Table 3. Mating type-specific genes from fission yeast

Common name	Systematic name	Mutant phenotype	Known mating-type specific	Description
M specific				
mfm1	*SPAPB8E5.05*	M specific sterility Redundant with *mfm2* and *mfm3*	Yes	M factor pheromone precursor
mfm2	*SPAC513.03*	M specific sterility Redundant with *mfm1* and *mfm3*	Yes	M factor pheromone precursor
mfm3	*SPBPJ4664.03*	M specific sterility Redundant with *mfm1* and *mfm2*	Yes	M factor pheromone precursor
mam1	*SPBC25B2.02c*	M specific sterility	Yes	ABC transporter, probably transports M factor
mam2	*SPAC11H11.04*	M specific sterility	Yes	P factor pheromone receptor
sxa2	*SPAC1296.03c*	M specific sterility	Yes	Secreted protease, down-regulates P factor
mam4	*SPAC10F6.12c*	M specific sterility	Reported not M specific	Farnesyl cysteine carboxyl methyltransferase, required for the M factor pheromone processing
cwp1	*SPAPB1A10.04c*	Essential (this work)	No	Geranylgeranyltransferase (alpha subunit)
	SPAPB1A10.02	Essential (this work)	No	Sequence orphan
mam3	*SPAP11E10.02c*	M specific sterility (this work)	No	Predicted glycoprotein, similar to SPBC21D10.06c (P specific)
	SPAC11H11.03c	Normal mating	No	Contains SMR (Small MutS-Related) domain
	SPAC11H11.05c	Normal mating	No	Sequence orphan
P specific				
map2	*SPCC1795.06*	P specific sterility	Yes	P factor pheromone precursor
map3	*SPAC3F10.10c*	P specific sterility	Yes	M factor pheromone receptor
map4	*SPBC21D10.06c*	P specific sterility (this work)	No	Predicted glycoprotein, similar to SPAP11E10.02c (M specific)
	SPAC1565.03	Normal mating	No	Sequence orphan

Mating type-specific genes were identified as described in the text. Genes shown in orange were not previously known to be specifically induced in a mating type-specific fashion. Mutant phenotypes and descriptions were compiled by using information from GeneDB (www.genedb.org), PombePD (www.proteome.com), and our own literature searches. Column four indicates whether mating type-specific expression previously had been studied. *SPAP11E10.02c* and *SPBC21D10.06c* have been independently identified and named *mam3* and *map4*, respectively (M. Yamamoto, personal communication).