

Aspergillus Bibliography

J. Clutterbuck

Follow this and additional works at: <https://newprairiepress.org/fgr>



This work is licensed under a [Creative Commons Attribution-Share Alike 4.0 License](https://creativecommons.org/licenses/by-sa/4.0/).

Recommended Citation

Clutterbuck, J. (1997) "Aspergillus Bibliography," *Fungal Genetics Reports*: Vol. 44, Article 26.
<https://doi.org/10.4148/1941-4765.1294>

This Bibliography is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in *Fungal Genetics Reports* by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

Aspergillus Bibliography

Abstract

This bibliography attempts to cover genetical and biochemical publications on *Aspergillus nidulans* and also includes selected references to related species and topics. I would be grateful for publication lists and reprints, especially for papers in books and less readily available periodicals. Entries have been checked as far as possible, but please tell me of any errors.

Aspergillus Bibliography

This bibliography attempts to cover genetical and biochemical publications on *Aspergillus nidulans* and also includes selected references to related species and topics. I would be grateful for publication lists and reprints, especially for papers in books and less readily available periodicals. Entries have been checked as far as possible, but please tell me of any errors.

John Clutterbuck

The Authors are kindly requested to send a copy of each article to the FGSC for its reprint collection.

[Author](#) and [Keyword](#) indexes follow the references.

- 1. Aleksenko, A., Nikolaev, I., Vinetski, Y & Clutterbuck, A.J.** 1996 Gene expression from replicating plasmids in *Aspergillus nidulans*. *Mol. Gen. Genet.* **253**: 242-246.
- 2. An, Z., Farman, M.L., Budde, A., Taura, S. & Leong, S.A.** 1996 New cosmid vectors for library construction, chromosome walking and restriction mapping of the filamentous fungi. *Gene* **176**: 93-96.
- 3. Andrianopoulos, A., Brons, J., Davis, M.A. & Hynes, M.J.** 1997 The *amdA* regulatory gene of *Aspergillus nidulans*: characterization of gain-of-function mutations and identification of binding sites for the gene product. *Fungal Genet. Biol.* **21**: 50-63.
- 4. Aramayo, R., Peleg, Y., Addison, R. & Metzberg, R.** 1996 *Asm-1+*, a *Neurospora crassa* gene related to transcriptional regulators of fungal development. *Genetics* **144**: 991-1003.
- 5. Arst, H.N.Jr.** 1997 Cosying up to MoCo. *Microbiol.* **143**: 1037.
- 6. Arst, H.N.Jr.** 1997 New evidence for old detective work. 1997 *Microbiol.* **143**: 1481-1482.
- 7. Aufauvre-Brown, A., Mellado, E., Gow, N.A. R. & Holden, D.W.** *Aspergillus fumigatus chsE*: a gene related to *CHS3* of *Saccharomyces cerevisiae* and important for hyphal growth and conidiophore development but not pathogenicity. *Fungal Genet. Biol.* **21**: 141-152.
- 8. Barry, E.G.** 1997 Fungal chromosomes. *J. Genet.* **75**: 255-263.
- 9. Babudri, N., Morpurgo, G., Marini, A. & Prantera, G.** 1997 The base analog 6-N-hydroxylaminopurine (HAP) mutagenesis is dependent on the integrity of the *uvsE*, *uvsF* and *uvsB* genes in *Aspergillus nidulans*. *Ant. van Leeuwenhoek* **71**: 249-255.
- 10. Bencina, M., Panneman, H., Ruijter, G.J.G., Legisa, M. & Visser, J.** 1997 Characterization and overexpression of the *Aspergillus niger* gene encoding the cAMP-dependent protein kinase catalytic subunit. *Microbiol.* **143**: 1211-1220.

11. **Bennett, J.W.** 1997 White paper: genomics of filamentous fungi. *Fungal Genet. Biol.* **21**: 3-7.
12. **Bhandarka, S.M., Chirravuri, S. & Arnold, J.** 1996 PARODS - A study of parallel algorithms for ordering DNA sequences. *Comput. Applic. Biosci.* **12**: 269-280.
13. **Bhattacharyya, A. & Blackburn, E.H.** 1997 *Aspergillus nidulans* maintains short telomeres throughout development. *Nucl. Acids Res.* **25**: 1426-1431.
14. **Borgia, P., Iartchouk, N., Riggle, P.J., Winter, K.R., Koltrin, Y. & Bulawa, C.E.** 1996 The *chsB* gene of *Aspergillus nidulans* is necessary for normal hyphal growth and development. *Fungal Genet. Biol.* **20**: 193-203. [Erratum: *Fungal Genet. Biol.* **20**: 314.]
15. **Borgia, P.T., Miao, Y., Dodge, C.L.** 1996 The *orlA* gene from *Aspergillus nidulans* encodes a trehalose-6-phosphate phosphatase necessary for normal growth and chitin synthesis at elevated temperatures. *Mol. Microbiol.* **20**: 1287-1296.
16. **Bottomley, J.R., Hawkins, A.R. & Kleanthous, C.** 1996 Conformational changes and the role of metals in the mechanism of type II dehydroquinase from *Aspergillus nidulans*. *Biochem. J.* **319**: 269-278.
17. **Brakhage, A.A.** 1997 Molecular regulation of penicillin biosynthesis in *Aspergillus (Emericella) nidulans*. *FEMS-Microbiol. Lett.* **148**: 1-10.
18. **Brito, N., Avila, J., Perez, M.D., González, C. & Siverio, J.M.** 1996 The genes *YNII* and *YNRI*, encoding nitrite reductase and nitrate reductase respectively in the yeast *Hansenula polymorpha*, are clustered and co-ordinately regulated. *Biochem. J.* **317**: 89-95.
19. **Brown, D.W., Adams, T.H. & Keller, N.P.** 1996 *Aspergillus* has distinct fatty acid synthases for primary and secondary metabolism. *Proc. Natl Acad. Sci. U.S.A.* **93**: 14873-14877.
20. **Buades, C. & Moya, A.** 1996 Phylogenetic analysis of the isopenicillin-N-synthetase horizontal gene transfer. *J. Mol. Evol.* **42**: 537-542.
21. **Burow, G.B., Nesbitt, T.C., Dunlap, J. & Keller, N.P.** 1997 Seed lipoxygenase products modulate *Aspergillus* mycotoxin biosynthesis. *Mol. Plant Microbe Interact.* **10**: 380-387.
22. **Calera, J.A., Ovejero, M.C., López-Medrano, R., Seguardo, M., Puente, P. & Leal, F.** 1997 Characterization of the *Aspergillus nidulans aspnd1* gene demonstrates that the ASPND1 antigen, which it encodes, and several *Aspergillus fumigatus* immunodominant antigens belong to the same family. *Infect. Immun.* **65**: 1335-1344.
23. **Cary, J.W., Wright, M., Bhatnagar, D., Lee, R. & Chu, F.S.** 1996 Molecular characterization of an *Aspergillus parasiticus* dehydrogenase gene, *norA*, located in the aflatoxin biosynthetic gene cluster. *Appl. Env. Microbiol.* **62**: 360-366.

- 24. Castro-Prado, M.A.A., Gebara, J.S., Querol, C.B., Zucchi, O.L.A.D. & Zucchi, T.M.A.D.** 1996 Duplicate gene inactivation affects ascospore viability in *Aspergillus nidulans*. *Braz. J. Genet.* **19**: 381-386.
- 25. Chae, S.-K. & Kafer, E.** 1997 Two *uvs* genes of *Aspergillus nidulans* with different functions in error-prone repair: *uvsI*, active in mutation-specific reversion, and *uvsC*, a *recA* homolog, required for all UV mutagenesis. *Molec. Gen. Genet.* **254**: 643-653.
- 26. Chae, K.S., Chang, M.H., Song, Y.E., Chung, J.H., Jahng, K.Y., Han, Y.J. & Han, D.M.** 1994 Isolation and characterization of a genomic DNA fragment complementing the *velA1* mutation of *Aspergillus nidulans*. *Kor. J. Genet.* **16**: 333-342.
- 27. Chang, P.K., Ehrlich, K.C., Linz, J.E., Bhatnagar, D., Cleveland, T.E. & Bennett, J.W.** 1996 Characterization of the *Aspergillus parasiticus niaD* and *niiA* gene cluster. *Curr. Genet.* **30**: 68-75.
- 28. Chen, J.-s., Saxton, J., Hemming, F.W. & Peberdy, J.F.** 1996 Purification and partial characterization of the high and low molecular weight form (S- and F-form) of invertase secreted by *Aspergillus nidulans*. *Biochim. Biophys. Acta* **1296**: 207-218.
- 29. Chiu, Y.H. & Morris, N.R.** 1997 Genetic and molecular analysis of a tRNA-Leu missense suppressor of *nudC3*, a mutation that blocks nuclear migration in *Aspergillus nidulans*. *Genetics* **145**: 707-714.
- 30. Christiansen, S.K., Knudsen, S. & Giese, H.** 1995 Biolistic transformation of the obligate plant pathogenic fungus, *Erysiphe graminis* f. sp. *hordei*. *Curr. Genet.* **29**: 100-102.
- 31. Cimerman, A.** 1995 *Aspergillus* toxins. *Alpe Adria Microbiol. J.* **3**: 181-188.
- 32. Clutterbuck, A.J.** 1997 parasexual recombination in fungi. *J. Genet.* **75**: 281-86.
- 33. Coenen, A., Croft, J.H., Slakhorst, M., Debets, F. & Hoekstra, R.** 1996 Mitochondrial inheritance in *Aspergillus nidulans*. *Genet. Res.* **67**: 93-100.
- 34. Coenen, A., Kevei, F. & Hoekstra, R.F.** 1997 Factors affecting the spread of double-stranded RNA viruses in *Aspergillus nidulans*. *Genet. Res. Camb.* **69**: 1-10.
- 35. d'Enfert, C.** 1996 Selection of multiple disruption events in *Aspergillus fumigatus* using the orotidine-5'-decarboxylase gene *pyrG* as a unique transformation marker. *Curr. Genet.* **30**: 76-82.
- 35a. d'Enfert, C.** 1997 fungal spore germination: insights from the molecular genetics of *Aspergillus nidulans* and *Neurospora crassa*. *Fungal Gen. Biol.* **21**: 163-172.
- 36. d'Enfert, C. & Fontaine, T.** 1997 Molecular characterization of the *Aspergillus nidulans treA* gene encoding an acid trehalase required for growth on trehalose. *Mol. Microbiol.* **24**: 203-216.

