

Adaptive Evolution Relieves Nitrogen Catabolite Repression and Decreases Urea Accumulation in Cultures of the Chinese Rice Wine Yeast Strain *Saccharomyces cerevisiae* XZ-11

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SUPPORTING INFORMATION

Table S1. Primers used in the study

Primers	Sequences (5'-3')
GLN3-F	CTAATAACTTAATGCGTCACAA
GLN3-R	GGTAATATCGGAACAACAGA
GAT1-F	CTGATATGAATATGACTATGAAC
GAT1-R	TCCAGAATGATGATCTATTG
ARG1-F	ACTCATTCGTCACACCAA
ARG1-R	GATCTGATGTA CT CACACTCT
ARG3-F	GGTGAAGAATTTGCGAAACAG
ARG3-R	CAGCCACAGAGACAAGTTC
ARG4-F	GCCTCAGAAGAAGAATGC
ARG4-R	TCATCAAGAATCCTGTCAGAT
CAR1-F	GAAACAAACGGTGAAGGT
CAR1-R	TGTAGCAGGAATGTATAATGG
DAL80-F	GGAGTTGGTGACAGACCTATAC
DAL80-R	TAGTTCCACTTCCAGTTGCTT
GZF3-F	GCACATAATCTGGACAACCTT
GZF3-R	GACCGCTTGATTCTATATTACA
TOR1-F	CTTGTCGGTAGGTTGTC
TOR1-R	TGTTAGCAGTTCCAGTAGTAT
TOR2-F	TTCTTGCTGTTGATACTCTG
TOR2-R	ATAGTTCGCCAGTCTTGA
URE2-F	CTGGTGATGGAATTAGACA
URE2-R	GAAACGACTTTGTGACATT
DUR1,2-F	AAGAAGTAATGGTGGTGAAG
DUR1,2-R	AAGTAATAATAACTGGCTCATCA
DUR3-F	AACGATAAGGAACAAGAAGAAGAA
DUR3-R	CCAAGGTTAGGCTCAATCAAT
ACT1-F	TGGATTCTGGTATGTTCT
ACT1-R	GTCAATATAGGAGGTTATGG

Table S2 Genetic variants in the genome of adaptive evolution improved strains 4B, 7H, and 10G

(See Excel file Table S2.xlsx)

Table S3 Fast evolved genes in three evolved strains

(See Excel file Table S3.xlsx)

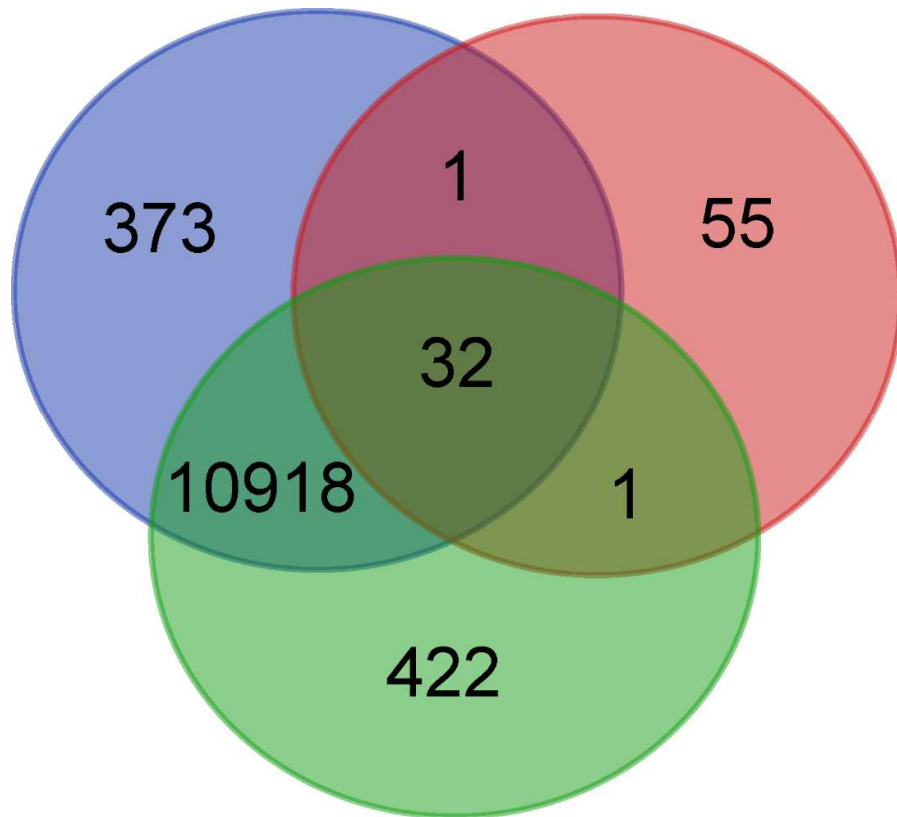


Figure S1 Comparative analysis of the variants among three evolved strains. The red circle stands for strain 4H; the blue circle stands for strain 7H, and the green circle stands for strain 10G.