# **Resource Summary Report**

Generated by NIF on May 25, 2025

## celltrackR

RRID:SCR\_021021

Type: Tool

### **Proper Citation**

celltrackR (RRID:SCR\_021021)

#### **Resource Information**

URL: <a href="https://cran.r-project.org/web/packages/celltrackR/index.html">https://cran.r-project.org/web/packages/celltrackR/index.html</a>

**Proper Citation:** celltrackR (RRID:SCR\_021021)

**Description:** Software R package to analyze immune cell migration data. Supports pipeline for track analysis by providing methods for data management, quality control, extracting and visualizing migration statistics, clustering tracks, and simulating cell migration. Available measures include displacement, confinement ratio, autocorrelation, straightness, turning angle, and fractal dimension. Measures can be applied to entire tracks, steps, or subtracks with varying length.

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

**Defining Citation:** DOI:10.1101/670505v1

**Keywords:** Immune cell migration data, dimensional space, cell analysis, cell migration, cell tracks, cell migration data, displacement, confinement ratio, autocorrelation, turning angle, fractal dimension

Funding: NIAID U01 AI095550;

NIAID R01 AI077600

Availability: Free, Available for download, Freely available

Resource Name: celltrackR

Resource ID: SCR 021021

Alternate URLs: https://github.com/ingewortel/celltrackR

**License**: GPL-2

**Record Creation Time:** 20220129T080353+0000

**Record Last Update:** 20250525T031910+0000

## **Ratings and Alerts**

No rating or validation information has been found for celltrackR.

No alerts have been found for celltrackR.

#### 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 NIF.

Lodewijk GA, et al. (2024) Self-organization of embryonic stem cells into a reproducible embryo model through epigenome editing. bioRxiv: the preprint server for biology.

Martin E, et al. (2024) Time-resolved proximity proteomics uncovers a membrane tension-sensitive caveolin-1 interactome at the rear of migrating cells. eLife, 13.

Wortel IMN, et al. (2022) Listeria motility increases the efficiency of epithelial invasion during intestinal infection. PLoS pathogens, 18(12), e1011028.

Wortel IMN, et al. (2021) CelltrackR: An R package for fast and flexible analysis of immune cell migration data. Immunoinformatics (Amsterdam, Netherlands), 1-2.