- 37. D'Souza, T.M., Boominathan, K. & Reddy, C.A.** 1996 Isolation of laccase gene-specific sequences from white rot and brown rot fungi by PCR. *Appl. Env. Microbiol.* **62**: 3739-3744.
- 38. Daboussi, M.J.** 1997 fungal transposable elements: generators of diversity and genetic tools. *J. Genet.* **75**: 325-339.
- 39. Davis, M.A., Small, A.J., Kourambas, S. & Hynes, M.J.** 1996 The *tamA* gene of *Aspergillus nidulans* contains a putative zinc cluster motif which is not required for gene function. *J. Bacteriol.* **178**: 3406-3409.
- 40. Davis, R.** 1997 the fungal genetic system: a historical overview. *J. Genet.* **75**: 245-253.
- 41. Dayton, J.S. & Means, A.R.** 1996 Ca²⁺/calmodulin-dependent kinase is essential for both growth and nuclear division in *Aspergillus nidulans*. *Mol. Biol. Cell* **7**: 1511-1519.
- 42. Dayton, J.S., Sumi, M., Nanthakumar, N.N. & Means, A.R.** 1997 Expression of a constitutively active Ca²⁺/calmodulin-dependent kinase in *Aspergillus nidulans* spores prevents germination and entry into the cell cycle. *J. Biol. Chem.* **272**: 3223-3230.
- 43. Del Sorbo, G., Andrade, A.C., Van Nistelrooy, J.G.M., Van Kan, J.A.L., Balzi, E. & De Waard, M.A.** 1997 Multidrug resistance in *Aspergillus nidulans* involves novel ATP-binding cassette transporters. *Molec. Gen. Genet.* **254**: 417-426.
- 44. Dian, I. & Firsov, L.M.** 1995 [In Russian] Species identification of fungi of the genus *Aspergillus* and localisation of glucoamylase genes by PCR and electrophoretic caryotypification. *Mikol. Fitopatol.* **29**: 30-34.
- 45. Díaz, R., Sapag, A., Peiano, A., Steiner, J. & Eyzaguirre, J.** 1997 Cloning, sequencing and expression of the cDNA of endoxylanase B from *Penicillium purpurogenum*. *Gene* **187**: 247-251.
- 46. Díaz, M., Pedregosa, A.M., de Lucas, J.R., Torralba, S., Monistrol, I.F. & Laborda, F.** 1996 Purification and properties of -galactosidase from *Aspergillus nidulans*. *Microbiologia (Madrid)* **12**: 585-592.
- 47. Dohlman, H.G., Song, J., Ma, D., Courchesne, W.E. & Thorner, J.** 1996 Sst2, a negative regulator of pheromone signaling in the yeast *Saccharomyces cerevisiae*: Expression, localization, and genetic interaction and physical association with G α 1 (the G-protein α subunit). *Mol. Cell. Biol.* **16**: 5194-5209.
- 48. Doyle, W.A., Burke, J.F., Chovnick, A., Dutton, F.L., Whittle, J.R.S. & Bray, R.C.** 1996 Properties of xanthine dehydrogenase variants from rosy mutant strains of *Drosophila melanogaster* and their relevance to the enzyme's structure and mechanism. *Eur. J. Biochem.* **239**: 782-795.

- 49. Ebbole, D.J.** 1997 Morphogenesis and vegetative differentiation in filamentous fungi. *J. Genet.* **75**: 361-374.
- 50. El-Rady, J. & Shearer, G.Jr.** 1996 Isolation and characterization of a calmodulin-encoding cDNA from the pathogenic fungus *Histoplasma capsulatum*. *J. Med. Vet. Mycol.* **34**: 163-169.
- 51. Espeso, E.A. & Peñalva, M.A.** 1996 Three binding sites for the *Aspergillus nidulans* PacC zinc-finger transcription factor are necessary and sufficient for regulation by ambient pH of the isopenicillin N synthase gene promoter. *J. Biol. Chem.* **271**: 28825-28830.
- 52. Fernández-Cañón, J.M. & Luengo, J.M.** 1997 The phenylacetic acid uptake system of *Aspergillus nidulans* is under a *creA*-independent model of catabolic repression which seems to be mediated by acetyl-CoA. *J. Antibiotics (Tokyo)* **50**: 45-52.
- 53. Fernández-Cañón, J.M. & Peñalva, M.A.** 1997 Spectrophotometric determination of homogentisate using *Aspergillus nidulans* homogentisate dioxygenase. *Anal. Biochem.* **245**: 218-221.
- 54. Fernández-Espinar, M.T., Vallés, S., Piñaga, F., Pérez-González, J.A. & Ramón, D.** 1996 Construction of an *Aspergillus nidulans* multicopy transformant for the *xlnB* gene and its use in purifying the minor X-24 xylanase. *Appl. Microbiol. Biotechnol.* **45**: 338-341.
- 55. Fontaine, T., Hartland, R.P., Diaquin, M., Simenel, C. & Latgé, J.P.** 1997 Differential patterns of activity displayed by two exo- -1,3-glucanases associated with the *Aspergillus fumigatus* cell wall. *J. Bacteriol.* **179**: 3154-3163.
- 56. Froeliger, E.H. & Carpenter, B.E.** 1996 *NUT1*, a major nitrogen regulatory gene in *Magnaporthe grisea*, is dispensable for pathogenicity. *Mol. Gen. Genet.* **251**: 647-656.
- 57. Fry, A.M. & Nigg, E.A.** 1995 The NIMA kinase joins forces with Cdc2. *Curr. Biol.* **5**: 1122-1125.
- 58. Fujii, I., Ono, Y., Tada, H., Gomi, K., Ebizuka, Y. & Sankawa, U.** 1996 Cloning of the polyketide synthase gene *atX* from *Aspergillus terreus* and its identification as the 6-methylsalicylic acid synthase gene by heterologous expression. *Mol. Gen. Genet.* **253**: 1-10.
- 59. Gilkens, M.M.C., Visser, J. & de Graaf, L.H.** 1996 Arabinoxylan degradation by fungi: characterization of the arabinoxylan-arabinofuranohydrolase encoding genes from *Aspergillus niger* and *Aspergillus tubigenensis*. *Curr. Genet.* **31**: 22-29.
- 60. Goldman, G.H. & Morris, N.R.** 1995 *Aspergillus nidulans* as a model system for cell and molecular biology studies. in *Methods in Molecular Genetics*, Vol. 6. Microbial gene techniques. ed. Adolph, K.W. Academic Press, Inc. San Diego, pp. 48-65.

- 61. Gonzales, R., Gavrias V., Gomez, D., Scazzocchio, C. & Cubero, B.** 1997 The integration of nitrogen and carbon catabolite repression in *Aspergillus nidulans* requires the GATA factor AreA and an additional positive-acting element, ADA. EMBO J. **16**: 2937-2944.
- 62. Gorinstein, S., Paccola-Meirelles, L.D., Belo, V.A. & Azevedo, J.L.** 1996 Characterization of *Beauveria bassiana*, *Metarhizium anisopliae* and *Aspergillus nidulans* through electrophoretic patterns of their protein fractions. J. Ferment. Bioeng. **82**: 89-92.
- 63. Gouka, R.J., Punt, P.J., Hessing, J.G.M. & van den Hondel, C.A.M.J.J.** 1996 Analysis of heterologous protein production in defined recombinant *Aspergillus awamori* strains. Appl. Env. Microbiol. **62**: 1951-1957.
- 64. Griffiths, A.J.F.** 1997 Mitochondrial inheritance in filamentous fungi. J. Genet. **75**: 403-414.
- 65. Gromada, A. & Fiedurek, J.** 1997 Selective isolation of *Aspergillus niger* mutants with enhanced glucose oxidase produciton. J. Appl. Microbiol. **82**: 648-632.
- 66. Gustafson, G., Davis, G., Waldron, C., Smith, A. & Henry, M.** 1996 Identification of a new antifungal target site through a dual biochemical and molecular-genetics approach. Curr. Genet. **30**: 159-165.
- 67 Guzmán-de-Peña, D. & Ruiz-Herrera, J.** 1997 Relationship between aflatoxin biosynthesis and sporulation in *Aspergillus parasiticus*. Fungal Genet. Biol. **21**: 198-205.
- 68. Haas, H., Angermayr, K. & Stöffler, G.** 1997 Molecular analysis of a *Penicillium chrysogenum* GATA factor encoding gene (*sreP*) exhibiting significant homology to the *Ustilago maydis urbs1* gene. Gene **184**: 33-37.
- 69. Hamer, L.** 1997 from genes to genomes: sequencing of filamentous fungal genomes. Fungal Genet. Biol. **21**: 8-10.
- 70. Hamer, J.E. & Holden, D.W.** 1997 Linking approaches in the study of fungal pathogenesis: a commentary. Fungal genet. Biol. **21**: 11-16.
- 71. Han, D.M. & Han, Y.J.** 1994 Effect of NPGA1 mutation on the development of *Aspergillus nidulans* with *velA+* or *velA1* allele. Kor. J. Genet. **16**: 323-332.
- 72. Hatamoto, O., Watavai, T., Kikuchi, M., Mizusawa, K. & Sekine, H.** 1996 Cloning and sequencing of the gene encoding tannase and a structural study of the tannase subunit from *Aspergillus oryzae*. Gene **175**: 215-221.
- 73. Herzog, R.W., Daniell, H., Singh, N.K. & Lemke, P.A.** 1996 A comparative study on the transformation of *Aspergillus nidulans* by microprojectile bombardment of conidia and a more conventional procedure using protoplasts treated with polyethyleneglycol. Appl. Microbiol. Biotechnol. **45**: 333-337.

