



Figure S7: Schematic structure of the plasmid pAC-VIOL for production of violaxanthin in *E. coli*. The plasmid was made by inserting the Arabidopsis cDNA encoding zeaxanthin epoxidase (ZEP) into pAC-ZEAXipi (Cunningham and Gantt, 2007), which carries the bacterial genes: *crtE*, geranylgeranyl diphosphate synthase; *ipi2*, isopentenyl diphosphate isomerase, *crtY*, lycopene β -cyclase; *crtI*, phytoene desaturase; *crtB*, phytoene synthase; *crtZ*, β -carotene hydroxylase. Unique restriction sites are indicated. Cm^{R} -chloramphenicol resistance; ori- origin of replication.