

Supplementary

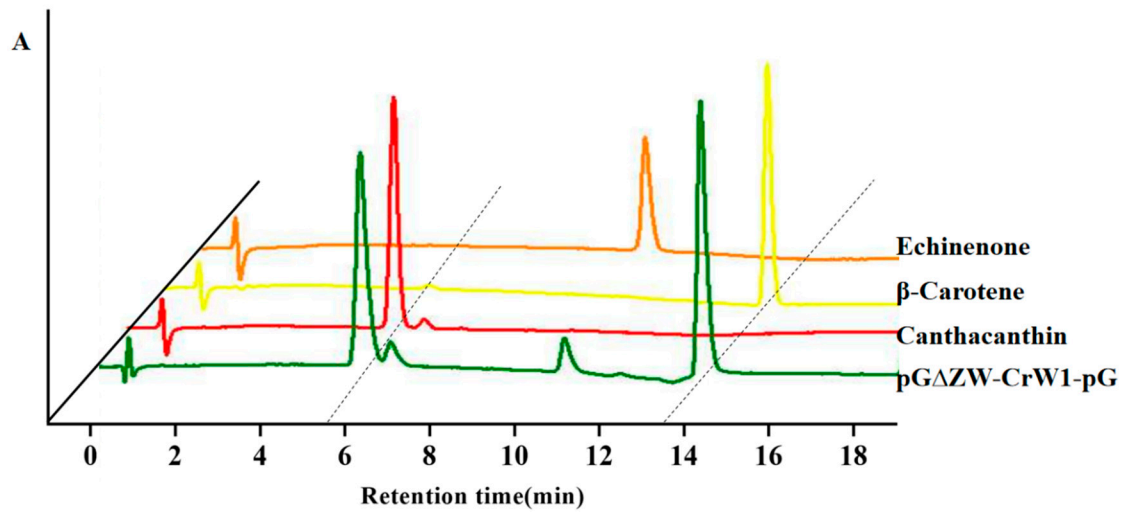


Figure S1. HPLC diagram of standards and extracts from *E.coli* harboring pGΔZW-CrW1-pG.

Table S1. Plasmids constructed or adopted in this study.

Plasmids	Plasmid information	Source
pACCAR16Δcrtx	pET, T7, HpE, CrtI, CrtB, CrtY, Chl ^r	Shanghai Jiaotong University
pG-KJE8	pET, T7, Dnak, DnaJ, GrpE, GroES, GroE, Chl ^r	General Biosystems (Anhui) Co., Ltd
p30CrtW _{Bsp}	pET, T7, CrtW _{Bsp} , Kan ^r	This study
p32CrtW _{Bsp}	pET, T7, CrtW _{Bsp} , Amp ^r	This lab
pCold-CrtW _{Bsp}	pET, cspA, CrtW _{Bsp} , Amp ^r	This study
pGST-CrtW _{Bsp}	pET, T7, GST, CrtW _{Bsp} , Kan ^r	This study
pMBP-CrtW _{Bsp}	pET, T7, MBP, CrtW _{Bsp} , Kan ^r	This study
pGlpF-CrtW _{Bsp}	pET, T7, GlpF, CrtW _{Bsp} , Kan ^r	This study
pSUMO-CrtW _{Bsp}	pET, T7, SUMO, CrtW _{Bsp} , Kan ^r	This study
pHpW1	pET, T7, HpW1, Kan ^r	This study
pHpW2	pET, T7, HpW2, Kan ^r	This study
pCrW1	pET, T7, CrW1, Kan ^r	This study
pCzW1	pET, T7, CzW1, Kan ^r	This study
pGΔZW-CrtW _{Bsp}	pET, T7, HpE, CrtI, CrtB, CrtY, CrtW _{Bsp} , Amp ^r	This lab
pGΔZW-HpW1	pET, T7, HpE, CrtI, CrtB, CrtY, HpW1, Amp ^r	This lab
pGΔZW-HpW2	pET, T7, HpE, CrtI, CrtB, CrtY, HpW2, Amp ^r	This lab
pGΔZW-CrW1	pET, T7, HpE, CrtI, CrtB, CrtY, CrW1, Amp ^r	This lab
pGΔZW-CzW1	pET, T7, HpE, CrtI, CrtB, CrtY, CzW1, Amp ^r	This lab

Table S2. Primers used in this study.

ID	Primer sequence (5'→3')	used for
HpW1F	CAGTcatatgCACCACCACCACCACCAGCTGGCCGCCACCGTG	pHpW1 construction
HpW1R	ACTGaagcttCTTATGCCGGCACCAGAC	
HpW2F	CAGTcatatgCACCACCACCACCACCAGGTGCATGCAGGTCAG	pHpW2 construction
HpW2R	ACTGaagcttCTTATGCCAGGGCAGGCA	
CrW1F	CAGTcatatgCACCACCACCACCACCACGGTCCGGGTATTCAGCCG	pCrW1 construction
CrW1R	ACTGaagcttCTTAGGCCATAACGCCCA	
CzW1F	CAGTcatatgCACCACCACCACCACCACGCCCTGATGTGACCCAT	pCzW1 construction
CzW1R	ACTGaagcttCTTAATTCACCAGCTGAG	

The restriction sites are indicated by lowercase letters.