- 74. Holdom, M.D., Hay, R.J. & Hamilton, A.J.** 1996 The Cu, Zn superoxide dismutases of *Aspergillus flavus*, *Aspergillus niger*, *Aspergillus nidulans*, and *Aspergillus terreus*: Purification and biochemical comparison with the *Aspergillus fumigatus* Cu, Zn superoxide dismutase. *Infect. Immun.* **64**: 3326-3332.
- 75. Horiuchi, H., Ohkuma, M. & Takagi, M.** 1996 [In Japanese] Gene targeting in yeasts and filamentous fungi. *Nippon Nogeikagaku Kaishi* **70**: 893-896.
- 76. Hughes, M., Arundhati, A., Lunness, P., Shaw, P.J. & Doonan, J.H.** 1996 A temperature-sensitive splicing mutation in the *bimG* gene of *Aspergillus* produces an N-terminal fragment which interferes with type 1 protein phosphatase function. *EMBO J.* **15**: 4574-4583.
- 77. Hynes, M.J.** 1997 Genetic transformation of filamentous fungi. *J. Genet.* **75**: 297-311.
- 78. Ilmén, M., Thrane, C. & Penttilä, M.** 1996 The glucose repressor gene *cre1* of *Trichoderma*: Isolation and expression of a full-length and a truncated mutant form. *Mol. Gen. Genet.* **251**: 451-460.
- 79. Irelan, J.T. & Selkar, E.U.** 1997 Gene silencing in fungi: RIP, MIP and quelling. *J. Genet.* **75**: 313-324.
- 80. Kafer, E. & May, G.** 1997 The *uvsF* gene region in *Aspergillus nidulans* codes for a protein with homology to DNA replication factor C. *Gene* **191**: 155-159.
- 81. Kapoor, M.** 1995 Gene transfer by electroporation of filamentous fungi. Ch 29 in *Methods in Molecular Biology 47: Electroporation protocols for microorganisms*, ed J.A. Nickoloff-J-A., Humana Press Inc. Totowa, New Jersey, USA, pp. 279-289.
- 82. Karos, M. & Fischer, R.** 1996 *hymA* (hypha-like metulae), a new developmental mutant of *Aspergillus nidulans*. *Microbiol.* **142**: 3211-3218.
- 83. Kato, M., Aoyama, A., Naruse, F., Kobayashi, T. & Tsukagoshi, N.** 1997 An *Aspergillus nidulans* nuclear protein, AnCP, involved in enhancement of Taka-amylase A gene expression, binds to the CCAAT- containing *taaG2*, *amdS*, and *gatA* promoters. *Mol. Gen. Genet.* **254**: 119-126.
- 84. Kawaguchi, T., Enoki, T., Tsurumaki, S., Sumitani, J.-i., Ueda, M., Ooi, T. & Arai, M.** 1996 Cloning and sequencing of the cDNA encoding -glucosidase 1 from *Aspergillus aculeatus*. *Gene* **173**: 287-288.
- 85. Kawasaki, L., Wysong, D., Diamond, R. & Aguirre, J.** 1997 Two divergent catalase genes are differentially regulated during *Aspergillus nidulans* development and oxidative stress. *J. Bacteriol.* **179**: 3284-3292.

- 86. Kelkar, H.S., Keller, N.P. & Adams, T.H.** 1996 *Aspergillus nidulans stcP* encodes an O-methyltransferase that is required for sterigmatocystin biosynthesis. *Appl. Env. Microbiol.* **62**: 4296-4298.
- 87. Kelkar, H.S., Skloss, T.W., Haw, J.F., Keller, N.P. & Adams, T.H.** 1997 *Aspergillus nidulans stcL* encodes a putative cytochrome P-450 monooxygenase required for bisfuran desaturation during aflatoxin/sterigmatocystin biosynthesis. *J. Biol. Chem.* **272**: 1589-1594.
- 88. Keller, N.P. & Hohn, T.M.** 1997 Metabolic pathway gene clusters in filamentous fungi. *Fungal Genet. Biol.* **21**: 17-29.
- 89. Kelly, R., Register, E., Hsu, M.-J., Kurtz, M. & Nielsen, J.** 1996 Isolation of a gene involved in 1,3- β -glucan synthesis in *Aspergillus nidulans* and purification of the corresponding protein. *J. Bacteriol.* **178**: 4381-4391.
- 90. Kennedy, J. & Turner, G.** 1996 d-(L- α -aminoadipyl)-L-cysteiny-D-valine synthetase is a rate limiting enzyme for penicillin production in *Aspergillus nidulans*. *Mol. Gen. Genet.* **253**: 189-197.
- 91. Kevei, F., Tóth, B., Coenen, A., Haman, Z., Varga, J. & Croft, J.H.** 1997 Recombination of mitochondrial DNAs following transmission of mitochondria among incompatible strains of black *Aspergilli*. *Mol. Gen. Genet.* **254**: 379-388.
- 92. King, R.W., Deshaies, R.J., Peters, J.-M. & Kirschner, M.W.** 1996 How proteolysis drives the cell cycle. *Science* **274**: 1652-1659.
- 93. Krell, T., Horsburgh, M.J., Cooper, A., Kelly, S.M. & Coggins, J.R.** 1996 Localization of the active site of type II dehydroquinases: Identification of a common arginine-containing motif in the two classes of dehydroquinases. *J. Biol. Chem.* **271**: 24492-24497.
- 94. Krüger, M. & Fischer, R.** 1996 Isolation of two *apsA* suppressor strains in *Aspergillus nidulans*. *Genet.* **144**: 533-540.
- 95. Kucharski, R. & Bartnik, E.** 1997 The TBP gene from *Aspergillus nidulans* - structure and expression in *Saccharomyces cerevisiae*. *Microbiol.* **143**: 1263-1270.
- 96. Lamb, H.K., Newton, G.H., Levett, L.J., Cairns, E., Roberts, C.F. & Hawkins, A.R.** 1996 [The QUTA activator and QUTR repressor proteins of *Aspergillus nidulans* interact to regulate transcription of the quinate utilization pathways genes. *Microbiology* **142**: 1477-1490] Corrigendum to Corrigendum to entry 93, FGN **43** : *Microbiology* **143**: 2983.
- 97. Landman, O., Borovok, I., Aharonowitz, Y. & Cohen, G.** 1997 The glutamine ligand in the ferrous iron active site of isopenicillin N synthase of *Streptomyces jumonjinensis* is not essential for catalysis. *FEBS Lett.* **405**: 172-174.

- 98. Le Dall, M.-T., Nicaud, J.-M., Tréton, B.Y. & Gaillardin, C.M.** 1996 The 3-phosphoglycerate kinase gene of the yeast *Yarrowia lipolytica* de-represses on gluconeogenic substrates. *Curr. Genet.* **29**: 446-456.
- 99. Leslie, J.F. & Zeller, K.A.** 1997 Heterokaryon incompatibility in fungi - more than just another way to die. *J. Genet.* **75**: 415-424.
- 100. Levesley, I., Newton, G.H., Lamb, H.K., van Schothorst, E., Dalglish, R.W.M., Samson, A.C.R., Roberts, C.F. & Hawkins, A.R.** 1996 Corrigendum to entry 100, FGN 43 (*Microbiology* **142**: 87-98): *Microbiology* **142**: 1909.
- 101. Lewandowska, I., Balinska, M., Natorff, R. & Paszewski, A.** 1996 Regulation of folate-dependent enzyme levels in *Aspergillus nidulans*: Studies with regulatory mutants. *Biochim. Biophys. Acta* **1290**: 89-94.
- 102. Li, W. & Mitchell, A.P.** 1997 Proteolytic activation of Rim1p, a positive regulator of yeast sporulation and invasive growth. *Genet.* **145**: 63-73.
- 103. Litzka, O., Then Bergh, K. & Brakhage, A.A.** 1996 The *Aspergillus nidulans* penicillin-biosynthesis gene *aat* (*penDE*) is controlled by a CCAAT-containing DNA element. *Eur. J. Biochem.* **238**: 675-682.
- 104. Lockington, R.A., Borlace, G.N. & Kelly, J.M.** 1997 Pyruvate decarboxylase and anaerobic survival in *Aspergillus nidulans*. *Gene* **191**: 61-67.
- 105. Lu, K.P. & Means, A.R.** 1993 Conditional mutants for studying functions of calmodulin in *Aspergillus nidulans*. in *Methods in Molecular Genetics*, Vol. 2. Gene and chromosome analysis, Part B. ed. Adolph, K.W. Academic Press, Inc. San Diego, pp. 255-275.
- 106. MacCabe, A.P., Fernández-Espinar, M.T., De Graaff, L.H., Visser, J. & Ramón, D.** 1996 Identification, isolation and sequence of the *Aspergillus nidulans xlnC* gene encoding the 34-kDa xylanase. *Gene* **175**: 29-33.
- 107. Machida, M., Chang, Y.-C., Manabe, M., Yasukawa, M., Kunichiro, S. & Tigami, Y.** 1996 Molecular cloning of a cDNA encoding enolase from the filamentous fungus, *Aspergillus oryzae*. *Curr. Genet.* **30**: 423-431.
- 108. Marhoul, J.F. & Adams, T.H.** 1996 *Aspergillus fabM* encodes an essential product that is related to poly (A)-binding proteins and activates development when overexpressed. *Genetics* **144**: 1463-1470.
- 109. Marhoul, J. & Adams, T.H.** 1997 Isolation of *Aspergillus nidulans* mutants that overcome *brlA*-induced growth arrest. *Fungal Genet. Biol.* **21**: 109-117.

