

Supplementary Material

Supplementary Figures

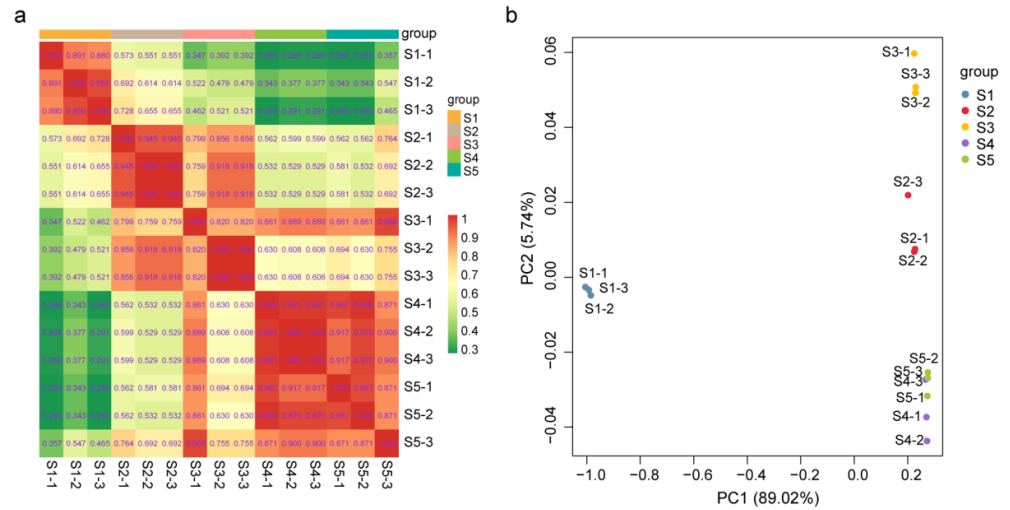


Figure S1. Correlation assessment and principal component analysis of five stages (S1–S5). Repeated correlation assessment (a) and principal component analysis (b) of all the olive samples.

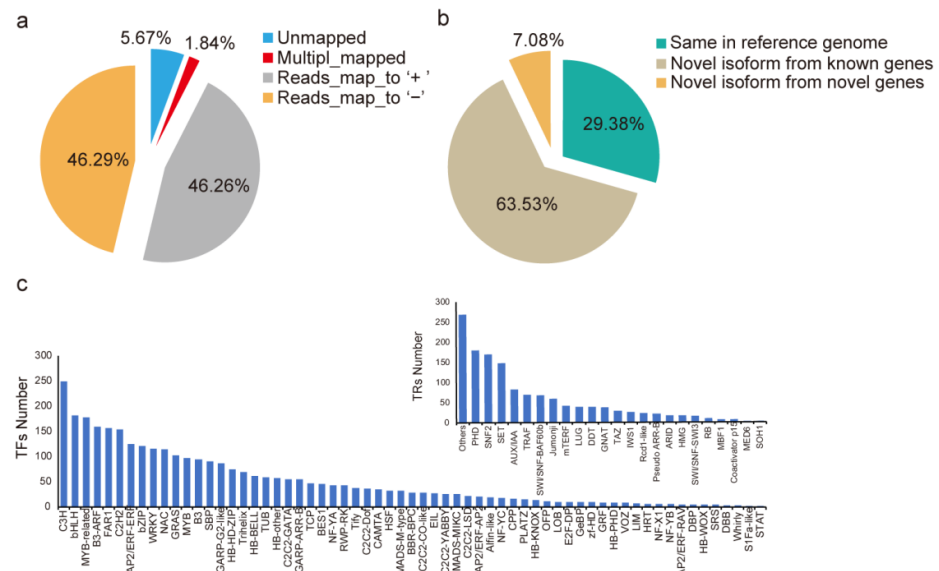


Figure S2. Genome mapping and transcriptional regulation of olive. (a) Comparison and mapping with the reference genome by GMAP mapping statistics. (b) Classification of mapped full-length transcripts. (c) The number of transcription factors (TFs) and transcription regulation factors (TRs).

