

Resource Summary Report

Generated by PRECISE-TBI on Sep 8, 2026

SIGEN

RRID:SCR_016284

Type: Tool

Proper Citation

SIGEN (RRID:SCR_016284)

Resource Information

URL: <https://sites.google.com/site/sigenproject/>

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Description: Software to extract and trace neuronal structure from confocal laser scanning microscope images. It performs the automatic reconstruction of neurons for image stacks and can generate compartmental models of neurons as swc file format data.

Synonyms: Simulation of Geometrical and Electrical properties of Neuron, SIGEN: Simulation of Geometrical and Electrical properties of Neuron

Resource Type: data processing software, image analysis software, image reconstruction software, segmentation software, software application, software resource

Keywords: segmentation, neuron, confocal, laser, scan, microscopy, reconstruction, swc, confocal, laser, microscopy

Availability: Free, Available for download

Resource Name: SIGEN

Resource ID: SCR_016284

Record Creation Time: 20220129T080329+0000

Record Last Update: 20260905T132806+0000

Ratings and Alerts

No rating or validation information has been found for SIGEN.

No alerts have been found for SIGEN.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 3 mentions in open access literature.

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

Hu Z, et al. (2026) Multi-omics integration and machine learning reveal gut-immune signatures in idiopathic pulmonary fibrosis: insights from bulk RNA-seq, single-cell profiles, spatial transcriptomics, and experimental validation. *Frontiers in immunology*, 17, 1730289.

Kumaraswamy A, et al. (2019) Adaptations during Maturation in an Identified Honeybee Interneuron Responsive to Waggle Dance Vibration Signals. *eNeuro*, 6(5).

Ikeno H, et al. (2018) A Segmentation Scheme for Complex Neuronal Arbors and Application to Vibration Sensitive Neurons in the Honeybee Brain. *Frontiers in neuroinformatics*, 12, 61.