- 110. Marx, F., Haas, H., Reindl, M., Stöffler, G., Lottspeich, F. & Redl, B.** 1996 Cloning, structural organization and regulation of expression of the *Penicillium chrysogenum paf* gene encoding an abundantly secreted protein with antifungal activity. *Gene* **167**: 167-171.
- 111. Mazur, P. & Baginsky, W.** 1996 In vitro activity of 1,3- β -D-glucan synthase requires the GTP-binding protein Rho1. *J. Biol. Chem.* **271**: 14604-14609.
- 112. Mellado, E., Specht, C.A., Robbins, P.W. & Holden, D.W.** 1996 Cloning and characterization of *chsD*, a chitin synthase-like gene of *Aspergillus fumigatus*. *FEMS Microbiol. Lett.* **143**: 69-76.
- 113. Minetoki, T., Nunokawa, Y., Gomi, K., Kitamoto, K., Kumagai, C. & Tamura, G.,** 1996 Deletion analysis of promoter elements of the *Aspergillus oryzae agdA* gene encoding α -glucosidase. *Curr. Genet.* **30**: 432-438.
- 114. Mitchell, D.B., Vogel, K., Weimann, B.J., Pasamontes, L. & van Loon, A.P.G.M.** 1997 The phytase subfamily of histidine acid phosphatases: isolation of genes for two novel phytases for the fungi *Aspergillus terreus* and *Myceliophthora thermophila*. *Microbiology* **143**: 245-252.
- 115. Momany, M. & Hamer, J.E.** 1997 The *Aspergillus nidulans* septin encoding gene, *aspB*, is essential for growth. *Fungal Genet. Biol.* **21**: 92-100.
- 116. Monfort, A., Blasco, A., Prieto, J.A. & Sanz, P.** 1996 Combined expression of *Aspergillus nidulans* endoxylanase X24 and *Aspergillus oryzae* α -amylase in industrial Baker's yeasts and their use in bread making. *Appl. Env. Microbiol.* **62**: 3712-3715.
- 117. Morris, S.M., Anaya, P., Xiang, X., Morris, N.R., May, G.S. & Yu-Lee, L.Y.** 1997 A prolactin-inducible T cell gene product is structurally similar to the *Aspergillus nidulans* nuclear movement protein NUDC. *Mol. Endocrinol.* **11**: 229-236.
- 118. Motoyama, T., Fujiwara, M., Kojima, N., Horiuchi, H., Ohta, A. & Takagi, M.** 1997 The *Aspergillus nidulans* genes *chsA* and *chsD* encode chitin synthases which have redundant functions in conidia formation. *Mol. Gen. Genet.* **253**: 520-528.
- 119. Murakami, H. & Okayama, H.** 1997 Cell cycle checkpoint control. *Exp. Mol. Medicine* **29**: 1-11.
- 120. Murphy, R.L., Andrianopoulos, A., Davis, M.A. & Hynes, M.J.** 1997 Identification of *amdX*, a new *cys-2-his-2* (C2H2) zinc-finger gene involved in the regulation of the *amdS* gene of *Aspergillus nidulans*. *Mol. Microbiol.* **23**: 591-602.
- 121. Nakamura, A., Nishimura, I., Yokoyama, A., Lee, D.-G., Hidaka, M., Masaki, H., Kimura, A., Chiba, S. & Uozumi, T.** 1997 Cloning and sequencing of an α -glucosidase gene from *Aspergillus niger* and its expression in *A. nidulans*. *J. Biotechnol.* **53**: 75-84.

- 122. Namgung, J., Park, B.C., Lee, D.H., Bae, K.S. & Park, H.-M.** 1996 Cloning and characterization of chitin synthase gene fragments from *Penicillium chrysogenum*. FEMS Microbiol. Lett. **145**: 189-194.
- 123. Natvig, D.O. & May, G.**, 1997 Fungal evolution and speciation. J. Genet. **75**: 441-452.
- 124. Negrete-Urtasun, S., Denison, S.H. & Arst, H.N.Jr.** 1997 Characterization of the pH signal transduction pathway gene *pala* of *Aspergillus nidulans* and identification of possible homologs. J. Bacteriol. **179**: 1832-1835.
- 125. Newbury, J. & Peberdy, J.F.** 1996 Characterization of the heat shock response in protoplasts of *Aspergillus nidulans*. Mycol. Res. **100**: 1325-1332.
- 126. Ngiam, C., Jeenes, D.J. & Archer, D.B.** 1997 Isolation and characterisation of a gene encoding protein disulphide isomerase, *pdiA* from *Aspergillus niger*. Curr. Genet. **31**: 133-138.
- 127. Nyssönen, E., Armutan, M., Enfield, L., Stubbs, J. & Dunn-Coleman, N.S.** 1996 The transposable element *Tan1* of *Aspergillus niger* var. *awamori*, a new member of the *Fot1* family. Mol. Gen. Genet. **253**: 50-56.
- 128. O'Herrin, S.M., Kulkarni, S., Kenealy, W.R., Fechner, J.H.Jr., Sollinger, H., Schneck, J.P. & Burlingham, W.J.** 1996 Expression of human recombinant 2-microglobulin by *Aspergillus nidulans* and its activity. Hum. Immunol. **51**: 63-72.
- 129. Oestreicher, N., Scazzocchio, C. & Suárez, T.** 1997 Mutations in a dispensable region of the UaY transcription factor of *Aspergillus nidulans* differentially affect the expression of structural genes. Mol. Microbiol. **24**: 1189-1199.
- 130. Osmani, S.A. & Ye, X.S.** 1996 Cell cycle regulation of *Aspergillus* by two protein kinases. Biochem. J. **317**: 633-641.
- 131. Papagiannopoulos, P., Andrianopoulos, A., Sharp, J.A., Davis, M.A. & Hynes, M.J.** 1996 The *hapC* gene of *Aspergillus nidulans* is involved in the expression of CCAAT-containing promoters. Mol. Gen. Genet. **251**: 412-421.
- 132. Paquin, B., Laforest, M.-J., Forget, L., Roewer, I., Wang, Z., Longcore, J. & Lang, B.F.** 1997 The fungal genome project: evolution of fungal mitochondrial genomes and their gene expression. Curr. Genet. **31**: 380-395.
- 133. Parry, J.M., Parry, E.M., Bourner, R., Doherty, A., Ellard, S., O'Donovan, J., Hoebee, B., de Stoppelaar, J.M., Mohn, G.R., Önfelt, A., Renglin, A., Schultz, N., Söderpalm-Berndes, C., Jensen, K.G., Kirsch-Volders, M., Elhajouji, A., Van Hummelen, P., Degrassi, F., Antoccia, A., Cimini, D., Izzo, M., Tanzarella, C., Adler, I.D., Kliesch, U., Schriever-Schwemmer, G., Gassar, P., Crebelli, R., Carere, A., Andreoli, C., Benigni, R., Leopardi, P., Marcon, F., Zinjo, Z., Natarajan, A.T., Boei, J.J.W.A., Kappas, A., Voutsinas, G.,**

- Zarani, F.E., Patrinelli, A., Pachierotti, F., Tiveron, C. & Hess, P.** 1996 The detection and evaluation of aneugenic chemicals. *Mutation-Research* **353**: 11-46.
- 134. Peñalver, M.C., Casanova, M., Martínez, L.P. & Gil, M.L.** 1996 Cell wall protein and glycoprotein constituents of *Aspergillus fumigatus* that bind to polystyrene may be responsible for the cell surface hydrophobicity of the mycelium. *Microbiology* **142**: 1597-1604.
- 135. Pérez, M.D., González, C., Ávila, J., Brito, N. & Siverio, J.M.** 1997 The *YNT1* gene encoding the nitrate transporter in the yeast *Hansenula polymorpha* is clustered with genes *YNI1* and *YNR1* encoding nitrite reductase and nitrate reductase, and its disruption causes inability to grow in nitrate. *Biochem. J.* **321**: 397-403.
- 136. Pérez-González, J.A., de Graaf, L.H., Visser, J. & Ramón, D.** 1996 Molecular cloning and expression in *Saccharomyces cerevisiae* of two *Aspergillus nidulans* xylanase genes. *Appl. Env. Microbiol.* **62**: 2179-2182.
- 137. Peters, J.-M., King, R.W., Hoog, C. & Kirschner, M.W.** 1996 Identification of BIME as a subunit of the anaphase-promoting complex. *Science* **274**: 1199-1201.
- 138. Pinto, F., Valera, J.L., Pedregosa, A.M., Monistrol, I.F. & Laborda, F.** 1996 Effect of antimicrotubular fungicides on germination and protoplast regeneration processes in *Aspergillus nidulans*. *Rev. Iberoam. Micol.* **13**: 68-72.
- 139. Plamann, M.** 1997 Nuclear division, nuclear distribution and cytokinesis in filamentous fungi. *J. Genet.* **75**: 351-360.
- 140. Podile, A.R. & Prakash, A.P.** 1996 Lysis and biological control of *Aspergillus niger* by *Bacillus subtilis* AF 1. *Can. J. Microbiol.* **42**: 533-538.
- 141. Polley, S.D. & Caddick, M.X.** 1996 Molecular characterisation of *meaB*, a novel gene affecting nitrogen metabolite repression in *Aspergillus nidulans*. *FEBS Lett.* **388**: 200-205.
- 142. Raju, N.B.** 1997 Meiotic drive in fungi: chromosomal elements that cause fratricide and distort genetic ratios. *J. Genet.* **75**: 287-296.
- 143. Ramos Ruiz, A., De la Torre R.A., Alonso, N., Villaescusa, A., Betancourt, J. & Vizoso, A.** 1996 Screening of medicinal plants for induction of somatic segregation activity in *Aspergillus nidulans*. *J. Ethnopharmacol.* **52**: 123-127.
- 144. Reymond-Cotton, P., Fraissinet-Tachet, L. & Fèvre, M.** 1996 Expression of the *Sclerotinia sclerotiorum* polygalacturonase *pgl* gene: Possible involvement of CREA in glucose catabolite repression. *Curr. Genet.* **30**: 240-245.
- 145. Rosenkranz, H.S. & Klopman, G.** 1996 A study of the structural basis of the ability of chlorinated alkanes and alkenes to induce aneuploidy and toxicity in the mold *Aspergillus nidulans*. *Mutation Res.* **354**: 183-193.

