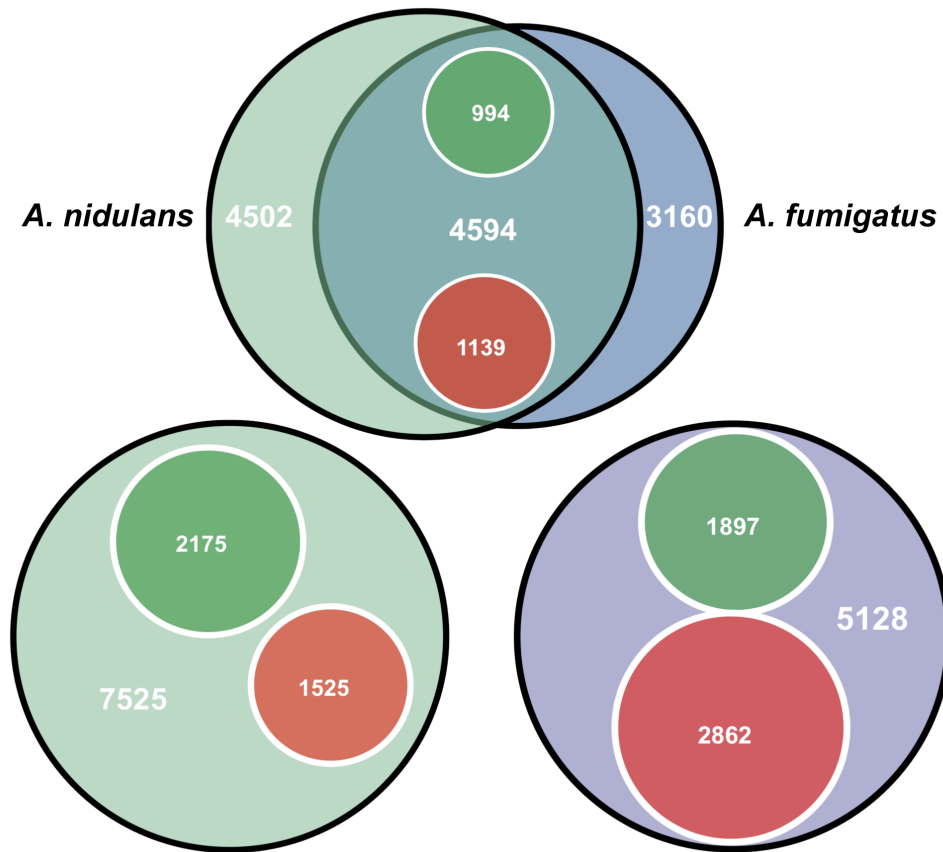


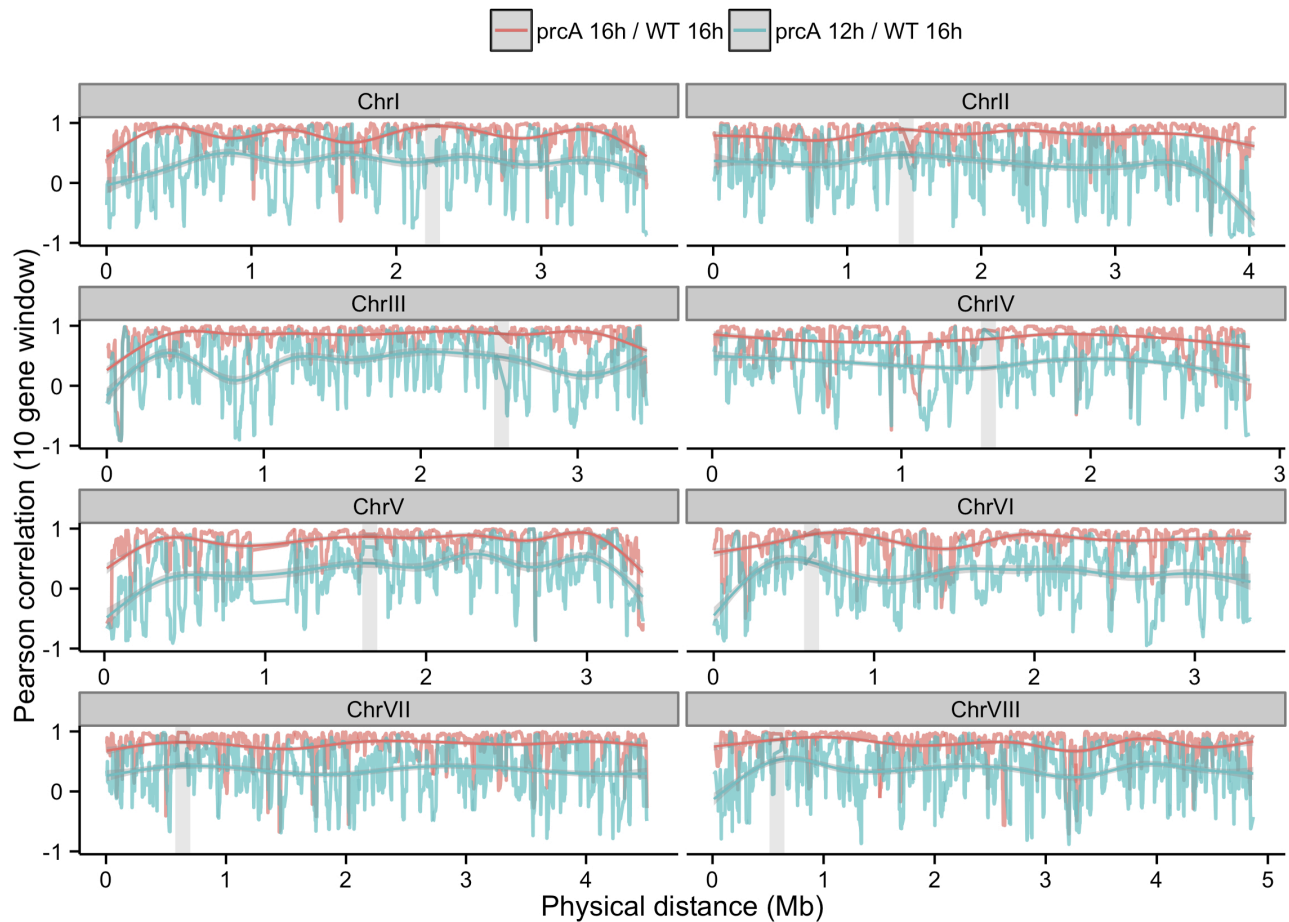
Supplementary Figure 1.

Microarray circuit, where each line represents a single competitive hybridization and each sample comparison includes dye-swapped technical replicates. Under the medium density culture conditions used, wild-type acquires competence between 14 and 15 hours, while *prcA* acquires competence between 12 and 14 hours.



