RRID:SCR_013387)

Description: The Cortical box method is an analytical method that standardizes the serial coronal sections of rodent cortex for quantitative analysis (details are written in the manual document). There are several tools necessary for this analysis. Currently, a program CxStand which is a core program of Cortical Box method is available for download. It standardizes a set of serial sections of rat cortex into standard rectangulars. Cortical box method was developed by Dr. Junya Hirokawa in the Yamamori Lab to map c-fos immunoreactivity in the rat cortex. This method was now applied to analyze the in situ data. From the original image, the cortical region is taken out and transformed, then normalized. You do this to a set of coronal sections of a rat cortex. Then, the cortex becomes a box. You can now slice the cortical box at desired lamina positions for layer maps. For more information, please refer to, <http://www.nibb.ac.jp/brish/Gallery/corticalboxE.html>. Requirements Cortical Box Method software is written in Labview and requires Labview version 7.0 (or later) and Vision development version 7.0 (or later). Labview and Vision are products of National Instruments (<http://www.ni.com/>). I confirmed (*) the Cortical box software works in the latest versions of Labview (ver.8.6) and Vision development (ver. 8.6), which can be downloaded without charge in the National Instruments web site (<http://www.ni.com/>) and can be used as evaluation softwares for 30 days. I tested the programs on PCs running the Windows family of operating systems. *A VI called image to image does not exist in Labview 8.6, please replace it into image to image 2. Programs CxStand ver 1.01 - (English, 680KB, Latest Version (2008/09/25 Update)) Standardization of a part of cortex into a rectangular. CBanalysis - construct 3D cortical box and create specific layer maps. DensityMap - Creating denisty map of staining signals. Copyright (c) 2008 Junya Hirokawa. All rights reserved. This program is free software; you can redistribute it and/or

modify it.

Synonyms: Cortical Box Method

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

Keywords: gene expressions, coronal sections, cortex, quantitative analysis, rodent, standardizes

Resource Name: Cortical Box Method: Quantitative analysis for gene expressions in rodent cortex

Resource ID: SCR_013387

Alternate IDs: nif-0000-11885

Record Creation Time: 20220129T080315+0000

Record Last Update: 20260731T042902+0000

Ratings and Alerts

No rating or validation information has been found for Cortical Box Method: Quantitative analysis for gene expressions in rodent cortex.

No alerts have been found for Cortical Box Method: Quantitative analysis for gene expressions in rodent cortex.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 5 mentions in open access literature.

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

Binh LH, et al. (2025) A novel approach for the router nodes placement in wireless mesh networks using phasing with approximation optimization algorithms. PloS one, 20(1), e0318247.

Harris L, et al. (2025) Improved quantitative accuracy in data-independent acquisition proteomics via retention time boundary imputation. bioRxiv : the preprint server for biology.

Chicco D, et al. (2025) The Venus score for the assessment of the quality and trustworthiness of biomedical datasets. BioData mining, 18(1), 1.

Wang S, et al. (2023) miRNA-27a is essential for bone remodeling by modulating p62-mediated osteoclast signaling. *eLife*, 12.

Rochigneux P, et al. (2020) Medical Treatment of Lung Cancer: Can Immune Cells Predict the Response? A Systematic Review. *Frontiers in immunology*, 11, 1036.