- 146. Ruijter, G.J.G., Panneman, H., van den Broeck, H.C., Bennett, J.M. & Visser, J.** 1996 Characterisation of the *Aspergillus nidulans* *frA1* mutant: hexose phosphorylation and apparent lack of involvement of hexokinase in glucose repression. *FEMS Microbiol. Lett.* **139**: 223-228.
- 147. Sami, M., Brown, T.J.N., Roach, P.L., Schofield, C.J. & Baldwin, J.E.** 1997 Glutamine-330 is not essential for activity in isopenicillin N synthase from *Aspergillus nidulans*. *FEBS Lett.* **405**: 191-194.
- 148. Sano, M., Nakamura, A., Masaki, H. & Uozumi, T.** 1996 Isolation and characterization of the nuclease 0 gene (*nuc0*) from *Aspergillus oryzae*. *Curr. Genet.* **30**: 312-317.
- 149. Scazzocchio, C.** 1997 Alkaptonuria: From humans to moulds and back. *Trends Genet.* **13**: 125-127.
- 150. Shroff, R.A., Lockington, R.A. & Kelly, J.M.** 1996 Analysis of mutations in the *creA* gene involved in carbon catabolite repression in *Aspergillus nidulans*. *Can. J. Microbiol.* **42**: 950-959.
- 151. Specht, C.A., Liu, Y., Robbins, P.W., Bulawa, C.E., Iartchouk, N., Winter, K.R., Riggle, P.J., Rhodes, J.C., Dodge, C.L., Culp, D.W. & Borgia, P.T.** 1996 The *chsD* and *chsE* genes of *Aspergillus nidulans* and their roles in chitin synthesis. *Fungal Genet. Biol.* **20**: 153-167.
- 152. Stadler, D.R.** 1997 Meiotic recombination in filamentous fungi. *J. Genet.* **75**: 265-280.
- 153. Stein, T., Vater, J.** 1996 Amino acid activation and polymerization at modular multienzymes in nonribosomal peptide biosynthesis. *Amino Acids (Vienna)* **10**: 201-227.
- 154. Stoldt, V.R., Sonneborn, A., Leuker, C.E. & Ernst, J.F.** 1997 Efg1p, an essential regulator of morphogenesis of the human pathogen *Candida albicans*, is a member of a conserved class of bHLH proteins regulating morphogenetic processes in fungi. *EMBO J.* **16**: 1982-1991.
- 155. Stewart, P., Whitwam, R.E., Kersten, P.J., Cullen, D. & Tien, M.** 1996 Efficient expression of a *Phanerochaete chrysosporium* manganese peroxidase gene in *Aspergillus oryzae*. *Appl. Env. Microbiol.* **62**: 860-864.
- 156. Suykerbuyk, M.E.G., van de Vondervoort, P.J.I., Schaap, P.J. & Visser, J.** 1996 Identification of regulatory mutants of *Aspergillus aculeatus* affected in rhamnogalacturonan hydrolase expression. *Curr. Genet.* **30**: 439-441.
- 157. Takashima, S., Iikura, H., Nakamura, A., Masaki, H. & Uozumi, T.** 1996 Analysis of Cre1 binding sites in the *Trichoderma reesei* *cbh1* upstream region. *FEMS Microbiol. Lett.* **145**: 361-366.
- 158. Talbot, N.J.** 1997 Fungal biology: Growing into the air. *Curr. Biol.* **7**: R78-R81.

- 159. Tan, D. & Ferreira, G.C.** 1996 Active site of 5-aminolevulinate synthase resides at the subunit interface. Evidence from *in vivo* heterodimer formation. *Biochem.* **35**: 8934-8941.
- 160. Tatsuno, K., Yamada-Okabe, H., Takagi, M., Arisawa, M. & Sudoh, M.** 1997 Properties of yeast expressed *Aspergillus nidulans* chitin synthase B which is essential for hyphal growth. *FEMS Microbiol. Lett.* **149**: 279-284.
- 161. Tazebay, U.H., Sophianopoulou, V., Scazzocchio, C. & Diallinas, G.** 1997 The gene encoding the major proline transporter of *Aspergillus nidulans* is upregulated during conidiospore germination and in response to proline induction and amino acid starvation. *Mol. Microbiol.* **24**: 105-117.
- 162. Then Bergh, K., Litzka, O. & Brakhage, A.A.** 1996 Identification of a major cis-acting DNA element controlling the bidirectionally transcribed penicillin biosynthesis genes *acvA* (*pcbAB*) and *ipnA* (*pcbC*) of *Aspergillus nidulans*. *J. Bacteriol.* **178**: 3908-3916.
- 163. Thompson, S.A., Golightly, E.J. & Yaver, D.S.** 1996 Nucleotide sequence of the *Aspergillus niger srpA* gene. *Gene* **167**: 337-338.
- 164. Todd, R.B., Murphy, R.L., Martin, H.M., Sharp, J.A., Davis, M.A., Katz, M.E. & Hynes, M.J.** 1997 The acetate regulatory gene *facB* of *Aspergillus nidulans* encodes a Zn(II)2Cys6 transcriptional activator. *Molec. Gen. Genet.* **254**: 495-504.
- 165. Topzewski, J., Sienko, M. & Paszewski, A.** 1997 Cloning and characterization of the *Aspergillus nidulans cysB* gene encoding cysteine synthase. *Curr. Genet.* **31**: 348-356.
- 166. Torralba, S., Pedregosa, A.M., de Lucas, J.R., Díaz, M.S., Monistrol, I.F. & Laborda, F.** 1996 Effect of the microtubule inhibitor methyl benzimidazol-2-yl carbamate (MBC) on production and secretion of enzymes in *Aspergillus nidulans*. *Mycol. Res.* **100**:1375-1382.
- 167. Trueman, L.J., Onyeocha, I. & Forde, B.G.** 1996 Recent advances in the molecular biology of a family of eukaryotic high affinity nitrate transporters. *Plant Physiol. Biochem.* **34**: 621-627.
- 168. Trueman, L.J., Richardson, A. & Forde, B.G.** 1996 Molecular cloning of higher plant homologues of the high-affinity nitrate transporters of *Chlamydomonas reinhardtii* and *Aspergillus nidulans*. *Gene* **175**: 223-231.
- 169. Tsuchiya, A., Nakazawa, H., Toida, J., Ohnishi, K. & Sekiguchi, J.** 1996 Cloning and nucleotide sequence of the mono- and diacetylglycerol lipase gene (*mllB*) of *Aspergillus oryzae*. *FEMS Microbiol. Lett.* **143**: 63-67.
- 170. Valenciano, S., de Lucas, J.R., Pedregosa, A., Monistrol, I.F. & Laborda, F.** 1996 Induction of -oxidation enzymes and microbody proliferation in *Aspergillus nidulans*. *Archiv. Microbiol.* **166**: 336-341.

- 171. van Generen, I.A.** 1997 Production of cutinase by *Aspergillus awamori*. Ph.D. thesis, University of Utrecht.
- 172. van Heemst, D., Swart, K., Holub, E.F., van Dijk, R., Offenbergh, H.H., Goosen, T., van den Broek, H.W.T. & Heyting, C.** 1997 Cloning, sequencing, disruption and phenotypic analysis of *uvsC*, an *Aspergillus nidulans* homologue of yeast *RAD51*. *Mol. Gen. Genet.* **254**: 654-664.
- 173. Ventura, L., Pérez-González, J.A. & Ramón, D.** 1997 Cloning and molecular analysis of the *Aspergillus terreus arg1* gene coding for an ornithine carbamoyltransferase. *FEMS Microbiol. Lett.* **149**: 207-212.
- 174. Vichitsoonthonkul, T., Chu, Y.-W., Patel, V., Patel, R. & Saunders, G.** 1996 Factors affecting DNA-binding proteins and *pcbC* transcript levels in *Penicillium chrysogenum*. *Curr. Genet.* **30**: 447-454.
- 175. von Döhren, H.** 1997 Genetics on the move into natural-product chemistry. *Trends Biotechnol.* **15**: 117-119.
- 176. Wessels, J.G.H.** 1996 Fungal hydrophobins: proteins that function at an interface. *Trends Plant Sci.* **1**: 9-15.
- 177. Williams, B.A., Sillaots, S., Tsang, A. & Storms, R.** 1996 Isolation by genetic complementation of two differentially expressed genes for -isopropylmalate dehydrogenase from *Aspergillus niger*. *Curr. Genet.* **30**: 305-311.
- 178. Wolkow, T.D., Harris, S.D. & Hamer, J.E.** 1996 Cytokinesis in *Aspergillus nidulans* is controlled by cell size, nuclear positioning and mitosis. *J. Cell Sci.* **109**: 2179-2188.
- 179. Wynne, J.P. & Ratledge, C.** 1997 Malic enzyme is a major source of NADPH for lipid accumulation by *Aspergillus nidulans*. *Microbiology* **143**: 253-257.
- 180. Xiang, X., Osmani, A.H., Osmani, S.A., Roghi, C.H., Willins, D.A., Beckwith, S., Goldman, G., Chiu, Y., Xin, M., Liu, B. & Morris, N.R.** 1995 Analysis of nuclear migration in *Aspergillus nidulans*. *Cold Spring Harbor Symp. Quant. Biol.* **60**: Protein kinesin: The dynamics of protein trafficking and stability. Cold Spring Harbor Laboratory Press, New York. pp. 813-819.
- 181. Xu, B., Wild, J.R. & Kenerley, C.M.** 1996 Enhanced expression of a bacterial gene for pesticide degradation in a common soil fungus. *J. Ferment. Bioeng.* **81**: 473-481.
- 182. Yamashita, Y.M., Nakaseko, Y., Samejima, I., Kumada, K., Yamada, H., Michaelson, D. & Yanagida, M.** 1996 20S cyclosome complex formation and proteolytic activity inhibited by the cAMP/PKA pathway. *Nature* **384**: 276-279.