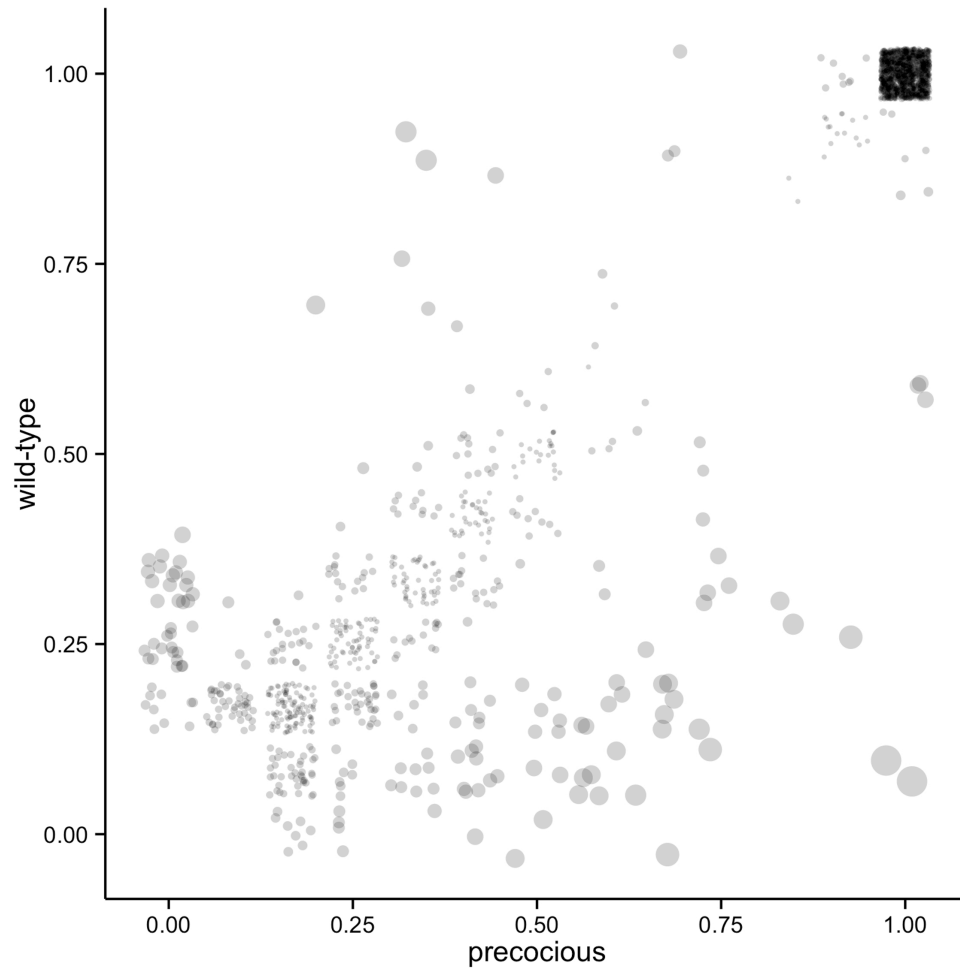
Supplementary Figure 2.

Venn diagram of competence regulated gene expression concordant between *A. nidulans* (16 hours) and *A. fumigatus* (12 hours). Overlap represents number of orthologs – upregulated in green, downregulated in red. Lower diagrams show significantly differentially expressed genes by species.



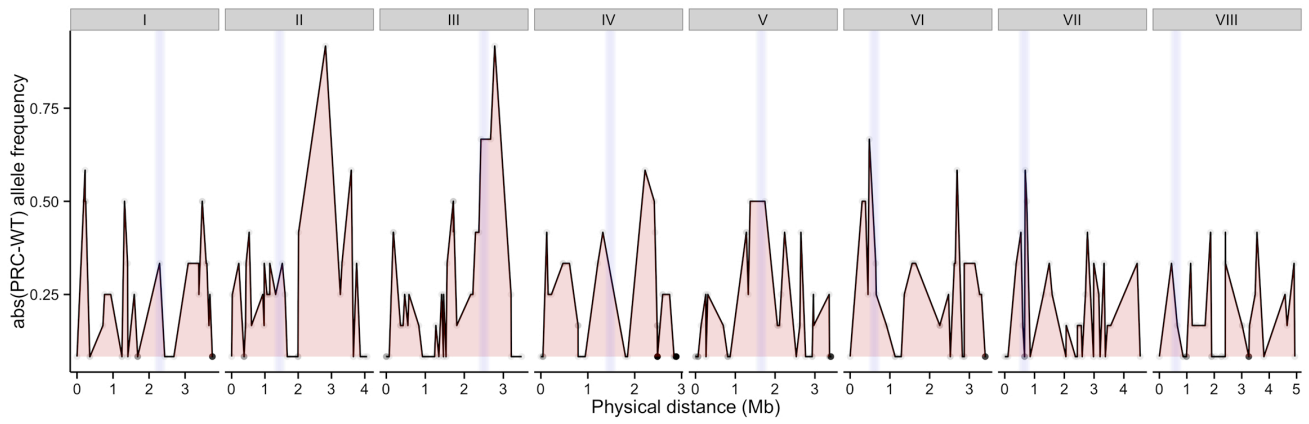
Supplementary Figure 3.

