



**Figure S1**

**Table S1** ALA content of transgenic rice seeds

ALA Content (mg g <sup>-1</sup> )	GluC	Ubi-1
NT	0.36	
<i>OsFAD3</i>	7.19 ± 2.03**	5.40 ± 2.18**
<i>OsFAD3</i>	0.56 ± 0.12**	0.40 ± 0.04*
<i>OsFAD7</i>	0.42 ± 0.05**	0.38 ± 0.04
<i>GmFAD7</i>	5.64 ± 2.10**	4.65 ± 1.62**
<i>GmFAD8</i>	0.38 ± 0.02*	0.37 ± 0.02
<i>GmFAD8</i>	0.37±0.01	0.37±0.01

*GluC*, a strong endosperm-specific glutelin promoter and *Ubi-1*, the maize ubiquitin-1 promoter promoted *OsFAD3/7/8* and *GmFAD3-1/2/3*, respectively. Each value represents the mean ± S.D. from ten independent transgenic lines. Student's t-test: \*,  $P < 0.05$ ; \*\*,  $P < 0.01$ . The NT as described in Fig. 2.