# **Resource Summary Report**

Generated by ASWG on Apr 30, 2025

## **SGN**

RRID:SCR\_004933

Type: Tool

### **Proper Citation**

SGN (RRID:SCR\_004933)

#### **Resource Information**

URL: http://solgenomics.net/

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**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: database, data or information resource

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:** nlx\_89764, biotools:sol\_genomics\_network

Alternate URLs: https://bio.tools/sol\_genomics\_network

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

**Record Creation Time:** 20220129T080227+0000

**Record Last Update:** 20250430T055327+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 903 mentions in open access literature.

**Listed below are recent publications.** The full list is available at <u>ASWG</u>.

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.

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.

Wang Y, et al. (2025) Identification of the CaCRT gene family and function of CaCRT1 under low-temperature stress in pepper (Capsicum annuum L.). Scientific reports, 15(1), 90.

Prigigallo MI, et al. (2025) Resistance-breaking strains of tomato spotted wilt virus hamper photosynthesis and protein synthesis pathways in a virus accumulation-dependent manner in Sw5-carrying tomatoes. Scientific reports, 15(1), 3630.

Qiang Q, et al. (2025) The amino acid permease SIAAP6 contributes to tomato growth and salt tolerance by mediating branched-chain amino acid transport. Horticulture research, 12(1), uhae286.

Rochsar E, et al. (2025) Tissue-specific resistance and susceptibility to the tomato brown rugose fruit virus (ToBRFV) conferred by Solanum pennellii loci. BMC plant biology, 25(1), 51.

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).

Liu Z, et al. (2025) SoIR: a comprehensive Solanaceae information resource for comparative and functional genomic study. Nucleic acids research, 53(D1), D1623.

Wu Y, et al. (2025) A vacuolar invertase gene SIVI modulates sugar metabolism and postharvest fruit quality and stress resistance in tomato. Horticulture research, 12(1), uhae283.

Shen X, et al. (2025) The tomato gene Ty-6, encoding DNA polymerase delta subunit 1, confers broad resistance to Geminiviruses. TAG. Theoretical and applied genetics. Theoretische und angewandte Genetik, 138(1), 22.

Shaikh MA, et al. (2025) StCDF1: A 'jack of all trades' clock output with a central role in regulating potato nitrate reduction activity. The New phytologist, 245(1), 282.

Huang M, et al. (2025) The BES1/BZR1 transcriptional factor SIBES2 regulates photosynthetic apparatus in tomato fruit. BMC plant biology, 25(1), 70.

Muhammad T, et al. (2024) Comprehensive genomic characterization and expression analysis of calreticulin gene family in tomato. Frontiers in plant science, 15, 1397765.

Gai W, et al. (2024) Genome-wide variants and optimal allelic combinations for citric acid in tomato. Horticulture research, 11(5), uhae070.

Wang Y, et al. (2024) Harnessing clonal gametes in hybrid crops to engineer polyploid genomes. Nature genetics, 56(6), 1075.

Zhang X, et al. (2024) Near-infrared light and PIF4 promote plant antiviral defense by enhancing RNA interference. Plant communications, 5(1), 100644.

Grützner R, et al. (2024) A transient expression tool box for anthocyanin biosynthesis in Nicotiana benthamiana. Plant biotechnology journal, 22(5), 1238.

Bin J, et al. (2024) Comprehensive Analyses of Four PhNF-YC Genes from Petunia hybrida and Impacts on Flowering Time. Plants (Basel, Switzerland), 13(5).

Yuan C, et al. (2024) Establishment and application of Agrobacterium-delivered CRISPR/Cas9 system for wild tobacco (Nicotiana alata) genome editing. Frontiers in plant science, 15, 1329697.

Cao H, et al. (2024) Genome-wide identification and expression analysis of the cryptochromes reveal the CsCRY1 role under low-light-stress in cucumber. Frontiers in plant science, 15, 1371435.