Correlation in gene expression between wild-type *A. nidulans* and *prcA* at 12 and 16 hours. A LOESS regression is plotted over coefficients for a 10 gene sliding window. Centromere positions are indicated by shaded bars.



Supplementary Figure 4.

Variant frequencies in wild-type and *precocious* sequenced bulks (12 genomes each). Point size is scaled by skew, and points for each cell of the 13 x 13 matrix are dispersed to minimise overplotting.



Supplementary Figure 5.

Variant differentiation between wild-type and *precocious* sequenced bulk genomes. Two high frequency variants on chromosomes II and III show evidence of linkage disequilibrium extending over several hundred kilobases. Centromere positions are indicated by shaded bars.

Supplementary Table 1

Name	Strain ID	Genotype	Source
MSF	58	<i>yA2, adE20, suA(adE20), AcrA1, galA1, pyroA4, facA303, sB3, nicB8, riboB2, veA1</i>	FGSC
A770	10076	<i>pyrG89, pabaB22, riboB2, veA1</i>	FGSC
A234	10380	<i>yA2, pabaA1, veA1</i>	FGSC
catABΔ	10383	<i>biA1, catAΔ(argB), metG1, catBΔ(argB) veA1</i>	Kawasaki et al. (1997) - CLK14
msnAΔ	10542	<i>biA1, pabaB22, msnAΔ(Af pyrG), veA1 niiA4</i>	Suzuki (unpublished)
TNO2A21	11036	<i>pyroA4, riboB2, veA1, nkuAΔ</i>	Hynes (unpublished)
TNO2A25	11037	<i>pyrG89, pabaB22 nkuAΔ(argB), veA1 riboB2</i>	Hynes (unpublished)
MUS51BARB12	11068	<i>pyroA4, pyrG89, veA1, nkuAΔ</i>	Hynes (unpublished)
WIM28	11597	<i>prcA, prcB</i>	L. N. Yager
WIM27	11598	<i>prcA</i>	L. N. Yager
WIM126	11599	<i>yA2 pabaA1</i>	L. N. Yager
W27UPR24	11774	<i>prcA, pyrG89, pabaB22, riboB2</i>	WIM27 x A770
PP3	11892	<i>yA2, prcA, pabaA1</i>	WIM27 x A234
WIM27PNG15	12016	<i>wA3, prcA, pabaA1, niiA4, gatA312</i>	PP3 x RSB12
PPU+	12042	<i>yA2 pabaA1 pyrG89, pyroA4 nkuAΔ(Bar)</i>	WIM126 x MUS51BARB12
PPU-	12043	<i>yA2 pabaA1 pyrG89, pyroA4 nkuAΔ(Bar), veA1</i>	WIM126 x MUS51BARB12
AN1060Δ9	12062	<i>pyrG89, pabaB22 nkuAΔ(argB), veA1 kdmAΔ(Nc pyr-4) riboB2</i>	Transformation (TNO2A25)
AN1060Δ12	12063	<i>pyrG89, pabaB22 nkuAΔ(argB), veA1 kdmAΔ(Nc pyr-4) riboB2</i>	Transformation (TNO2A25)
W271/2	12076	<i>prcA, pyrG89</i>	WIM27 x WIM27UPR24
W28UR2/5	12077	<i>prcA, prcB, pyrG89, riboB2</i>	WIM28 x WIM27UPR24
	12096	W27PNG15/MSF diploid	12016/58
PUTA29-	12097	<i>yA2, alcA(P)-brlA, pabaA1, pyrG89, nkuAΔ(bar), veA1</i>	Transformation (pTA29 -> PPU-)
PUTA29+	12098	<i>yA2, alcA(P)-brlA, pabaA1, pyrG89, nkuAΔ(bar)</i>	Transformation (pTA29 -> PPU+)
WIM126 5-AC	12199	<i>yA2, pabaA1</i>	5-azacytidine treatment (WIM126)
W28A103/4	12200	<i>yA1, niiA4, prcB, veA1</i>	WIM28 x MUS51BARA10
dmrAΔ	12209	<i>yA2 pabaA1 pyroA4 pyrG89 nkuAΔ(bar) dmrAΔ(Ncr pyr-4)</i>	Transformation (PPU+)
