Resource Summary Report

Generated by kravitz2 on Jul 31, 2026

SGN

RRID:SCR_004933
Type: Tool

Proper Citation

SGN (RRID:SCR_004933)

Resource Information

URL: http://solgenomics.net/

Proper Citation: SGN (RRID:SCR_004933)

Description: A clade oriented, community curated database containing genomic, genetic, phenotypic and taxonomic information for plant genomes. Genomic information is presented in a comparative format and tied to important plant model species such as Arabidopsis. SGN provides tools such as: BLAST searches, the SolCyc biochemical pathways database, a CAPS experiment designer, an intron detection tool, an advanced Alignment Analyzer, and a browser for phylogenetic trees. The SGN code and database are developed as an open source project, and is based on database schemas developed by the GMOD project and SGN-specific extensions.

Abbreviations: SGN, SGN ref

Synonyms: SGN ref, Sol Genomics Network

Resource Type: data or information resource, database

Defining Citation: PMID:20935049, PMID:16010005

Keywords: database, clade, genomic, sequence, phenotype, pathway, genetic, taxonomy, annotation, blast, plant genome, bio.tools, FASEB list

Funding: USDA ;
ATC Inc. Advanced Technologies Cambridge ;
NSF 0116076;
NSF 9872617;
NSF 975866;
NSF 0421634

Availability: Public, The community can contribute to this resource

Resource Name: SGN

Resource ID: SCR_004933

Alternate IDs: r3d100012078, nlx_89764, biotools:sol_genomics_network

Alternate URLs: https://bio.tools/sol_genomics_network, https://doi.org/10.17616/R3FS95

Old URLs: http://www.sgn.cornell.edu/

Record Creation Time: 20220129T080227+0000

Record Last Update: 20260729T044107+0000

Ratings and Alerts

No rating or validation information has been found for SGN.

No alerts have been found for SGN.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 993 mentions in open access literature.

Listed below are recent publications. The full list is available at kravitz2 .

Wang L, et al. (2025) A receptor antagonist counterbalances multiple systemin phytocytokines in tomato. Cell.

Zhang J, et al. (2025) Genome- and Transcriptome-Wide Characterization and Expression Analyses of bHLH Transcription Factor Family Reveal Their Relevance to Salt Stress Response in Tomato. Plants (Basel, Switzerland), 14(2).

Yan D, et al. (2025) A Phase-Separated SR Protein Reprograms Host Pre-mRNA Splicing to Enhance Disease Susceptibility. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(27), e2500072.

Liu S, et al. (2025) Late blight pathogen targets host Rab-G3 GTPases with an atypical GTPase-activating protein. Journal of integrative plant biology, 67(8), 2135.

Koyama R, et al. (2025) Lipid transfer protein VAS inhibits the hypersensitive response via reactive oxygen species signaling in Nicotiana benthamiana. Journal of experimental botany, 76(4), 1285.

Razifard H, et al. (2025) The Evolutionary Dynamics of Genetic Mutational Load Throughout Tomato Domestication History. Molecular ecology, 34(24), e70024.

Brumm S, et al. (2025) Functional divergence of plant SCAR/WAVE proteins is determined by intrinsically disordered regions. Science advances, 11(21), eadt6107.

Li L, et al. (2025) Effect of Low Red-to-Far-Red Light on Stem Elongation and Pith Cell Development in Dicots. Plant direct, 9(4), e70072.

Jo L, et al. (2025) Transcription factors SlMYB41, SlMYB92, and SlWRKY71 regulate gene expression in the tomato exodermis. Journal of experimental botany, 76(21), 6472.

Hashmi SS, et al. (2025) Exploring the role of ATP-binding cassette transporters in tomato (Solanum lycopersicum) under cadmium stress through genome-wide and transcriptomic analysis. Frontiers in plant science, 16, 1536178.

Zhong K, et al. (2025) NbPIRIN promotes the protease activity of papain-like cysteine protease NbRD21 to inhibit Chinese wheat mosaic virus infection. PLoS pathogens, 21(4), e1013037.

Cao P, et al. (2025) A SlMYB78-regulated bifunctional gene cluster for phenolamide and salicylic acid biosynthesis during tomato domestication, reducing disease resistance. Journal of integrative plant biology, 67(7), 1947.

Zhao D, et al. (2025) GATA8-Mediated Antiviral Defence Is Countered by Tomato Chlorosis Virus-Encoded Pathogenicity Protein p27. Molecular plant pathology, 26(7), e70115.

Yang Y, et al. (2025) Mitochondrial ROS trigger interorganellular signaling and prime ER processes to establish enhanced plant immunity. Science advances, 11(40), eady9234.

Paudel DB, et al. (2025) Transcriptomic changes associated with infection of Nicotiana benthamiana plants with tomato ringspot virus (genus Nepovirus) during the acute symptomatic stage and after symptom recovery. PloS one, 20(9), e0328517.

Almeida J, et al. (2025) The FIBRILLIN multigene family in tomato, their roles in plastoglobuli structure and metabolism. The Plant journal : for cell and molecular biology, 123(5), e70447.

Pascual LS, et al. (2025) Multi-omics-based insights into tomato adaptation to multifactorial stress combination. Plant physiology, 199(3).

Yan XC, et al. (2025) Single-cell transcriptomic profiling of maize cell heterogeneity and systemic immune responses against Puccinia polysora Underw. Plant biotechnology journal, 23(2), 549.

Matuszkiewicz M, et al. (2025) Identification of genes involved in the tomato root response to Globodera rostochiensis parasitism under varied light conditions. Journal of applied genetics, 66(1), 47.

Lin W, et al. (2025) The transcriptional analysis of pepper shed light on a proviral role of light-harvesting chlorophyll a/b binding protein 13 during infection of pepper mild mottle virus. Frontiers in plant science, 16, 1533151.