

Table S2 Genes identified as differentially expressed in MAT α and MAT α -playing-a cells using RNA sequencing

Gene	Log ₂ Fold Change:	
	Unstimulated MAT α -playing-a	Stimulated MAT α -playing-a
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	Unstimulated MAT α	Stimulated MAT α
<i>MATα1</i>	7.56*	7.86*
<i>YCR097W-A</i>	3.97*	6.96*
<i>YDR008C</i>	4.30*	5.70*
<i>SAG1</i>	3.63*	5.49*
<i>YCL065W</i>	2.91*	5.33*
<i>TRP1</i>	4.35*	5.31*
<i>MATα2</i>	1.28*	3.08*
<i>YLR040C</i>	3.41*	2.38*
<i>YLR041W</i>	3.21*	2.03*
<i>YML131W</i>	0.66*	0.69*
<i>TPO2</i>	-0.74*	0.53*
<i>YPR158C-D</i>	-0.61*	-0.48*
<i>ADE17</i>	-0.75*	-0.48*
<i>BAP2</i>	-0.94*	-0.54*
<i>FSF1</i>	-0.64*	-0.58*
<i>ILV3</i>	-0.75*	-0.58*
<i>GDH1</i>	-0.87*	-0.60*
<i>FIT3</i>	-0.84*	-0.63*
<i>ALD5</i>	-1.03*	-0.88*
<i>BAT1</i>	-1.70*	-1.20*
<i>OAC1</i>	-2.27*	-1.57*
<i>LEU1</i>	-2.47*	-1.82*
<i>ADE2</i>	-1.38*	-1.93*
<i>GYP8</i>	-1.02*	-2.05*
<i>STE2</i>	-2.67*	-2.18*
<i>MFA1</i>	-1.23*	-2.80*
<i>YNL146C-A</i>	-2.57*	-4.00*
<i>MFA2</i>	-5.51*	-6.85*
<i>ASG7</i>	-2.68*	-9.11*
<i>AGA2</i>	-7.29*	-9.28*
Genes whose expression changed significantly only in pheromone-stimulated cells		
<i>YHR145C</i>	-0.61	3.63*

<i>YCR041W</i>	2.14	3.53*
<i>PCL1</i>	-0.12	1.85*
<i>SNL1</i>	0.05	1.75*
<i>YLR346C</i>	1.20	1.70*
<i>TOS6</i>	-0.03	1.30*
<i>INO1</i>	0.16	1.30*
<i>PST1</i>	-0.06	1.16*
<i>OYE3</i>	-0.22	1.05*
<i>TOS4</i>	-0.04	1.03*
<i>YOX1</i>	-0.12	0.97*
<i>IMD2</i>	0.02	0.95*
<i>PIR3</i>	0.47	0.95*
<i>LEU2</i>	0.21	0.91*
<i>SPO11</i>	0.05	0.88*
<i>MCD1</i>	0.07	0.87*
<i>HES1</i>	0.29	0.85*
<i>GRE2</i>	0.13	0.80*
<i>AAD16</i>	0.00	0.80*
<i>YJL218W</i>	0.41	0.79*
<i>YGL230C</i>	0.05	0.78*
<i>AAD6</i>	0.03	0.77*
<i>EGT2</i>	0.12	0.76*
<i>YJR154W</i>	0.19	0.74*
<i>MCH2</i>	0.35	0.73*
<i>HTA2</i>	-0.17	0.73*
<i>YDR134C</i>	0.06	0.69*
<i>PIR1</i>	-0.11	0.69*
<i>KDX1</i>	0.52	0.68*
<i>HSP31</i>	0.22	0.68*
<i>YGR035C</i>	0.17	0.66*
<i>APL1</i>	0.07	0.66*
<i>YNR064C</i>	0.02	0.64*
<i>YBR071W</i>	-0.04	0.63*
<i>HAL1</i>	0.48	0.62*
<i>YOL159C</i>	0.04	0.62*
<i>CRG1</i>	0.22	0.62*
<i>YNL134C</i>	-0.04	0.60*
<i>AAD10</i>	-0.15	0.60*
<i>SVS1</i>	-0.09	0.59*

<i>SPI1</i>	0.44	0.58*
<i>YDR034W-B</i>	-0.51	0.57*
<i>RNR1</i>	0.07	0.56*
<i>SRL3</i>	0.08	0.56*
<i>YNL058C</i>	0.21	0.55*
<i>YKE4</i>	-0.02	0.54*
<i>ACA1</i>	0.28	0.52*
<i>SSA4</i>	-0.10	0.50*
<i>HHF1</i>	-0.09	0.50*
<i>DSE4</i>	0.29	0.48*
<i>OAZ1</i>	0.13	0.47*
<i>SEO1</i>	0.24	0.47*
<i>NIS1</i>	-0.11	0.47*
<i>YEH1</i>	0.01	0.46*
<i>HXT1</i>	-0.08	-0.47*
<i>PHO12</i>	-0.24	-0.50*
<i>YOL103W-B</i>	-0.31	-0.50*
<i>SIT1</i>	-0.46	-0.51*
<i>PHO11</i>	-0.24	-0.52*
<i>ENA1</i>	0.00	-0.52*
<i>LEU9</i>	-0.22	-0.52*
<i>HIS4</i>	-0.50	-0.52*
<i>YPL257W-B</i>	-0.31	-0.53*
<i>ALT2</i>	-0.20	-0.54*
<i>PDH1</i>	0.08	-0.56*
<i>PRY2</i>	-0.29	-0.57*
<i>HXK1</i>	-0.03	-0.57*
<i>TAT1</i>	-0.35	-0.57*
<i>YJR003C</i>	-0.15	-0.66*
<i>THI22</i>	-0.26	-0.81*
<i>FET3</i>	-0.32	-0.83*
<i>AXL1</i>	-0.52	-0.93*

Genes whose expression changed significantly only in unstimulated cells

<i>RDN5-2</i>	2.90*	1.33
<i>RDN5-5</i>	2.75*	0.73
<i>RDN5-4</i>	2.66*	1.02
<i>RDN5-3</i>	2.51*	0.93
<i>RDN5-1</i>	2.34*	0.99
<i>RDN5-6</i>	2.34*	0.99

<i>YLR042C</i>	0.66*	0.31
<i>HER1</i>	0.64*	0.15
<i>HAP4</i>	0.55*	0.23
<i>YJL171C</i>	-0.59*	-0.20
<i>DRE2</i>	-0.59*	-0.19
<i>HMX1</i>	-0.64*	-0.32
<i>GAP1</i>	-0.64*	-0.25
<i>ARN2</i>	-0.65*	-0.41
<i>FUS1</i>	-0.65*	-0.06
<i>MAE1</i>	-0.70*	-0.15
<i>AGA1</i>	-0.85*	-0.15
<i>FIT2</i>	-0.89*	-0.40
<i>ISU2</i>	-0.92*	-0.28
<i>YGP1</i>	-1.04*	-0.10
<i>DIC1</i>	-1.26*	-0.28

* Indicates statistical significance determined by the default settings in Cufflinks ($p < 0.001$) (Trapnell *et al.* 2010). Numbers in bold indicate that there is a greater than two-fold change between the expression of the gene in *MAT α* -playing-a and *MATa* cells.

LITERATURE CITED

Trapnell, C., B. A. Williams, G. Pertea, A. Mortazavi, G. Kwan *et al.*, 2010 Transcript assembly and quantification by RNA-seq reveals unannotated transcripts and isoform switching during cell differentiation. *Nat. Biotechnol.* **28**: 511-515.