AN1060ΔPV+	12211	<i>pabaA1 pyrG89, kdmAΔ(Nc pyr-4)</i>	AN1060K012 x WIM126
csnEΔ13	12212	<i>yA2, pabaA1, csnEΔ(Nc pyr-4), pyroA4, nkuAΔ</i>	Transformation (PPU+)
RJW75.2	12270	<i>pyroA4 stcEΔ bre2Δ(Af pyroA) veA1</i>	N. P. Keller/J. Strauss
RJW77.3	12271	<i>pyroA4 stcEΔ lsdAΔ(Af pyroA) veA1</i>	N. P. Keller/J. Strauss
RJW80.5	12272	<i>pyroA4 stcEΔ rtf1Δ(Af pyroA) veA1</i>	N. P. Keller/J. Strauss
RJW89.4	12273	<i>pyroA4 stcEΔ cdc73Δ(Af pyroA) veA1</i>	N. P. Keller/J. Strauss
AN1060xP10	12289	<i>yA1::[pLN7807] pyrG89, pyroA4, veA1</i>	Transformation (pLN7807 -> MUS51BARB12)
AN1060xP11	12290	<i>pyrG89, pyroA4, veA1 AN1060::[pLN7807]</i>	Transformation (pLN7807 -> MUS51BARB12)
LO1946	12324	<i>pyrG89, pyroA4, hhoA-GFP(Af pyroA), veA1 riboB2</i>	Oakley Lab. - LO1946
PRENB16	12422	<i>wA3, niiA4, gatA312, prcA, veA1</i>	WIM27 x RSB12
kdmAGFP16	12465	<i>pyrG89, hhoA-GFP(Af pyroA), kdmAΔ(Nc pyr-4)</i>	KOPV+ x LO1946
	12470	PRENB16/MSF diploid	12422/58
PBNB10	12489	<i>wA3, prcA, prcB, niiA4, biA1</i>	RSB12 x WIM28
WH1GFP6	12508	<i>pabaA1, hhoA-GFP(Af pyroA)</i>	WIM126 x LO1946
PAH1GFP5	12509	<i>prcA, histone H1-GFP(Af pyroA), pyroA?, nkuA?</i>	WIM27 x LO1946
PABH1GFP1	12510	<i>prcA, prcB, hhoA-GFP(Af pyroA), pyroA?, nkuA?</i>	WIM28 x LO1946
csnEH1GFP7	12515	<i>csnEΔ(Nc pyr-4), hhoA-GFP(Af pyroA), pyroA?, nkuA?</i>	csnEKO7 x LO1946
	12516	PBNB10/MSF diploid	12489/58
PABH13	12595	<i>prcA, prcB, hhoA-GFP(Af pyroA)</i>	PABH1GFP1 x WIM126
xPkdm+	12600	<i>pabaA1 pyrG89, AN1060::[pLN7807]</i>	AN1060xP11x WIM126
AN0888Δ	12632	<i>biA1, wA3, argB2, pyroA4, AN0888Δ(argB) veA1 riboB2</i>	J. Strauss
AN8211Δ	12633	<i>pabaA1 pyrG89, AN8211Δ(riboB), argB2, nkuAΔ(argB), veA1 riboB2</i>	J. Strauss
aodAΔ	12650	<i>nkuAΔ(argB), AN2099Δ(Af pyroA), veA1 niiA4</i>	Hynes (unpublished)
xPkdmAPU13	12809	<i>yA2 pabaA1 pyrG89, AN1060::[pLN7807]</i>	xPkdm+ x WIM126
YPU16	12810	<i>yA2 pabaA1 pyrG89</i>	xPkdm+ x WIM126
1Δ11-1	12915	<i>AN1997-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)
2F7-1	12916	<i>AN9060-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)
1E3-1	12917	<i>AN2012-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)
1Δ9-3	12918	<i>AN1944-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)
2Δ1-1	12919	<i>AN7170-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)
2F1-1	12920	<i>AN8636-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)
2E7-2	12921	<i>AN7873-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)
1F9-2	12922	<i>AN3280-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)
1A11-1	12923	<i>AN0785-Af pyroA (TNO2A21 background)</i>	Transformation (disruption -> TNO2A21)

