

Table S1. Fatty acid composition (weight %) in yeast cells expressing genes when feeding with C16:1<sup>Δ7</sup>

Fatty acid	Vector	AtFAD2	CeFAT-2	CeFAT-1
C16:0	6.4 ± 0.3	6.7 ± 0.3	7.2 ± 0.6	6.4 ± 0.1
C16:1 <sup>Δ7</sup>	<b>43.1 ± 0.2</b>	<b>43.3 ± 5.1</b>	<b>42.8 ± 1.9</b>	<b>43.5 ± 0.7</b>
C16:1 <sup>Δ9</sup>	13.2 ± 0.1	11.5 ± 0.8	8.1 ± 0.4	13.3 ± 0.2
C16:2 <sup>Δ7,10</sup>		0.3 ± 0.1	1.3 ± 0.1	
C16:2 <sup>Δ9,12</sup>		1.3 ± 0.3	4.5 ± 0.4	
C16:3 <sup>Δ9,12,15</sup>			0.8 ± 0.1	
C18:0	9.8 ± 0.2	10.3 ± 0.8	11.5 ± 1.1	9.8 ± 0.1
C18:1 <sup>Δ9</sup>	26.8 ± 0.4	15.9 ± 1.4	9.2 ± 0.5	26.1 ± 0.4
C18:1 <sup>Δ11</sup>	0.3 ± 0.0	0.3 ± 0.0	0.2 ± 0.0	0.3 ± 0.0
C18:2 <sup>Δ9,12</sup>		10.0 ± 2.1	12.2 ± 0.5	0.2 ± 0.0
C18:3 <sup>Δ9,12,15</sup>			1.4 ± 0.1	
Conversion (%)				
C16:1 <sup>Δ7</sup>		0.7 ± 0.2	3.0 ± 0.3	
C16:1 <sup>Δ9</sup>		9.9 ± 1.9	35.5 ± 3.3	

The fed substrate indicated in bold.

Trace amount of C15, C17 and trans C16 or C18 are not included

