Resource Summary Report

Generated by NIF on Apr 9, 2025

ASPGD

RRID:SCR_002047 Type: Tool

Proper Citation

ASPGD (RRID:SCR_002047)

Resource Information

URL: http://www.aspgd.org/

Proper Citation: ASPGD (RRID:SCR_002047)

Description: Database of genetic and molecular biological information about the filamentous fungi of the genus Aspergillus including information about genes and proteins of Aspergillus nidulans and Aspergillus fumigatus; descriptions and classifications of their biological roles, molecular functions, and subcellular localizations; gene, protein, and chromosome sequence information; tools for analysis and comparison of sequences; and links to literature information; as well as a multispecies comparative genomics browser tool (Sybil) for exploration of orthology and synteny across multiple sequenced Sgenus species. Also available are Gene Ontology (GO) and community resources. Based on the Candida Genome Database, the Aspergillus Genome Database is a resource for genomic sequence data and gene and protein information for Aspergilli. Among its many species, the genus contains an excellent model organism (A. nidulans, or its teleomorph Emericella nidulans), an important pathogen of the immunocompromised (A. fumigatus), an agriculturally important toxin producer (A. flavus), and two species used in industrial processes (A. niger and A. oryzae). Search options allow you to: *Search AspGD database using keywords. *Find chromosomal features that match specific properties or annotations. *Find AspGD web pages using keywords located on the page. *Find information on one gene from many databases. *Search for keywords related to a phenotype (e.g., conidiation), an allele (such as veA1), or an experimental condition (e.g., light). Analysis and Tools allow you to: *Find similarities between a sequence of interest and Aspergillus DNA or protein sequences. *Display and analyze an Aspergillus sequence (or other sequence) in many ways. *Navigate the chromosomes set. View nucleotide and protein sequence. *Find short DNA/protein sequence matches in Aspergillus. *Design sequencing and PCR primers for Aspergillus or other input sequences. *Display the restriction map for a Aspergillus or other input sequence. *Find similarities between a sequence of interest and fungal nucleotide or protein sequences. AspGD welcomes data submissions.

Abbreviations: ASPGD, ASPGD LOCUS, ASPGD REF

Synonyms: Aspergillus Genome Database, ASPGD REF, ASPGD LOCUS

Resource Type: database, data or information resource, service resource, storage service resource, data repository

Defining Citation: PMID:19773420

Keywords: function, gene, gene name, annotation, aspergillus, aspergillus nidulans, chromosome, community, dna, genome, genomic, localization, orthology, phenotype, protein, protein-coding genes, s. cerevisiae, sequence, allele, data analysis service, bio.tools, FASEB list

Funding: NIAID R01 AI077599

Availability: Free, Public

Resource Name: ASPGD

Resource ID: SCR_002047

Alternate IDs: nif-0000-12244, biotools:aspgd

Alternate URLs: http://www.aspergillusgenome.org/, https://bio.tools/aspgd

Record Creation Time: 20220129T080211+0000

Record Last Update: 20250409T060150+0000

Ratings and Alerts

No rating or validation information has been found for ASPGD.

No alerts have been found for ASPGD.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 211 mentions in open access literature.

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

Jorge JMP, et al. (2024) NmrB (AN9181) expression is activated under oxidative stress conditions acting as a metabolic repressor of Aspergillus nidulans. Frontiers in microbiology, 15, 1373469.

Bitencourt T, et al. (2024) Integrated multi-omics identifies pathways governing interspecies interaction between A. fumigatus and K. pneumoniae. Communications biology, 7(1), 1496.

Baroncelli R, et al. (2024) Genome evolution and transcriptome plasticity is associated with adaptation to monocot and dicot plants in Colletotrichum fungi. GigaScience, 13.

Cleere MM, et al. (2024) New colours for old in the blue-cheese fungus Penicillium roqueforti. NPJ science of food, 8(1), 3.

He X, et al. (2024) Genomic diversity of the pathogenic fungus Aspergillus fumigatus in Japan reveals the complex genomic basis of azole resistance. Communications biology, 7(1), 274.

Mamun MAA, et al. (2023) Fungal transglutaminase domain-containing proteins are involved in hyphal protection at the septal pore against wounding. Molecular biology of the cell, 34(13), ar127.

Chang PK, et al. (2023) Kojic Acid Gene Clusters and the Transcriptional Activation Mechanism of Aspergillus flavus KojR on Expression of Clustered Genes. Journal of fungi (Basel, Switzerland), 9(2).

Gawlik J, et al. (2022) Nuclear Functions of KaeA, a Subunit of the KEOPS Complex in Aspergillus nidulans. International journal of molecular sciences, 23(19).

Wang G, et al. (2022) Fungal-fungal cocultivation leads to widespread secondary metabolite alteration requiring the partial loss-of-function VeA1 protein. Science advances, 8(17), eabo6094.

Colabardini AC, et al. (2022) Chromatin profiling reveals heterogeneity in clinical isolates of the human pathogen Aspergillus fumigatus. PLoS genetics, 18(1), e1010001.

Gila BC, et al. (2022) Strategies Shaping the Transcription of Carbohydrate-Active Enzyme Genes in Aspergillus nidulans. Journal of fungi (Basel, Switzerland), 8(1).

Padilla-Garfias F, et al. (2022) DhDIT2 Encodes a Debaryomyces hansenii Cytochrome P450 Involved in Benzo(a)pyrene Degradation-A Proposal for Mycoremediation. Journal of fungi (Basel, Switzerland), 8(11).

Kazim ARS, et al. (2021) Aspergillus nidulans AmyG Functions as an Intracellular ?-Amylase to Promote ?-Glucan Synthesis. Microbiology spectrum, 9(3), e0064421.

Takahashi H, et al. (2021) Intimate genetic relationships and fungicide resistance in multiple strains of Aspergillus fumigatus isolated from a plant bulb. Environmental microbiology, 23(9), 5621.

Son SH, et al. (2021) HbxB Is a Key Regulator for Stress Response and ?-Glucan Biogenesis in Aspergillus nidulans. Microorganisms, 9(1).

Steyer JT, et al. (2021) Duplication and Functional Divergence of Branched-Chain Amino Acid Biosynthesis Genes in Aspergillus nidulans. mBio, 12(3), e0076821.

Dimou S, et al. (2021) Profile of Membrane Cargo Trafficking Proteins and Transporters Expressed under N Source Derepressing Conditions in Aspergillus nidulans. Journal of fungi (Basel, Switzerland), 7(7).

Gallo A, et al. (2021) Current Approaches for Advancement in Understanding the Molecular Mechanisms of Mycotoxin Biosynthesis. International journal of molecular sciences, 22(15).

Palmer JM, et al. (2021) The sexual spore pigment asperthecin is required for normal ascospore production and protection from UV light in Aspergillus nidulans. Journal of industrial microbiology & biotechnology, 48(9-10).

Hage H, et al. (2021) Distribution of methionine sulfoxide reductases in fungi and conservation of the free-methionine-R-sulfoxide reductase in multicellular eukaryotes. Free radical biology & medicine, 169, 187.