Name	Strain ID	Genotype	Source
2G3-1	12924	AN9397-Af pyroA (TNO2A21 background)	Transformation (disruption -> TNO2A21)
2F9-2	12925	AN9090-Af pyroA (TNO2A21 background)	Transformation (disruption -> TNO2A21)
2F9-1	12926	AN9090-Af pyroA (TNO2A21 background)	Transformation (disruption -> TNO2A21)
1F3-1	12927	AN2893-Af pyroA (TNO2A21 background)	Transformation (disruption -> TNO2A21)
1F7-1	12928	AN3075-Af pyroA (TNO2A21 background)	Transformation (disruption -> TNO2A21)
2-2	12929	AN1569-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
3-2	12930	AN2001-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
3-6	12931	AN2001-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
4-5	12932	AN2036-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
5-2	12933	AN3075-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
5-5	12934	AN3075-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
7-1	12935	AN3433-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
8-5	12936	AN5775-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
8-9	12937	AN5775-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
9-1	12938	AN5870-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
9-2	12939	AN5870-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
9-3	12940	AN5870-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
11-1	12941	AN7896-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
11-2	12942	AN7896-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
12-1	12943	AN9147-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
13-5	12944	AN10906-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
19-2	12945	AN9060-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
19-3	12946	AN9060-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
21-1	12947	AN4878-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
21-2	12948	AN4878-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
21-4	12949	AN4878-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
22-1	12950	AN5209-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
22-2	12951	AN5209-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
22-4	12952	AN5209-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
48-1	12953	AN2893-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
48-3	12954	AN2893-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
54-2	12955	AN3688-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
54-11	12956	AN3688-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
76-1	12957	AN7170-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
76-6	12958	AN7170-Af pyroA (PPU+ background)	Transformation (deletion -> PPU+)
25-5	12959	AN0307-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
33-2	12960	AN1170-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
32-1	12961	AN1160-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
15-1	12962	AN0709-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
54-1	12963	AN3688-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
16-4	12964	AN1875-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
77-2	12965	AN7173-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
33-1	12966	AN1170-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
34-2	12967	AN1267-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
34-1	12968	AN1267-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
27-6	12969	AN0557-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
75-1	12970	AN7169-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
58-1	12971	AN4051-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
35-1	12972	AN1338-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
77-1	12973	AN7173-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
75-4	12974	AN7169-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
54-2	12975	AN3688-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
64-1	12976	AN5130-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
55-1	12977	AN3799-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
16-3	12978	AN1875-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
55-4	12979	AN3799-Af pyroA (MUS51BARB12 background)	Transformation (deletion -> MUS51BARB12)
PCV9	12980	prcC, yA2, pabaA1, pyroA4, pyrG89, nkuAΔ	Mutagenesis (PUTA29+)