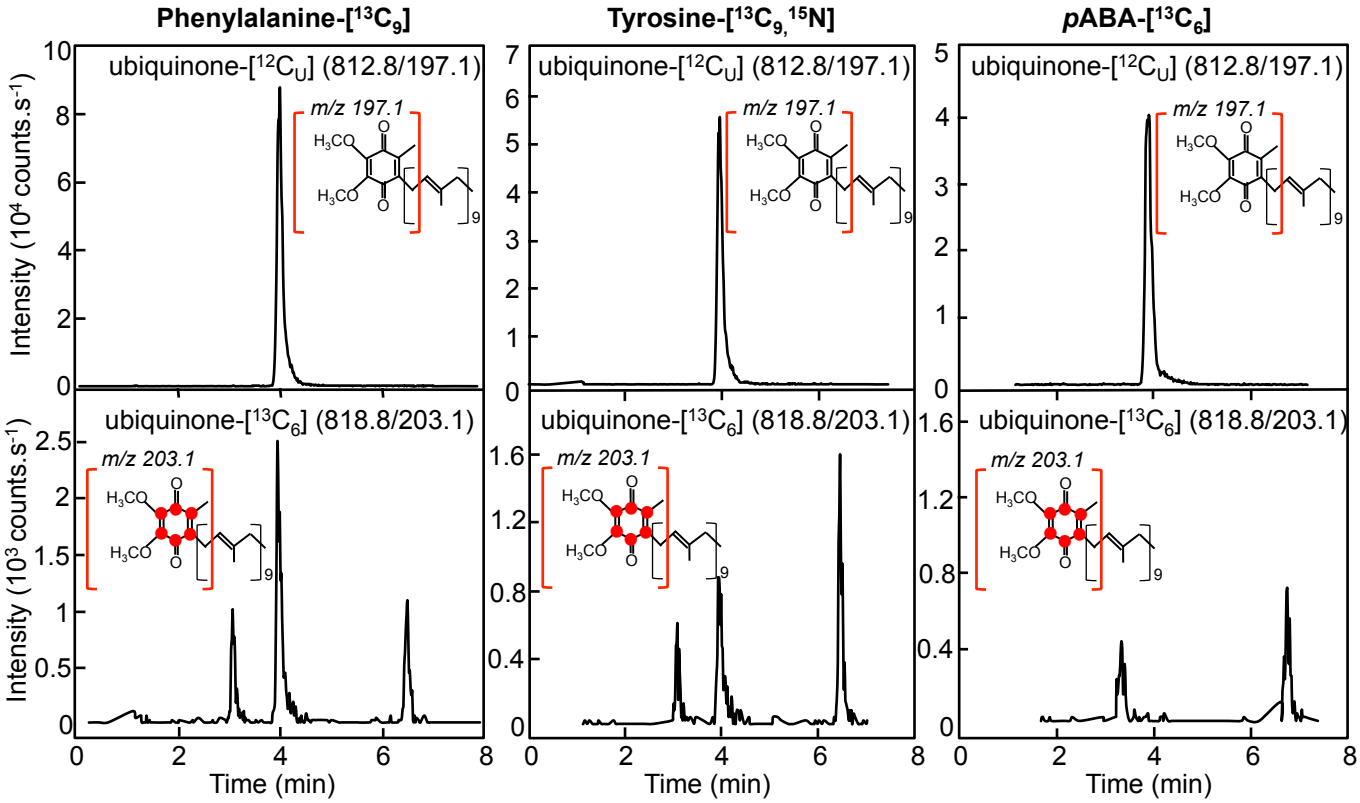
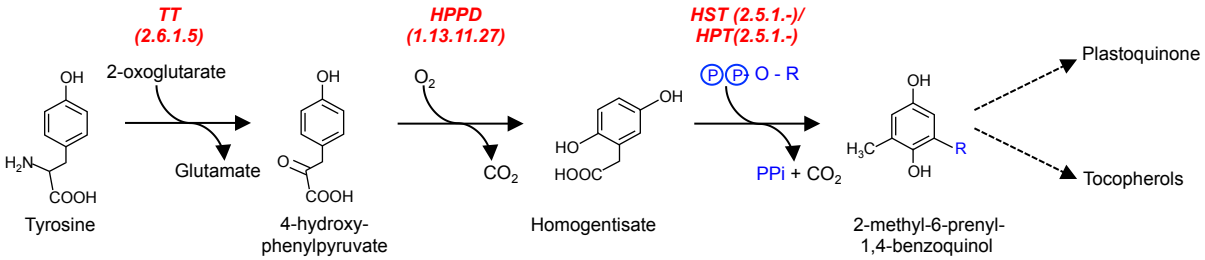


Supplemental Figure 1. Extracted counts of ion pairs for multiple reaction monitorings of ubiquinone isotopes. Axenically grown Arabidopsis were fed for 3h with 250 µM doses of phenylalanine-[$^{13}C_9$] (left panels), tyrosine-[$^{13}C_9$;^{15}N] (center panels) or *p*ABA-[$^{13}C_6$] (right panels). Red dots indicate the positions of the ^{13}C isotope.



Supplemental Figure 2. Formation of the ring of plastid prenyl benzoquinones from tyrosine**.** R is phytyl (C_{20}) in the biosynthetic pathway of tocopherols, and solanesyl (C_{45}) in that of plastoquinone. HPPD, 4-hydroxyphenylpyruvate dioxygenase; HPT, homogentisate phytyl transferase; HST, homogentisate solanesyl transferase; TT, tyrosine transaminase

Supplemental Table 1. CoA ligase activity in Arabidopsis extracts

	nmoles.mg^{-1}.h^{-1}			
	p-coumarate	*t*-cinnamate	Ferulate	Caffeate
Wild type	49 ± 18	12 ± 5	31 ± 8	48 ± 11
at4g19010	54 ± 29	14 ± 9	44 ± 18	50 ± 13

Arabidopsis leaf extracts (18-36 μg) were assayed with 2.5 mM ATP, 0.5 mM CoA and 100 μM of various hydroxycinnamate derivatives for 30-60 min at 30°C. The formation of the corresponding CoA thioesters was monitored spectrophotometrically as described in the Methods. Data are means of three replicates ± S.E. Wild-type and *at4g19010* knockout (SALK_043310) values are not significantly different as determined by Fisher's test from an analysis of variance ($p>0.3$).