

S1 Table. Amino acid identity (%) between different alleles of pheromone receptors from selected basidiomycete species. Proteins were aligned using ClustalW as implemented in Bioedit (Hall, 1999).

Species	Mating	Pheromone receptor gene	Accession number / Genome Locus (coordinates)	% aa identity
<i>Phaffia rhodozyma</i> (CRUB 1149)	Homothallic	<i>STE3-1</i>	PRJNA307837/ NODE_186 (11928..13388)	49
		<i>STE3-2</i>	PRJNA307837/ NODE_198(2416..3807)	
<i>Phaffia rhodozyma</i> (CBS 6938)	Homothallic	<i>STE3-1</i>	CED85384.1	50
		<i>STE3-2</i>	CED85379.1	
<i>Phaffia rhodozyma</i> (CBS 7918)	Homothallic	<i>STE3-1</i>	PRJNA306035/ LSVH01000226.1 (11858..13318)	50
		<i>STE3-2</i>	PRJNA306035/ LSVH01000253.1 (7004..8395)	
<i>Microbotryum violaceum</i>	Heterothallic bipolar	<i>A1</i>	ABU62847.1	20
		<i>A2</i>	ABU62846.1	
<i>Ustilago hordei</i>	Heterothallic bipolar	<i>Pra1</i>	CAJ41875.1	23
		<i>Pra2</i>	AAD56044.1	
<i>Cryptococcus flavescens</i>	Heterothallic tetrapolar	<i>A2</i>	CDR19322.1	29
		<i>A1</i>	CDR19327.1	
<i>Sporidiolobos salmonicolor</i>	Heterothallic tetrapolar	<i>A2</i>	ADM24775.1	26
		<i>A1</i>	ADM24772.1	
<i>Cryptococcus neoformans</i>	Heterothallic bipolar	<i>STE3 a</i>	AAN75624.1	31
		<i>STE3 alpha</i>	AAN75724.1	
<i>Cryptococcus gattii</i>	Heterothallic bipolar	<i>STE3 a</i>	AEG78597.1	31
		<i>STE3 alpha</i>	AEG78622.1	
<i>Sporisorium reilianum</i>	Heterothallic tetrapolar	<i>Pra1</i>	CAI59749.1	Pra1 vs. Pra2: 23 Pra1 vs. Pra3: 28 Pra2 vs. Pra3: 24
		<i>Pra2</i>	CBQ71125.1	
		<i>Pra3</i>	ABW21687.1	