

Supplementary Table 1 The *A. fumigatus* orthologs of *C. albicans* biofilms formation transcriptional regulators

Biofilm regulators in <i>C.albicans</i>	Orthologs in <i>A. fumigatus</i>	Function in <i>A. fumigatus</i>	Identities	References
<i>flo8</i>	Afu7g02260 (<i>somA</i>)	Regulator of adherence, biofilm formation, development, virulence and cell wall homeostasis	23%	1-3
<i>efg1</i>	Afu2g07900 (<i>stuA</i>)	APSES domain transcription factor involved in regulation of conidiophore development, biofilm formation and secondary metabolism	73%	2,4-6
<i>bcr1</i>	Afu3g09820 (<i>dvrA</i>)	Regulator of virulence and host cell interactions	71%	7
<i>brg1</i>	Afu3g13870 (<i>nsdD</i>)	Regulator of asexual development, mating and putative regulator of cell wall synthesis	68%	8-10
<i>tec1</i>	Afu1g04830 (<i>abaA</i>)	Transcriptional activator involved in regulation of conidiation, cell death, autolysis and biogenesis of gliotoxin	48%	11,12
<i>leu3</i>	Afu2g03460 (<i>leuB</i>)	The Zn ₂ Cys ₆ -type transcription factor LeuB cross-links regulation of leucine biosynthesis and iron acquisition	43%	13
<i>tup1</i>	Afu6g05150 (<i>rocA</i>)	Transcriptional repressor	59%	14
<i>zap1</i>	Afu1g10080 (<i>zafA</i>)	The zinc-responsive transcription factor that controls the adaptive response to zinc starvation and virulence	39%	15,16
<i>cas5</i>	Afu1g16590 (<i>brlA</i>)	A key activator for developmental initiation and transcription factor of response to nitrogen depletion	48%	6,17,18
<i>rim101</i>	Afu3g11970 (<i>pacC</i>)	The pH-responsive PacC transcription factor governs epithelial entry and tissue invasion during pulmonary aspergillosis	67%	19,20

<i>bpr1</i>	Afu1g03210 (<i>flbD</i>)	Transcription activator governs conidium formation and development	61%	17
<i>ada2</i>	Afu2g10640 (<i>adaB</i>)	A subunit of the SAGA complex, involved in regulation of conidiophore development, biofilm formation and drug resistance	43%	21,22
<i>ace2</i>	Afu3g11250 (<i>ace2</i>)	Transcription factor governs pigment production, conidiation and virulence	45%	23
<i>gcn4</i>	Afu4g12470 (<i>cpcA</i>)	Regulator of amino acid biosynthesis and virulence	39%	24,25
<i>fcr3</i>	Afu2g02540 (<i>rmsA</i>)	Transcription factor governs gliotoxin cluster metabolites	28%	26
<i>gzf3</i>	Afu2g13380 (<i>areB</i>)	Regulator involved in nitrogen and carbon metabolism in <i>Aspergillus nidulans</i>	89%	27,28
<i>snf5</i>	Afu2g16840	Unknown function	32%	—
<i>try2</i>	Afu3g02380	Unknown function	42%	—
<i>sfp1</i>	Afu1g14750	Unknown function	66%	—
<i>taf14</i>	Afu5g12190	Unknown function	38%	—
<i>war1</i>	Afu7g01640	Unknown function	45%	—
<i>try5</i>	Afu2g16230	Unknown function	73%	—
<i>gal4</i>	Afu3g06740	Unknown function	38%	—
<i>suc1</i>	Afu1g17150	Unknown function	28%	—
<i>rfg1</i>	Afu4g10820	Unknown function	49%	—
<i>zcf28</i>	Afu1g01650	Unknown function	38%	—
<i>zcf32</i>	Afu1g01850	Unknown function	56%	—
<i>zcf34</i>	Afu5g01700	Unknown function	37%	—
<i>ahr1</i>	Afu5g11070	Unknown function	35%	—
<i>dal81</i>	Afu3g08050	Unknown function	32%	—

<i>fgr27</i>	Afu8g04540	Unknown function	29%	—
<i>ndt80</i>	ND	—	—	—
<i>rob1</i>	ND	—	—	—
<i>rfx2</i>	ND	—	—	—
<i>nrg1</i>	ND	—	—	—
<i>try4</i>	ND	—	—	—
<i>try6</i>	ND	—	—	—
<i>als1</i>	ND	—	—	—
<i>als2</i>	ND	—	—	—
<i>als3</i>	ND	—	—	—
<i>hwp1</i>	ND	—	—	—
<i>ugm6</i>	ND	—	—	—
<i>tye7</i>	ND	—	—	—
<i>mss11</i>	ND	—	—	—
<i>czf1</i>	ND	—	—	—
<i>try3</i>	ND	—	—	—
<i>uga33</i>	ND	—	—	—
<i>zcf31</i>	ND	—	—	—
<i>zcf39</i>	ND	—	—	—
<i>zfu2</i>	ND	—	—	—
<i>znc1</i>	ND	—	—	—
<i>meT4</i>	ND	—	—	—
<i>not3</i>	ND	—	—	—
<i>sap6</i>	ND	—	—	—

To detect the orthologs, a method called reciprocal Best Hits (RBH) was used. Orthologs are assumed if two genes each in a different genome find each other as the best hit in the other genome²⁹.

The descriptions of the orthologs in *A. fumigatus* are based on FungiDB database (<http://fungidb.org/fungidb/>) release 56, 15 Feb 2022 and NCBI-Pubmed (<https://www.ncbi.nlm.nih.gov>).

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