

Table S1*Saccharomyces cerevisiae* strains used in this study.

| Strain | Genotype | Source of reference |
|-----------------|--|-----------------------|
| IFO10150 | <i>MATa ste-VC9 ura3-52 trp1-289 his3-Δ1 leu2-3112 pTRS7</i> | (Tejima, et al. 2017) |
| SCFAA1-4 | <i>SCFAA1-4-Ura MATa ste-VC9 ura3-52 trp1-289 his3-Δ1 leu2-3112 Scfaa1Δ::dpl200 Scfaa4Δ::dpl200</i> | (Tejima, et al. 2017) |
| SCFAA1-4-pTRS7 | <i>SCFAA1-4 MATa ste-VC9 ura3-52 trp1-289 his3-Δ1 leu2-3112 Scfaa1Δ::dpl200 Scfaa4Δ::dpl200 pTRS7</i> | (Tejima, et al. 2017) |
| SCFAA1-4-ScFAA1 | <i>SCFAA1-4 MATa ste-VC9 ura3-52 trp1-289 his3-Δ1 leu2-3112 Scfaa1Δ::dpl200 Scfaa4Δ::dpl200 pTRS7-ScFAA1</i> | This study |
| SCFAA1-4-ScFAA4 | <i>SCFAA1-4 MATa ste-VC9 ura3-52 trp1-289 his3-Δ1 leu2-3112 Scfaa1Δ::dpl200 Scfaa4Δ::dpl200 pTRS7-ScFAA4</i> | This study |
| SCFAA1-4-MgFAA1 | <i>SCFAA1-4 MATa ste-VC9 ura3-52 trp1-289 his3-Δ1 leu2-3112 Scfaa1Δ::dpl200 Scfaa4Δ::dpl200 pTRS7-MgFAA1</i> | This study |
| SCFAA1-4-MpFAA1 | <i>SCFAA1-4 MATa ste-VC9 ura3-52 trp1-289 his3-Δ1 leu2-3112 Scfaa1Δ::dpl200 Scfaa4Δ::dpl200 pTRS7-MpFAA1</i> | This study |
| SCFAA1-4-MsFAA1 | <i>SCFAA1-4 MATa ste-VC9 ura3-52 trp1-289 his3-Δ1 leu2-3112 Scfaa1Δ::dpl200 Scfaa4Δ::dpl200 pTRS7-MsFAA1</i> | This study |

*IFO: Institution for Fermentation, Osaka, Japan

Table S2

Plasmids used in this study.

| Plasmid | Description | Source of reference |
|--------------|---|---------------------|
| pTRS7 | <i>S. cerevisiae</i> cloning vector | (Tejima, 2017) |
| pTRS7-ScFAA1 | A plasmid for expression of <i>S. cerevisiae</i> <i>FAA1</i> into SCFAA1-4 | This study |
| pTRS7-ScFAA4 | A plasmid for expression of <i>S. cerevisiae</i> <i>FAA4</i> into SCFAA1-4 | This study |
| pTRS7-MpFAA1 | A plasmid for expression of <i>M. pachydermatis</i> <i>FAA1</i> into SCFAA1-4 | This study |
| pTRS7-MgFAA1 | A plasmid for expression of <i>M. globosa</i> <i>FAA1</i> into SCFAA1-4 | This study |
| pTRS7-MsFAA1 | A plasmid for expression of <i>M. sympodialis</i> <i>FAA1</i> into SCFAA1-4 | This study |

Table S3

Primers used in this study.

Restriction endonuclease sites are underlined.

| Name | Primer sequence (5'-3') |
|------------------|--------------------------------------|
| ScFAA1-F | TTGTCGACGTAAGTATAGAAAGTTCTTGTTGT |
| ScFAA1-R | TTGCGGCCGCGAAAAAGTGCTTTAGTATGATGAGGC |
| ScFAA4-F | TTGGATCCCCCTCTGAGTTGACATAAAAAGCG |
| ScFAA4-R | TTGCGGCCGCGAGAAGAACTATGTATTGTGCAAGT |
| MpFAA1-F | TTGTCGACGAGAACGTAAGCAGGCAA |
| MpFAA1-R | TTCCCGGCCCGACGAACCACGCTAT |
| MgFAA1-F | TTGAATTCCTCTAATCGGCCTTCCGTT |
| MgFAA1-R | TTGGATCCACGCACGGATTGGCTATG |
| MsFAA1-F | TTCCCGGGAGCAGTCACGTTTTCAA |
| MsFAA1-R | TTACTAGTGGCCACGCCACACCGTAAT |
| RT-PCR(MpFAA1-F) | AAGAAGGTAGGTGGCGAAGAGA |
| RT-PCR(MpFAA1-R) | GCTCAAACCACTCGCAAAGA |
| RT-PCR(MpACT1-F) | CTTACGAACCAACCTGTGGTGA |
| RT-PCR(MpACT1-R) | ACATTTCCGGCGTGTCTTGG |