

Supplementary Table 4 Physical and genetic mapping of cloned *A. niger* genes

Gene	Genbank no	Linkage group	Super-contig	Orf name	reference CHEF	reference parasexual analysis
<i>abfA</i>	L29005	II	1	An01g00330	this study	
<i>pepB</i>	M68871	II	1	An01g00530	¹	¹
<i>xyrA</i>	AF219625	II	1	An01g03740	this study	
<i>cpcA</i>	X99215	II	1	An01g07900		this study, ²
<i>kexB</i>	Y18127	II	1	An01g08530	this study	
<i>xlnD</i>	Z84377	II	1	An01g09960	this study	
<i>pgal</i>	X58892	II	1	An01g11520	this study	
<i>cbhB</i>	AF156269	II	1	An01g11660	this study	
<i>pgaE</i>	Y14386	II	1	An01g14670	this study	
<i>goxC</i>	X16061	II	1	An01g14740		^{3,4}
<i>creA</i>	L03811	IV	2	An02g03830		⁵
<i>pkaC</i>	X94399	IV	2	An02g04270		⁶
<i>pgaB</i>	Y18805	IV	2	An02g04900	this study	
<i>mpdA</i>	AY081178	IV	2	An02g05830	this study	⁷
<i>pepE</i>	U03278	IV	2	An02g07210	¹	¹
<i>pacC</i>	X98417	IV	2	An02g07890	⁸	⁸
<i>aglB</i>	Y18586	IV	2	An02g11150	this study	
<i>hxA</i>	AJ009973	IV	2	An02g14380	this study	
<i>pelB</i>	X65552	VI	3	An03g00190	this study	
<i>axhA</i>	Z78011	VI	3	An03g00960	this study	
<i>rDNA</i>	X78538	VI	3	An03e03200	⁹	
<i>pmeA</i>	X54145	VI	3	An03g06310	this study	
<i>glaA</i>	AY250996	VI	3	An03g06550	⁹	
<i>glcA</i>	AY955284	VI	4	An04g04890		¹⁰
<i>acuA</i>	X16990	VI	4	An04g05620		¹¹
<i>pgaC</i>	A21180	VII	5	An05g02440	this study	
<i>aglA</i>	X63348	VIII	6	An06g00170	⁹	

<i>xkiA</i>	AJ305311	IV	7	An07g03140	¹²	¹³
<i>pepC</i>	M96758	IV	7	An07g03880	this study	
<i>pepF</i>	X79541	IV	7	An07g08030	this study	
<i>eglB</i>	X54145	IV	7	An07g08950	this study	
<i>rodA</i>	DQ349135	IV	7	An07g03350	this study	
<i>cbhA</i>	AF156268	IV	7	An07g09330	this study	
<i>trpC</i>	X07071	VIII	8	An08g06080		¹⁴
<i>acuB</i>	U56097	VIII	8	An08g06580		¹¹
<i>cprA</i>	Z26938	VIII	8	An08g07840	⁹	
<i>niaD</i> (R)	M77022	VIII	8	An08g11170		¹⁴
<i>faeA</i>	Y09330	I	9	An09g00120	¹⁵	
<i>abnA</i>	L23430	I	9	An09g01190	this study	
<i>rgaeA</i>	AJ242854	I	9	An09g02160	this study	
<i>pgaD</i>	Y18806	I	9	An09g03260	this study	
<i>bphA</i>	X52521	I	9	An09g03500	⁹	¹⁶
<i>pepD</i>	L19059	I	9	An09g03780	¹	¹
<i>prtF</i>	AJ567910	V	10	An10g00820		¹⁷
<i>plyA</i>	AJ276331	V	10	An10g00870	This study	
<i>pelC</i>	AY839647	VII	11	An11g04030	This study	
<i>bipA</i>	Y08868	VII	11	An11g04180	¹⁸	
<i>nicB</i> (R)	T. Goosen (personal communication)	VII	11	An11g10910	⁹	¹⁹
<i>rhgA</i>	X94220	III	12	An12g00950	this study	
<i>pyrA</i> (L)	X96734	III	12	An12g03570	⁹	²⁰
<i>axeA</i>	A22880	III	12	An12g05010	this study	
<i>pgaX</i>	A39428	III	12	An12g07500	this study	
<i>glkA</i>	X99626	III	12	An12g08610	this study	
<i>areA</i>	X81998	III	12	An12g08960	this study	²¹
<i>faeB</i>	AJ309807	III	12	An12g10390	this study	
<i>alcB</i>	AY955276	II	13	An13g00950	this study	

<i>eglA</i>	AJ224451	I	14	An14g02760	this study	
<i>argB</i>	M19158	I	14	An14g03400	²²	²²
<i>rhgB</i>	X94221	I	14	An14g04200	This study	
<i>pelA</i>	X60724	I	14	An14g04370	This study	
<i>pepA</i>	U03507	I	14	An14g04710	⁹	¹
<i>aguA</i>	AJ290451	I	14	An14g05800	This study	
<i>abfB</i>	L23502	III	15	An15g02300	This study	
<i>pgalI</i>	X58893	III	15	An15g05370	This study	
<i>xlnR</i>	AJ001909	III	15	An15g05810	²³	²³
<i>gpdA</i>	X99652	V	16	An16g01830	⁹	
<i>pkaR</i>	AJ296317	V	16	An16g03740		⁶
<i>pgaA</i>	Y18804	V	16	An16g06990	this study	
<i>gatA</i>	AY955283	V	17	An17g00910	this study	
<i>nirA</i> (L)	M68900	VIII	18	An18g02330	this study	¹⁴
<i>bglA</i>	AF121777	VIII	18	An18g03570	this study	
<i>pelD</i>	M55657	IV	19	An19g00270	this study	

- 1) the *oahA* gene corresponds with the *pvtF* mutation
- 2) the *cpcA* disruption was mapped to linkage group II using the parasexual cycle (results not shown)

References Supplementary Table 4

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