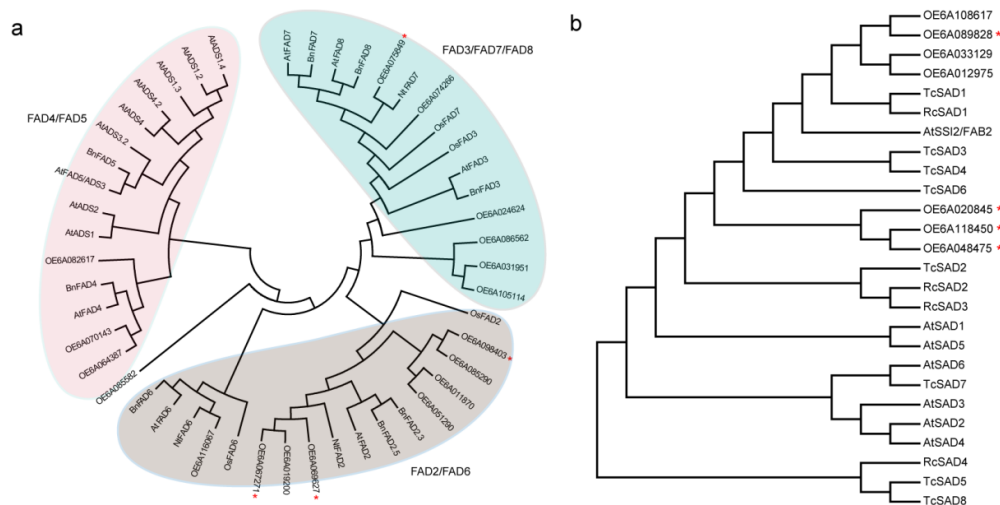


Figure S3. Putative genes of FAD (a) and SAD (b) identified at the developing stages of olive fruit. At, Arabidopsis thaliana; Bn, Brassica napus; Nt, Nicotiana tabacum; Os, Oryza sativa; Rc, castor; Tc, cacao.

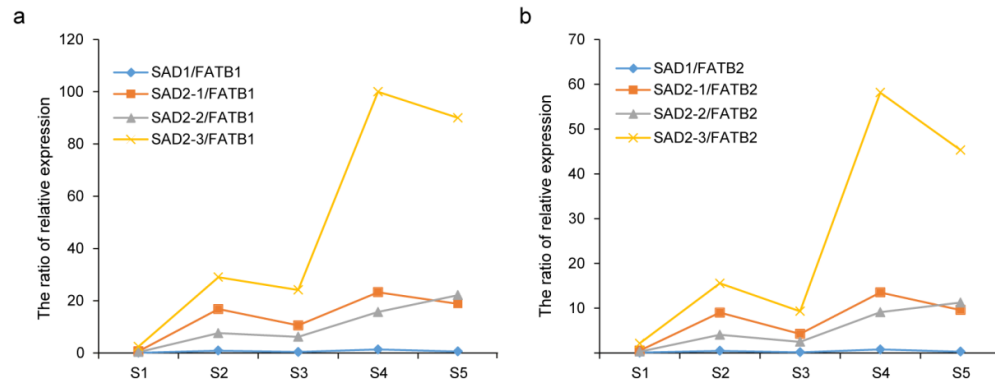


Figure S4. Dynamic changes in SADs/FATBs during olive fruit maturation. (a, b) The dynamic value of SADs/FATBs from S1 to S5. SAD1, OE6A089828; SAD2-1, OE6A118450; SAD2-2, OE6A048475; SAD2-3, OE6A020845; FAD6, OE6A116067; FATB1, OE6A080663; FATB2, OE6A029754; FATA1, OE6A018491; FATA2, OE6A059595.

Table S1. Differential expressed genes associated with FA synthesis in plastids at different stages.

Candidate genes	S1vsS2	S2vsS3	S3vsS4	S4vsS5	Gene name
OE6A042043	-3.09				CT
OE6A055531	-3.76				CT
OE6A092496	-5.27				BCCP
OE6A034317	-5.23				BCCP
OE6A006214	-2.50	-1.25			BCCP
OE6A018229	-4.12		-1.03		BC
OE6A118580	-3.23				BC
OE6A119613	-3.51				MAT
OE6A067994	-3.74			-1.04	KASIII
OE6A015649	-1.63				KASI
OE6A049543	-1.47				KASI
OE6A089647	1.90				KASII
OE6A120045	-3.35	-2.52	-1.41		KASII
OE6A089717		-1.29			KAR
OE6A094355		-1.15			KAR
OE6A098105	-4.28				HAD

OE6A104748	-2.65				EAR
OE6A057837	-3.33				EAR
OE6A114340	-3.55				EAR
OE6A018491	-2.15				FATA
OE6A059595	-1.45	-1.08			FATA
OE6A080663	1.06				FATB
OE6A029754		1.36			FATB
OE6A089828	-2.02				SAD1
OE6A118450	-3.71				SAD2-1
OE6A048475	-3.35				SAD2-2
OE6A020845	-2.49		-1.47		SAD2-3
OE6A098403	-2.52	-1.57			FAD2
OE6A067271	4.77				FAD2
OE6A069627	1.32				FAD2
OE6A075849	3.65		1.49	-2.45	FAD7

Note: CT, carboxyltransferase; BCCP, carboxylated biotin carrier protein; BC, biotin carboxylase; MAT, malonyl-CoA ACP transacylase; KAS, ketoacyl-ACP synthase; KAR, ketoacyl-ACP reductase; HAD, hydroxyacyl-ACP dehydrase; EAR, enoyl-ACP reductase; FATA/B, acyl-ACP thioesterase A/B; SAD, stearoyl-ACP desaturase; FAD, fatty acid desaturase.