- 183. Ye, X.S., Fincher, R.R., Tang, A., O'Donnell, K. & Osmani, S.A.** 1996 Two S-phase checkpoint systems, one involving the function of both BIME and Tyr15 phosphorylation of p34cdc2, inhibit NIMA and prevent premature mitosis. *EMBO J.* **15**: 3599-3610.
- 184. Ye, X.S., Fincher, R.R., Tang, A. & Osmani, S.A.** 1997 The G2/M DNA damage checkpoint inhibits mitosis through Tyr15 phosphorylation of p34cdc2 in *Aspergillus nidulans*. *EMBO J.* **16**: 182-192.
- 185. Yu, J.H., Wieser, J. & Adams, T.H.** 1996 The *Aspergillus* FlbA RGS domain protein antagonizes G protein signaling to block proliferation and allow development. *EMBO J.* **15**: 5184-5190.
- 186. Zachariae, W., Shin, T.H., Galova, M., Obermaier, B. & Nasmyth, K.** 1996 Identification of subunits of the anaphase-promoting complex of *Saccharomyces cerevisiae*. *Science* **274**: 1201-1204.
- 187. Zimmerman, J.W., Specht, C.A., Xoconostle-Cazares, B. & Robbins, P.W.** 1996 The isolation of a Dol-P-Man synthase from *Ustilago maydis* that functions in *Saccharomyces cerevisiae*. *Yeast* **12**: 765-771.
- 188. Zucchi, T.M.A.D.** 1996 RNA-mediated transformation in *Aspergillus nidulans* recovers gene functions lost by deletion or by point mutations. *Cell. Mol. Biol. (Noisy-Le-Grand)* **42**: 889-904.
- 189. Zucchi, T.M.A.D., Cunha, F.Q., Ribeiro, R.A., Ferreira, S.H. & De Lucca, F.L.** 1996 Transformation of *Aspergillus nidulans* by RNA from rat macrophages stimulated with lipopolysaccharide. *Cell. Mol. Biol. (Noisy Le Grand)* **42**: 235-240.
-

Aspergillus Author Index

Adams, T.H. 19 86 87 108 109 185
Addison, R. 4
Adler, I.D. 133
Aguirre, J. 85
Aharonowitz, Y. 97
Aleksenko, A. 1
Alonso, N. 143
An, Z. 2
Anaya, P. 117
Andrade, A.C. 43
Andreoli, C. 133
Andrianopoulos, A. 3 120 131
Angermayr, K. 68
Antoccia, A. 133

Aoyama, A. 83
Arai, M. 84
Aramayo, R. 4
Archer, D.B. 126
Arisawa, M. 160
Armutan, M. 127
Arnold, J. 12
Arst, H.N.Jr. 5 6 124
Arundhati, A. 76
Avila, J. 18 135
Azevedo, J.L. 62
Babudri, N. 9
Bae, K.S. 122
Baginsky, W. 111
Baldwin, J.E. 147
Balinska, M. 101
Balzi, E. 43
Barry, E.G. 8
Bartnik, E. 95
Beckwith, S. 180
Belo, V.A. 62
Bencina, M. 10
Benigni, R. 133
Bennett, J.M. 146
Bennett, J.W. 11 27
Betancourt, J. 143
Bhandarka, S.M. 12
Bhatnagar, D. 23 27
Bhattacharyya, A. 13
Blackburn, E.H. 13
Blasco, A. 116
Boei, J.J.W.A. 133
Boominathan, K. 37
Borgia, P.T. 14 15 151
Borlace, G.N. 104
Borovok, I. 97
Bottomley, J.R. 16
Bourner, R. 133
Brakhage, A.A. 17 103 162
Bray, R.C. 48
Brito, N. 18 135
Brons, J. 3
Brown, D.W. 19
Brown, T.J.N. 147
Buades, C. 20
Budde, A. 2

Bulawa, C.E. 14 151
Burke, J.F. 48
Burlingham, W.J. 128
Burow, G.B. 21
Caddick, M.X. 141
Cairns, E. 96
Calera, J.A. 22
Carere, A. 133
Carpenter, B.E. 56
Cary, J.W. 23
Casanova, M. 134
Castro-Prado, M.A.A. 24
Chae, K.S. 26
Chae, S.-K. 25
Chang, M.H. 26
Chang, P.K. 27
Chang, Y.-C. 107
Chen, J.-s. 28
Chiba, S. 121
Chirravuri, S. 12
Chiu, Y. 29 180
Chovnick, A. 48
Christiansen, S.K. 30
Chu, F.S. 23
Chu, Y.-W. 174
Chung, J.H. 26
Cimerman, A. 31
Cimini, D. 133
Cleveland, T.E. 27
Clutterbuck, A.J. 1 32
Coenen, A. 33 34 91
Coggins, J.R. 93
Cohen, G. 97
Cooper, A. 93
Courchesne, W.E. 47
Crebelli, R. 133
Croft, J.H. 33 91
Cubero, B. 61
Cullen, D. 155
Culp, D.W. 151
Cunha, F.Q. 189
d'Enfert, C. 35 35a 36
D'Souza, T.M. 37
Daboussi, M.J. 38
Dagleish, R.W.M. 100
Daniell, H. 73

Davis, G. 66
Davis, M.A. 3 39 120 131 164
Davis, R. 40
Dayton, J.S. 41 42
de Graaff, L.H. 59 106 136
De la Torre R.A. 143
de Lucas, J.R. 46 166 170
De Lucca, F.L. 189
de Stoppelaar, J.M 133
De Waard, M.A. 43
Debets, F. 33
Degrassi, F. 133
Del Sorbo, G. 43
Denison, S.H. 124
Deshaies, R.J. 92
Diallinas, G. 161
Diamond, R. 85
Dian, I. 44
Diaquin, M. 55
Díaz, M.S. 46 166
Díaz, R. 45
Dodge, C.L. 15 151
Doherty, A. 133
Dohlman, H.G. 47
Doonan, J.H. 76
Doyle, W.A. 48
Dunlap, J. 21
Dunn-Coleman, N. 127
Dutton, F.L. 48
Ebbole, D.J. 49
Ebizuka, Y. 58
Ehrlich, K.C. 27
El-Rady, J. 50
Elhajouji, A. 133
Ellard, S. 133
Enfield, L. 127
Enoki, T. 84
Ernst, J.F. 154
Espeso, E.A. 51
Eyzaguirre, J. 45
Farman, M.L. 2
Fechner, J.H.Jr. 128
Fernández-Cañón, J.M. 52 53
Fernández-Espinar, M.T. 54 106
Ferreira, G.C. 159
Ferreira, S.H. 189

Fèvre, M. 144
Fiedurek, J. 65
Fincher, R.R. 183 184
Firsov, L.M. 44
Fischer, R. 82 94
Fontaine, T. 36 55
Forde, B.G. 167 168
Forget, L. 132
Fraissinet-Tachet, L. 144
Froeliger, E.H. 56
Fry, A.M. 57
Fujii, I. 58
Fujiwara, M. 118
Gaillardin, C.M. 98
Galova, M. 186
Gassar, P. 133
Gavrias V. 61
Gebara, J.S. 24
Giese, H. 30
Gil, M.L. 134
Gilkens, M.M.C. 59
Goldman, G.H. 60 180
Golightly, E.J. 163
Gomez, D. 61
Gomi, K. 58 113
Gonzales, R. 61
González, C. 18 135
Goosen, T. 172
Gorinstein, S. 62
Gouka, R.J. 63
Griffiths, A.J.F. 64
Gromada, A. 65
Guo, Z. 73
Gustafson, G. 66
Guzmán-de-Peña, D. 67
Haas, H. 68 110
Haman, Z. 91
Hamer, J.E. 70 115 178
Hamer, L. 69
Hamilton, A.J. 74
Han, D.M. 26 71
Han, Y.J. 26 71
Harris, S.D. 178
Hartland, R.P. 55
Hatamoto, O. 72
Haw, J.F. 87

Hawkins, A.R. 16 96 100
Hay, R.J. 74
Hemming, F.W. 28
Henry, M. 66
Herzog, R.W. 73
Hess, P. 133
Hessing, J.G.M. 63
Heyting, C. 172
Hidaka, M. 121
Hintz, W.E. 73
Hoebee, B. 133
Hoekstra, R.F. 33 34
Hohn, T.M. 88
Holden, D.W. 70 112
Holdom, M.D. 74
Holub, E.F. 172
Hoog, C. 137
Horiuchi, H. 75 118
Horsburgh, M.J. 93
Hsu, M.-J. 89
Hughes, M. 76
Hynes, M.J. 3 39 77 120 131 164
Iartchouk, N. 14 151
Ikura, H. 157
Ilmén, M. 78
Irelan, J.T. 79
Izzo, M. 133
Jahng, K.Y. 26
Jeenes, D.J. 126
Jensen, K.G. 133
Kafer, E. 25 80
Kalsner, I. 73
Kapoor, M. 81
Kappas, A. 133
Karos, M. 82
Kato, M. 83
Katz, M.E. 164
Kawaguchi, T. 84
Kawasaki, L. 85
Kelkar, H.S. 86 87
Keller, N.P. 19 21 86 87 88
Kelly, J.M. 104 150
Kelly, R. 89
Kelly, S.M. 93
Kenealy, W.R. 128
Kenerley, C.M. 181

Kennedy, J. 90
Kersten, P.J. 155
Kevei, F. 34 91
Kikuchi, M. 72
Kimura, A. 121
King, R.W. 92 137
Kirsch-Volders, M. 133
Kirschner, M.W. 92 137
Kitamoto, K. 113
Kleanthous, C. 16
Kliesch, U. 133
Klopman, G. 145
Knudsen, S. 30
Kobayashi, T. 83
Kojima, N. 118
Koltrin, Y. 14
Kourambas, S. 39
Krell, T. 93
Krüger, M. 94
Kucharski, R. 95
Kulkarni, S. 128
Kumada, K. 182
Kumagai, C.
Kunichiro, S. 107
Kurtz, M. 89
Laborda, F. 46 138 166 170
Laforest, M.-J. 132
Lagosky, P.A. 73
Lamb, H.K. 96 100
Landman, O. 97
Lang, B.F. 132
Latgé, J.P. 55
Le Dall, M.-T. 98
Leal, F. 22
Lee, D.-G. 121
Lee, D.H. 122
Lee, R. 23
Legisa, M. 10
Lemke, P.A. 73
Leong, S.A. 2
Leopardi, P. 133
Leslie, J.F. 99
Leuker, C.E. 154
Levesley, I. 100
Levett, L.J. 96
Lewandowska, I. 101

