

Appendix A Fatty acid profile of yeast cells expressing various isoforms of the FAE1 gene.

Fatty acid content (%)	e_{AI}	E_A	e_{C2}	e_{C4}	E_C	$pYES$
C16:0	13.96±0.77	7.65±0.39	14.9±0.36	14.41±0.72	11.09±1.23	15.33±0.77
C16:1	33.73±0.50	23.65±1.13	38.55±1.27	38.31±2.10	27.64±2.61	42.15±0.50
C18:0	3.08±0.30	1.98±0.16	5.44±0.80	4.51±0.30	2.65±0.36	3.2±0.30
C18:1	34.86±1.46	11.46±0.76	33.92±1.50	28.57±1.57	12.87±1.65	29.38±1.46
C22:0	0±0	2.43±0.43	0±0	0±0	2.67±0.15	0±0
C22:1	0±0	20.55±1.42	0±0	0±0	17.32±1.07	0±0
others	14.35±2.95	32.25±2.22	7.17±0.70	14.17±3.28	25.73±2.89	9.92±1.46

e_{AI} , total fatty acids from yeast expressing the *FAE1.1* gene from Zhongshuang6; E_A , total fatty acids from yeast expressing the *FAE1.1* gene from Zhongyou821; e_{C2} , total fatty acids from yeast expressing the *FAE1.2* gene from Zhongshuang6; e_{C4} , total fatty acids from yeast expressing the *FAE1.2* gene from Zhongshuang7; E_C , total fatty acids from yeast expressing the *FAE1.2* gene from Zhongyou821; pYES2, total fatty acids from yeast transformed with the pYES2 vector.

Appendix B Primers used in qRT-PCR analysis for genes involved in erucic acid synthesis.

Gene name	Accession number	qRT-PCR primers
<i>FAE1</i>	AF009563	F: 5'GTCAGGCTTTAAGTGTAACAGTGCA3'

		R: 5'TTATTAGGACCGACCGTTTTGG3'
<i>KCR</i>	AY196197	F: 5'GCAGCACTGCGTTTTGTAGGCT3'
		R: 5'CACTTTCGGGCAATGCAGATAC3'
<i>ECR</i>	FJ899705	F: 5'GTTCAACATCGCTACTCAGACCG3'
		R: 5'TGCTTTCCAAGAGCCCAGTTAG3'
<i>actin</i>	AF111812	F: 5'CTGGAATTGCTGACCGTATGAG3'
		R: 5'ATCTGTTGGAAAGTGCTGAGGG3'
