

Resource Summary Report

Generated by [ASWG](#) on Aug 1, 2026

Semi-Manual Alignment to Reference Templates

RRID:SCR_019265

Type: Tool

Proper Citation

Semi-Manual Alignment to Reference Templates (RRID:SCR_019265)

Resource Information

URL: <https://github.com/mjin1812/SMART>

Proper Citation: Semi-Manual Alignment to Reference Templates (RRID:SCR_019265)

Description: Software tool that extends WholeBrain framework in R for segmenting and registering experimental images to Allen Mouse Common Coordinate Framework (CCF). Streamlines processing of large volumetric LSM datasets and solves issues with non-uniform morphing across anterior-posterior axis with interactive “choice game.” Accounts for duplicate cell counts in adjacent z images and presents new ways to easily parse apart and interactively visualize final mapped datasets.

Abbreviations: SMART

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

Defining Citation: [DOI:10.1101/727529](https://doi.org/10.1101/727529)

Keywords: Segmenting experimental images, registering experimental images, Allen Mouse Common Coordinate Framework, data processing, experimental images

Availability: Free, Available for download, Freely available

Resource Name: Semi-Manual Alignment to Reference Templates

Resource ID: SCR_019265

Alternate URLs: <https://mjin1812.github.io/SMART/installation.html>

Record Creation Time: 20220129T080344+0000

Record Last Update: 20260801T190612+0000

Ratings and Alerts

No rating or validation information has been found for Semi-Manual Alignment to Reference Templates.

No alerts have been found for Semi-Manual Alignment to Reference Templates.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 2818 mentions in open access literature.

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

Wang S, et al. (2023) Host- and virus-induced gene silencing of HOG1-MAPK cascade genes in *Rhizophagus irregularis* inhibit arbuscule development and reduce resistance of plants to drought stress. *Plant biotechnology journal*, 21(4), 866.

Wang Y, et al. (2023) Identification of Alfalfa SPL gene family and expression analysis under biotic and abiotic stresses. *Scientific reports*, 13(1), 84.

Zou H, et al. (2023) Transcriptome profiling reveals the roles of pigment formation mechanisms in yellow *Paeonia delavayi* flowers. *Molecular genetics and genomics : MGG*, 298(2), 375.

Zhang Q, et al. (2023) TGF- β 1 suppresses the T-cell response in teleost fish by initiating Smad3- and Foxp3-mediated transcriptional networks. *The Journal of biological chemistry*, 299(2), 102843.

Wolf C, et al. (2023) Motivation by reward jointly improves speed and accuracy, whereas task-relevance and meaningful images do not. *Attention, perception & psychophysics*, 85(3), 930.

Qiu CW, et al. (2023) Genome resequencing and transcriptome profiling reveal molecular evidence of tolerance to water deficit in barley. *Journal of advanced research*, 49, 31.

Dundee JM, et al. (2023) P2Y6 receptor-dependent microglial phagocytosis of synapses mediates synaptic and memory loss in aging. *Aging cell*, 22(2), e13761.

Kusakabe M, et al. (2023) Cells with stem-like properties are associated with the development of HPV18-positive cervical cancer. *Cancer science*, 114(3), 885.

Sun X, et al. (2023) Glucose transporter GLUT1 expression is important for oriental river prawn (*Macrobrachium nipponense*) hemocyte adaptation to hypoxic conditions. *The Journal of biological chemistry*, 299(1), 102748.

Mirhadi S, et al. (2023) Mitochondrial Aconitase ACO2 Links Iron Homeostasis with Tumorigenicity in Non-Small Cell Lung Cancer. *Molecular cancer research : MCR*, 21(1), 36.

Cheng K, et al. (2023) Genome-wide identification and characterization of polycomb repressive complex 2 core components in upland cotton (*Gossypium hirsutum* L.). *BMC plant biology*, 23(1), 66.

Olsen TR, et al. (2023) Scalable co-sequencing of RNA and DNA from individual nuclei. *bioRxiv : the preprint server for biology*.

Saito-Takatsuji H, et al. (2023) Transthyretin Is Commonly Upregulated in the Hippocampus of Two Stress-Induced Depression Mouse Models. *International journal of molecular sciences*, 24(4).

Wang MJ, et al. (2023) Genome-Wide Identification and Analysis of bHLH Transcription Factors Related to Anthocyanin Biosynthesis in *Cymbidium ensifolium*. *International journal of molecular sciences*, 24(4).

Stürzebecher PE, et al. (2023) [Treatment and LDL cholesterol adjustment in patients with high and very high cardiovascular risk in Germany compared with Europe - data from the SANTORINI registry]. *Deutsche medizinische Wochenschrift* (1946), 148(9), 55.

Anwar A, et al. (2023) Anxiety and Stress Related to COVID-19 Among the Community Dwelling Older Adults Residing in the Largest Refugee Camp of the World. *Community mental health journal*, 1.

Pei H, et al. (2023) The Tumorigenic Effect of lncRNA AFAP1-AS1 is Mediated by Translated Peptide ATMLP Under the Control of m6 A Methylation. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 10(13), e2300314.

Li K, et al. (2023) Glutamine Metabolism Underlies the Functional Similarity of T Cells between Nile Tilapia and Tetrapod. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 10(12), e2201164.

Fu X, et al. (2023) circRNA432 enhances the coelomocyte phagocytosis via regulating the miR-2008-ELMO1 axis in *Vibrio splendidus*-challenged *Apostichopus japonicus*. *Communications biology*, 6(1), 115.

Cui H, et al. (2023) Genome-Wide Identification and Analysis of the Maize Serine Peptidase S8 Family Genes in Response to Drought at Seedling Stage. *Plants* (Basel, Switzerland), 12(2).