

Resource Summary Report

Generated by [SPARC SAWG](#) on Jul 29, 2026

SeedGenes

RRID:SCR_013323

Type: Tool

Proper Citation

SeedGenes (RRID:SCR_013323)

Resource Information

URL: <http://www.seedgenes.org/>

Proper Citation: SeedGenes (RRID:SCR_013323)

Description: A database of genes that give a seed phenotype when disrupted by mutation. The long-term goal of this project is to establish a comprehensive dataset of essential genes. The updated project database (December, 2007) presents information on 358 genes and 605 mutants. More than 60% of these mutants have been analyzed in the Meinke laboratory (Stillwater, OK).

Synonyms: SeedGenes

Resource Type: data or information resource, database

Resource Name: SeedGenes

Resource ID: SCR_013323

Alternate IDs: nif-0000-03450

Record Creation Time: 20220129T080315+0000

Record Last Update: 20260729T044315+0000

Ratings and Alerts

No rating or validation information has been found for SeedGenes.

No alerts have been found for SeedGenes.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 27 mentions in open access literature.

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

Xu JJ, et al. (2021) A unique flavoenzyme operates in ubiquinone biosynthesis in photosynthesis-related eukaryotes. *Science advances*, 7(50), eabl3594.

Su PH, et al. (2019) Two Arabidopsis Chloroplast GrpE Homologues Exhibit Distinct Biological Activities and Can Form Homo- and Hetero-Oligomers. *Frontiers in plant science*, 10, 1719.

Andriotis VME, et al. (2019) The plastidial pentose phosphate pathway is essential for postglobular embryo development in Arabidopsis. *Proceedings of the National Academy of Sciences of the United States of America*, 116(30), 15297.

Ke X, et al. (2017) Functional divergence of chloroplast Cpn60? subunits during Arabidopsis embryo development. *PLoS genetics*, 13(9), e1007036.

Muñoz-Nortes T, et al. (2017) Suitability of two distinct approaches for the high-throughput study of the post-embryonic effects of embryo-lethal mutations in Arabidopsis. *Scientific reports*, 7(1), 17010.

Colombo M, et al. (2016) GUN1, a Jack-Of-All-Trades in Chloroplast Protein Homeostasis and Signaling. *Frontiers in plant science*, 7, 1427.

Oellrich A, et al. (2015) An ontology approach to comparative phenomics in plants. *Plant methods*, 11, 10.

Wickramasuriya AM, et al. (2015) Global scale transcriptome analysis of Arabidopsis embryogenesis in vitro. *BMC genomics*, 16(1), 301.

Drost HG, et al. (2015) Evidence for active maintenance of phylotranscriptomic hourglass patterns in animal and plant embryogenesis. *Molecular biology and evolution*, 32(5), 1221.

Iglesias FM, et al. (2015) The arabidopsis DNA polymerase ϵ has a role in the deposition of transcriptionally active epigenetic marks, development and flowering. *PLoS genetics*, 11(2), e1004975.

Gupta Y, et al. (2015) De novo assembly and characterization of transcriptomes of early-stage fruit from two genotypes of *Annona squamosa* L. with contrast in seed number. *BMC genomics*, 16(1), 86.

López-Bucio JS, et al. (2014) Arabidopsis thaliana mitogen-activated protein kinase 6 is involved in seed formation and modulation of primary and lateral root development. *Journal of experimental botany*, 65(1), 169.

Jeon Y, et al. (2014) DER containing two consecutive GTP-binding domains plays an essential role in chloroplast ribosomal RNA processing and ribosome biogenesis in higher plants. *Journal of experimental botany*, 65(1), 117.

Li M, et al. (2014) Morphological and proteomic analysis reveal the role of pistil under pollination in *Liriodendron chinense* (Hemsl.) Sarg. PloS one, 9(6), e99970.

Tiller N, et al. (2014) The translational apparatus of plastids and its role in plant development. Molecular plant, 7(7), 1105.

Savage LJ, et al. (2013) Analysis of essential Arabidopsis nuclear genes encoding plastid-targeted proteins. PloS one, 8(9), e73291.

Lloyd J, et al. (2012) A comprehensive dataset of genes with a loss-of-function mutant phenotype in Arabidopsis. Plant physiology, 158(3), 1115.

Tang X, et al. (2012) Synergistic repression of the embryonic programme by SET DOMAIN GROUP 8 and EMBRYONIC FLOWER 2 in Arabidopsis seedlings. Journal of experimental botany, 63(3), 1391.

Olinares PD, et al. (2011) The Clp protease system; a central component of the chloroplast protease network. Biochimica et biophysica acta, 1807(8), 999.

Bolle C, et al. (2011) Perspectives on Systematic Analyses of Gene Function in Arabidopsis thaliana: New Tools, Topics and Trends. Current genomics, 12(1), 1.