Li, W. 102
Linz, J.E. 27
Litzka, O. 103 162
Liu, B. 180
Liu, Y. 151
Lockington, R.A. 104 150
Longcore, J. 132
López-Medrano, R. 22
Lottspeich, F. 110
Lu, K.P. 105
Luengo, J.M. 52
Lunness, P. 76
Ma, D. 47
MacCabe, A.P. 106
Machida, M. 107
Manabe, M. 107
Marcon, F. 133
Marhoul, J.F. 108 109
Marini, A. 9
Martin, H.M. 164
Martínez, L.P. 134
Marx, F. 110
Masaki, H. 121 148 157
May, G.S. 80 117
Mazur, P. 111
Means, A.R. 41 42 105
Mellado, E. 112
Metzenberg, R. 4
Miao, Y. 15
Michaelson, D. 182
Minetoki, T. 113
Mitchell, A.P. 102
Mitchell, D.B. 114
Mizusawa, K. 72
Mohn, G.R. 133
Momany, M. 115
Monfort, A. 116
Monistrol, I.F. 46 138 166 170
Morpurgo, G. 9
Morris, N.R. 29 60 117 180
Morris, S.M. 117
Motoyama, T. 118
Moya, A. 20
Murakami, H. 119
Murphy, R.L. 120 164
Nakamura, A. 121 148 157

Nakaseko, Y. 182
Nakazawa, H. 169
Namgung, J. 122
Nanthakumar, N.N. 42
Naruse, F. 83
Nasmyth, K. 186
Natarajan, A.T. 133
Natorff, R. 101
Natvig, D.O. 123
Negrete-Urtasun, S. 124
Nesbitt, T.C. 21
Newbury, J. 125
Newton, G.H. 96 100
Ngiam, C. 126
Nicaud, J.-M. 98
Nielsen, J. 89
Nigg, E.A. 57
Nikolaev, I. 1
Nishimura, I. 121
Nunokawa, Y. 113
Nyssönen, E. 127
O'Donnell, K. 183
O'Donovan, J. 133
O'Herrin, S.M. 128
Obermaier, B. 186
Oestreicher, N. 129
Offenberg, H.H. 172
Ohkuma, M. 75
Ohnishi, K. 169
Ohta, A. 118
Okayama, H. 119
Önfelt, A. 133
Ono, Y. 58
Onyeocha, I. 167
Ooi, T. 84
Osmani, A.H. 180
Osmani, S.A. 130 180 183 184
Ovejero, M.C. 22
Paccola-Meirelles, L.D. 62
Pachierotti, F. 133
Panneman, H. 10 146
Papagiannopoulos, P. 131
Paquin, B. 132
Park, B.C. 122
Park, H.-M. 122
Parry, E.M. 133

Parry, J.M. 133
Pasamontes, L. 114
Paszewski, A. 101 165
Patel, R. 174
Patel, V. 174
Patrinelli, A. 133
Peberdy, J.F. 28 125
Pedregosa, A.M. 46 138 166 170
Peiano, A. 45
Peleg, Y. 4
Peñalva, M.A. 51 53
Peñalver, M.C. 134
Penttilä, M. 78
Perez, M.D. 18 135
Pérez-González, J.A. 54 136 173
Peters, J.-M. 92 137
Piñaga, F. 54
Pinto, F. 138
Plamann, M. 139
Plawinski, E. 73
Podile, A.R. 140
Polley, S.D. 141
Prakash, A.P. 140
Prantera, G. 9
Prieto, J.A. 116
Puente, P. 22
Punt, P.J. 63
Querol, C.B. 24
Raju, N.B. 142
Ramón, D. 54 106 136 173
Ramos Ruiz, A. 143
Ratledge, C. 179
Reddy, C.A. 37
Redl, B. 110
Register, E. 89
Reindl, M. 110
Renglin, A. 133
Reymond-Cotton, P. 144
Rhodes, J.C. 151
Ribeiro, R.A. 189
Richardson, A. 168
Riggle, P.J. 14 151
Roach, P.L. 147
Robbins, P.W. 112 151 187
Roberts, C.F. 96 100
Roewer, I. 132

Roghi, C.H. 180
Rosenkranz, H.S. 145
Ruijter, G.J.G. 10 146
Ruiz-Herrera, J. 67
Samejima, I. 182
Sami, M. 147
Samson, A.C.R. 100
Sankawa, U. 58
Sano, M. 148
Sanz, P. 116
Sapag, A. 45
Saunders, G. 174
Saxton, J. 28
Scazzocchio, C. 61 129 149 161
Schaap, P.J. 156
Schneck, J.P. 128
Schofield, C.J. 147
Schriever-Schwemmer, G. 133
Schultz, N. 133
Seguardo, M. 22
Sekiguchi, J. 169
Sekine, H. 72
Selkar, E.U. 79
Sharp, J.A. 131 164
Shaw, P.J. 76
Shearer, G.Jr. 50
Shin, T.H. 186
Shroff, R.A. 150
Sienko, M. 165
Sillaots, S. 177
Simenel, C. 55
Singh, N.K. 73
Siverio, J.M. 18 135
Skloss, T.W. 87
Slakhorst, M. 33
Small, A.J. 39
Smith, A. 66
Söderpalm-Berndes, C. 133
Sollinger, H. 128
Song, J. 47
Song, Y.E. 26
Sonneborn, A. 154
Sophianopoulou, V. 161
Specht, C.A. 112 151 187
Stadler, D.R. 152
Stein, T. 153

Steiner, J. 45
Stewart, P. 155
Stöffler, G. 68 110
Stoldt, V.R. 154
Storms, R. 177
Stubbs, J. 127
Suárez, T. 129
Sudoh, M. 160
Sumi, M. 42
Sumitani, J.-i. 84
Suykerbuyk, M.E.G. 156
Swart, K. 172
Tada, H. 58
Takagi, M. 75 118 160
Takashima, S. 157
Talbot, N.J. 158
Tamura, G. 113
Tan, D. 159
Tang, A. 183 184
Tanzarella, C. 133
Tatsuno, K. 160
Taura, S. 2
Tazebay, U.H. 161
Then Bergh, K. 103 162
Thompson, S.A. 163
Thorner, J. 47
Thrane, C. 78
Tien, M. 155
Tigami, Y. 107
Tiveron, C. 133
Todd, R.B. 164
Toida, J. 169
Topzewski, J. 165
Torralba, S. 46
Torralba, S. 166
Tóth, B. 91
Tréton, B.Y. 98
Trueman, L.J. 167
Trueman, L.J. 168
Tsang, A. 177
Tsuchiya, A. 169
Tsukagoshi, N. 83
Tsurumaki, S. 84
Turner, G. 90
Ueda, M. 84
Uozumi, T. 121 148 157

Valenciano, S. 170
Valera, J.L. 138
Vallés, S. 54
van de Vondervoort, P.J.I. 156
van den Broeck, H.C. 146
van den Broek, H.W.T. 172
van den Hondel, C.A.M.J.J. 63
van Dijk, R. 172
van Generen, I.A. 171
van Heemst, D. 172
Van Hummelen, P. 133
Van Kan, J.A.L. 43
van Loon, A.P.G.M. 114
Van Nistelrooy, J.G.M. 43
van Schothorst, E. 100
Varga, J. 91
Vater, J. 153
Ventura, L. 173
Vichitsoonthonkul, T. 174
Villaescusa, A. 143
Vinetski, Y 1
Visser, J. 10 59 106 136 146 156
Vizoso, A. 143
Vogel, K. 114
von Döhren, H. 175
Voutsinas, G. 133
Waldron, C. 66
Wang, Z. 132
Watavai, T. 72
Weimann, B.J. 114
Wessels, J.G.H. 176
Whittle, J.R.S. 48
Whitwam, R.E. 155
Wieser, J. 185
Wild, J.R. 181
Williams, B.A. 177
Willins, D.A. 180
Winter, K.R. 14 151
Wolkow, T.D. 178
Wright, M. 23
Wynne, J.P. 179
Wysong, D. 85
Xiang, X. 117 180
Xin, M. 180
Xoconostle-Cazares, B. 187
Xu, B. 181

Yamada, H. 182
Yamada-Okabe, H. 160
Yamashita, Y.M. 182
Yanagida, M. 182
Yasukawa, M. 107
Yaver, D.S. 163
Ye, X.S. 130 183 184
Yokoyama, A. 121
Yu, J.H. 185
Yu-Lee, L.Y. 117
Zachariae, W. 186
Zarani, F.E. 133
Zeller, K.A. 99
Zimmerman, J.W. 187
Zinjo, Z. 133
Zucchi, O.L.A.D. 24
Zucchi, T.M.A.D. 24 188 189

KEYWORDS

ABC transporter 43
Acetamidase regulation 3 120
Acetate regulation 164
Acetyl CoA regulation 52
Acetylglycerol lipase 169
Actin 178
Active site analysis 159
ADA element 62
Aflatoxin biosynthesis 23 67 87
Alkaptanuria 149
Allergens 22
AMA1 1
Amino acid starvation 161
Anaerobic survival 104
Anaphase promoting complex 137 186
Aneugens 133 143 145
Aninolevulinate synthase 159
Antibiotic biosynthesis 90
Antifungal protein 110
Antigens 22
Arabinoxylan degradation 59

Arginine biosynthesis 173
Ascospore viability 24
Aspergillus as a model system 40 60
Autolysis 55 148
Azacytidine 24
Benomyl 138
Biolistic transformation 30
Biological control 140
Bread making 116
Calmodulin 41 42 50 105
cAMP-dependent protein kinase 10
Carbon regulation 52 61 78 98 106 121 144 146 150 157 174
Catalases 85 170
CCAAT-binding protein 83
Cell cycle 41 42 57 60 76 92 119 130 137 139 182 183 184 186
Cell walls 55 89 111 112 134 187
Chaperonin 171
Chitin synthases 7 14 112 118 122 151 160
Chlorinated alkanes 145
Chromosome mis- segregation 133 143
Chromosome walking 2
Chromosomes 8
Conidial germination 35a 36 42 138 161
Conidial pigments 71
Conidiation 4 7 10 13 26 35a 36 47 49 67 71 82 85 94 108 109 118 151 154 185
Contig mapping 12
Cosmid vectors 2
Cutinase 171
Cyclosome 137 182 186
Cysteine synthase 165
Cytochrome P-450 monooxygenase 87
Cytoskeleton 138
Dehydroquinase II 16 93
Diaminobutanone 67
Dihydro-orotate dehydrogenase 66
DNA binding sites 3
DNA damage checkpoint 184
DNA methylation 24 79
DNA repair 9 172
DNA replication factor C 80

