

SUPPLEMENTARY TABLE I. Comparison of over-represented functional clusters of genes and protein levels from MLY61 WT YPM vs SLAM ($p < 0.01$). Red highlighting indicates shared in common with the same comparison in the *gpa2Δ* strain. () = Ratio metric change of iTRAQ-generated differentially expressed proteins.

Common biological process	Down-regulated genes	Decreased protein level	Up-regulated genes	Increased protein level
Cellular organization and biogenesis	<i>ESF1 MAK5 UTP21 UTP22 UTP7</i> <i>BRX1</i> <i>RPL3 RPL40B RPS04 RRP5 ASC1</i>	<i>RPL5</i> (0.72)		<i>SNU13</i> (1.78) <i>NOP1</i> (1.48) <i>P4B1</i> (1.53) <i>RPS19A</i> (1.81) <i>RPS18B</i> (1.80) <i>RPL23B</i> (2.42) <i>RPL4B</i> (2.10) <i>RPL28</i> (1.82) <i>RPS12</i> (1.73) <i>RPS8B</i> (2.17) <i>ASC1</i> (1.52) <i>RPF0</i> (1.37) <i>RPS5</i> (2.27) <i>RPS17A</i> (3.01) <i>RPS24B</i> (2.07) <i>RPL25</i> (2.72) <i>RPS0B</i> (1.68) <i>RPL20B</i> (1.40)
RNA metabolism	<i>ESF1 LSM5 MAK5 MSE1 MST1 MSW1</i> <i>RRP5 SNR44 SNR56 SNR63 SNR68</i> <i>SNR72 SUP35 TAD2 TIS11 UTP21</i> <i>UTP22 UTP7</i> <i>DBP2 NCL1 PUS7 SNR75</i> <i>TRM1</i>			<i>KRS1</i> (1.31) <i>GUS1</i> (1.16)
Nucleotide/nucleobase metabolism		<i>ATP1</i> (0.74) <i>ATP2</i> (0.73)		<i>ADE6</i> (1.21)
Protein biosynthesis	<i>MCD4 MRP4 MRPL7 MRPL8 MSE1</i> <i>MST1 MSW1 RPL18A RPL7B RPS29B</i> <i>RPS9A RSM26 SUF5 SUP35</i> <i>MIS1</i> <i>MRPL3 RPL15A RPL22A RPL3 RPL31B</i> <i>RPL34A RPL36A RPL40B RPL7A RPL9A</i> <i>RPL9B RPS0A RPS13 RPS22B RPS23A</i> <i>RPS23B RPS28B RPS7B RPS9B SUP45</i> <i>TEF4</i>			<i>EFB1</i> (1.76) <i>EFY2</i> (1.20) <i>CDC33</i> (1.25) <i>TEF1</i> (1.29)
Carbon source utilization	<i>SUC2 SUC4</i>	<i>TDH3</i> (0.84) <i>TAL1</i> (0.87) <i>TPH1</i> (0.74)	<i>PCK1</i>	<i>FB41</i> (1.42) <i>ENO2</i> (1.48) <i>CDC19</i> (1.16) <i>PFK2</i> (1.29) <i>TDH1</i> (2.70) <i>PSA1</i> (1.38) <i>PDC1</i> (1.24) <i>GPM1</i> (1.19) <i>PGK1</i> (1.66)
Nitrogen source utilization	<i>ALD6 ARN1 ARN2 ASC1 BAP2 CCC2</i> <i>CTR1 CTR3 ENB1 FRE1 FTR1 GNP1</i> <i>MIS1 MSE1 MST1 MSW1 PHO84 RPS23A</i> <i>RPS23B RPS9A RPS9B SUF5 SUP35</i> <i>SUP4 SUP45 TAT1 TAT2 TEF4</i>	<i>ILV3</i> (0.67) <i>LEU1</i> (0.28) <i>HIS4</i> (0.73) <i>PEP4</i> (0.68) <i>URA2</i> (0.79)	<i>ARG5.6 GAT1 SDL1 STR3</i> <i>CAT2 CPA1</i> <i>DAL3 DAL80 ECM40 LEU1 LYS5</i> <i>MET13 MET6 SHC1 UGA3</i>	<i>CYS4</i> (1.27) <i>HYP2</i> (1.22) <i>CCY5</i> (1.37)

Metabolism	
DNA replication initiation	
Organelle biosynthesis structure/function	<i>QCR2</i> (0.45) <i>CYB5</i> (0.60) <i>IDP1</i> (0.59) <i>ACO1</i> (0.45)
Mitochondrial iron import	<i>ILV5</i> (1.39)
Other metabolic functions	
	<i>APT1</i> <i>COX10</i> <i>DFR1</i> <i>URA7</i> <i>ERG13</i> (0.63) <i>SOD1</i> (0.80) <i>BIO4</i> <i>CRC1</i> <i>MLS1</i> <i>FYV10</i> <i>PIL1</i> (0.57) <i>SOD2</i> (0.39) <i>SSC1</i> (0.87)