Dolichyl phosphoryl mannose synthase 187
Duplicate genes 177
Duplication inactivation 24
Dynein 180
Electrophoretic karyotype 44 48
Electroporation 81
Electrospray mass spectrometry 93
Enolase 107
Error-prone DNA repair 25 172
Ethidium bromide resistance 65
Evolution of fungi 123 132
Extracellular enzymes 28
Fatty acid synthases 19
Fatty acids as carbon source 170
Folate regulation 101
Fungal genetics 40 60
G protein signalling 185
Gain-of-function mutants 3
Galactosidases 46 166
GATA factor 68
Gene clusters 18 88 135
Gene disruption 35 75
Gene expression on plasmids 1
Gene inactivation 188
Genome sequencing 11 69
Genomics 11 69
Genotoxicity testing 143
Geodin biosynthesis 58
Germination 35a 36 42 138 161
Glucan biosynthesis 89 111
Glucanases 55
Glucoamylase genes 44
Gluconeogenesis 107
Glucose oxidase 65
Glucosidase 84 113 121
Glycerol 35a
Glycolysis 107
Glycoproteins 22 28 74 134
Haem biosynthesis 159
Heat shock 85 125

Heat tolerance 15
Heterkaryon incompatibility 99 34
Heterologous expression of immunoglobulin
Heterologous gene expression 63 128 181 189
Hexose phosphorylation 146
Homogentisate assay 53
Horizontal gene transfer 20
Hydrophobicity 134
Hydrophobins 158 176
Hydroxylaminopurine mutagenesis 9
Hyphal branching 82
Hyphal growth 185
Hyphal walls 7 14 176
Industrial gene expression 63
Insertional mutagenesis 38 82
Intron evolution 132
Invertase 28
Iron binding site 97
Isocitrate lyase 170
Isopenicillin N synthase 97
Isopenicillin N synthase 147
Laccases 37
Leucine biosynthesis 177
Leucine zipper 164
Lipoxygenase 21
Maltose induction 113
Manganese peroxidase 155
Maternal inheritance 33
Meiotic drive 142
Metals and hydroquinase II 16
Methionine biosynthesis 101
Microbodies 170
Microglobulin 128
Microprojectile transformation 73
Microtubule inhibitors 166
MIP 79
Mitochondrial genomes 132
Mitochondrial inheritance 33 64
Mitochondrial recombination 91
Molybdenum cofactor 5 48

Multicopy transformants 54
Multidrug resistance 43
Mutagens 9 145 184
Mycotoxin biosynthesis 19 21 23 31 67 86 87
Neutrophil recruitment inhibitory factor 189
Nitrate reduction 5 18 135
Nitrate transporter 135 167 168
Nitrogen regulation 39 56 61 141
Nuclear distribution 94 117 139 180 178 179
Nucleases 148
O-methyltransferase 86
Organophosphate hydrolases 181
Overproduction mutants 65
Oxalate sensitivity 26 71
Oxidative stress 85
Parasexual cycle 32
Pathogenicity 7 22 56 70 112
PCR identification of species 44
Pectin induction 156
Penicillin biosynthesis 17 90 97 103 153 162 174 175
Penicillin biosynthesis
PENR1 penicillin regulation motif 103 162
Peptide biosynthesis 153
Peroxidase 155
Peroxisomes 170
Pesticide degradation 181
pH regulation 51 102 124 174
Phenylacetic acid uptake 52
Phenylalanine catabolism 149
Pheromone signaling 47
Phosphatase excretion 166
Phosphoglycerate kinase 98
Physical mapping 12
Polyamines 67
Poly(A)-binding protein 108
Polyketide synthase 58
Polyols 36
Polypeptide cleavage 72
Population studies 33
Proline catabolism cluster 61

Proline uptake 161
Promoter analysis 27 51 83 103 113 144 157 162 174
Promoter CCAAT motif 131
Protein disulphide isomerase 126
Protein domains 100
Protein electrophoresis 62
Protein excretion 166
Protein kinases 10 35a 41 42 57 130 183
Protein secretion 171 163
Protolytic regulator activation 102
Proteolysis in cell cycle 92 182
Protolast gene expression 125
Protoplast regeneration 138
Purine hydroxylases 5 48
pyrG-blaster 35
Pyridoxine biosynthesis 6
Pyrimidine analogue resistance 66
Pyrimidine biosynthesis 66
Pyruvate decarboxylase 104
Quelling 79
Quinate regulation 96 100
Recombination 152
Replicating plasmid 1
Retrotransformation 189 188
Rhamnogalacturonan hydrolase 156
Rho1 GTP-binding protein 111
RIP 79
RNA transformation 188 189
S-phase checkpoints 183
Septation 178
Septin 115
Sexual reproduction 4 26 71 72 94 123
Signal receptor particle 163
Single strand conformational polymorphism 150
Speciation 123
Species identification 62
Splicing mutant 76
Spore germination 36 42 138 161
Starch induction 121
Sterigmatocystin biosynthesis 19 21 86 87

Superoxide dismutases 74
Supersuppressor 29
Suppressor analysis 180
Taka-amylase 83
Tan1 transposable element 127
Tannase 72
TATA-binding protein 95
Taxonomy 123
Telomeres 13
Temperature-sensitive splicing 76
Transformation 35 73 77 81
Transposable elements 38 127
Trehalose-6-phosphate phosphatase 15
Trehalase 35a 36
tRNA suppressor 29
Transcription factors 129
Uric acid catabolism 129
Virus spread 34
Wall-bound enzymes 46
Wood rotting fungi 37
Xylanases 45 54 106 136
Yeast-hyphal dimorphism 50 154
Zinc finger motif 39 164

GENES

A. nidulans

aatA 17 103
abaA 109
acvA 17 90 162
amdA 3
amdX 120s
anka 184
apsA 94 178
areA 56c 61 104
argB 173c
aspB 115s
aspd1 22
atrA,B 43s
benA,C 166
benA promoter 30h

bim 139
bimE 76 137c 182c 183 186c
brlA 109
CaMK 41
catB 85s
chsA 118s
chsB 14s 160h
chsD 118s 151s
chsE 151s
cnxC 5
creA 61 78c 150 157c
crnA 135c 167c 168c
cysB 165s
endoxylanase 116h
fabM 108
facB 164s
fadA 185s
fahA 149
fasA,B 19s
fksA 89s
flbA 47c 185
flbB,D 109
frA 146s
glnA 6
gpdA promoter, terminator 181
hapC 131s
hemA 159c
het 99
hfaB 178
hmgA 149
hxA 48c
hymA 82
ipnA 17 20c 51 97 147 162
meaB 141s
mecC 101
methD,H 101
muyA,B 129
niaD 135c
niiA 18c 135c
nim 139

nimA 57 130 178 184
nimE 42
nimT 130 184
nimX 42 130 184
npeE 17
npgA 26 71
nud 139
nudA 178 180
nudC 29c 117ce 178 180
nudF 178 180
orlA 15s
pacC 51 102c
palA 124s
pdca 104s
pgkA 98c
prgA,B 17
prnB 161
pyrE 66s
pyroB 6
qutA 96 100
qutE 16 93c
qutR 96
rodA 35 158
samA,B 94
sep 139
sepA 178
snaA-E 180
sbrA-D 109
stcJ,K 19
stcL 87
stcP 86s
stuA 4c 154c
sufA 180
tamA 6 39s
TBP 95hs
treA 35a 36s
tubA 180
uaY 129
uvsB 9
uvsC 25 172s

uvsE 9
uvsF 9 80s
uvsI 25
velA 26 71s
xlnC 106s
xlnA 136sh
xlnB 54e 136sh
yA 37c

Other *Aspergilli*

-amylase 116h
B -glucosidase 121s
abfB 59
agdA 113s
argI 173s
atX 58s
axhA 59s
bglI 84s
bipA 171
CaM 50
chsD 112s
chsE 7
chsG 14s
enoA 107s
facB 164s
glucoamylases 44
leu2A,B 177s
mdlB 169s
niaD 27
niiA 27
norA 23s
nucO 148es
[*oliA*] 91
pdiA 126s
pkaC 10s
rhgA 156
srpA 163s

Other fungi

AFP 110

Asm-1 4c
bgaS 1e
cbh1 157
cre1 78c
cut4 182c
Endoxylanase B 45s
NUT1 56c
paf 110c
pcbC 174
PcCHS1-4 122s
Rim1 102c
sreP 68s
urbs1 68c
YNII 18
YNRI 18

Other organisms

DnudC 29c
microglobulin 128e
narK 168c
nar-3 168c
opd 181
RnudC 29c

ORGANISMS

Fungi

A. aculeatus 84 156
A. awamori 44 171e
A. flavus 74
A. fumigatus 7 14 22 55 70 74 112 134
A. niger 10 74 121 126 140 164 177
A. niger var. *awamori* 127
A. oryzae 72 81 107 113 114 155e 164 169
A. parasiticus 27 35 67
A. terreus 58 74 173
A. tubigenis 59
Acremonium chrysogenum 20
Beauveria bassiana 62 81
Candida albicans 154
Erysiphe graminis 30
Gliocladium virens 181h
Hansenula polymorpha 135

Histoplasma capsulatum 50
Magnaporthe grisea 2 56c
Metarhizium anisopliae 62
Neurospora crassa 4c 81
Penicillium canescens 1e
P. chrysogenum 20 68 103 110 122 174 175
P. purpurogenum 45
P. urticae 81
Phanerochaete chrysosporium 155h
Saccharomyces cerevisiae 95h 102 136h 160h 163 182c 186c187
Sclerotinia sclerotiorum 144
Trichoderma reesei 157c
Trichoderma sp. 78
Ustilago maydis 2 68 187
Yarrowia lipolytica 98c
Other organisms
Bacillus subtilis 140
Escherichia coli 168
Streptomyces jumonjinensis 97
Xenopus laevis 137c

Superscripts:

c sequence comparison
e Expression of
heterologous gene in *Aspergillus*
h *Aspergillus* gene
expressed elsewhere
s Sequence or clone