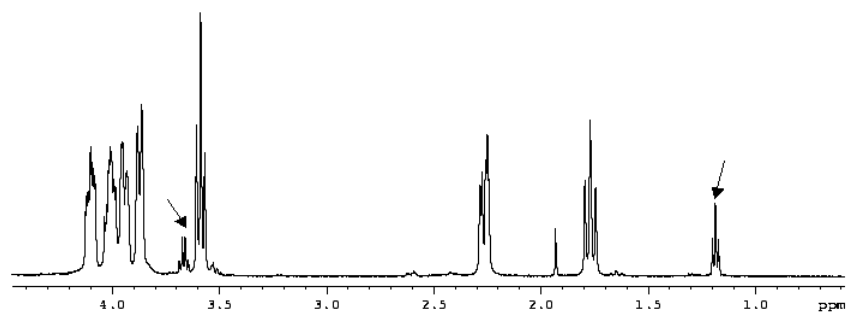
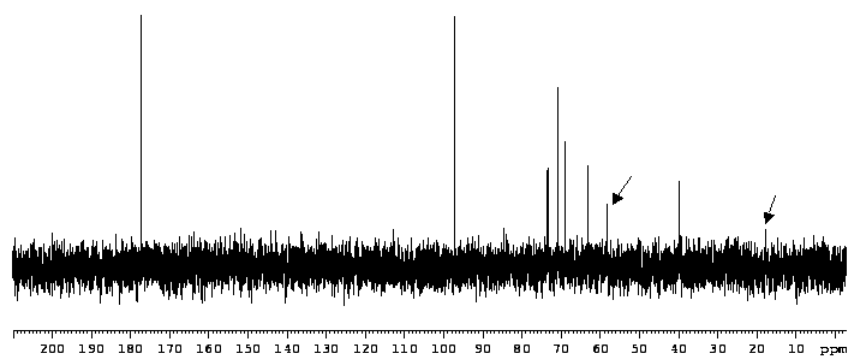


A



B



C

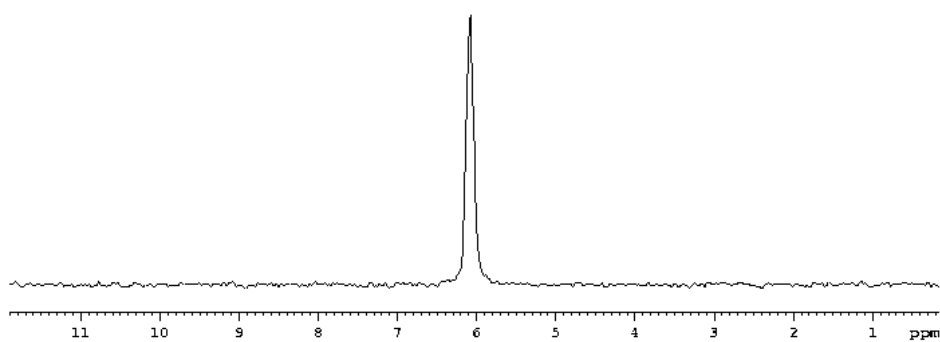
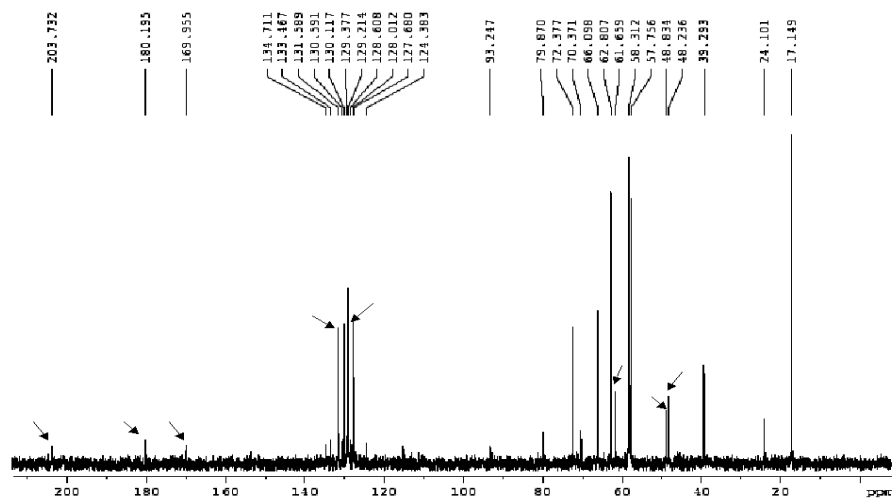


Figure 1 The spectra of the product (DAH7P) isolated from the $\text{aroA}^{\text{Marburg}}$ catalyzed condensation reaction between PEP and E4P. A, ^1H NMR spectrum (arrows denote resonances due to the residual ethanol from the purification); B, ^{13}C NMR spectrum (arrows denote resonances due to the ethanol); C, ^{31}P NMR spectrum.

A.



B.

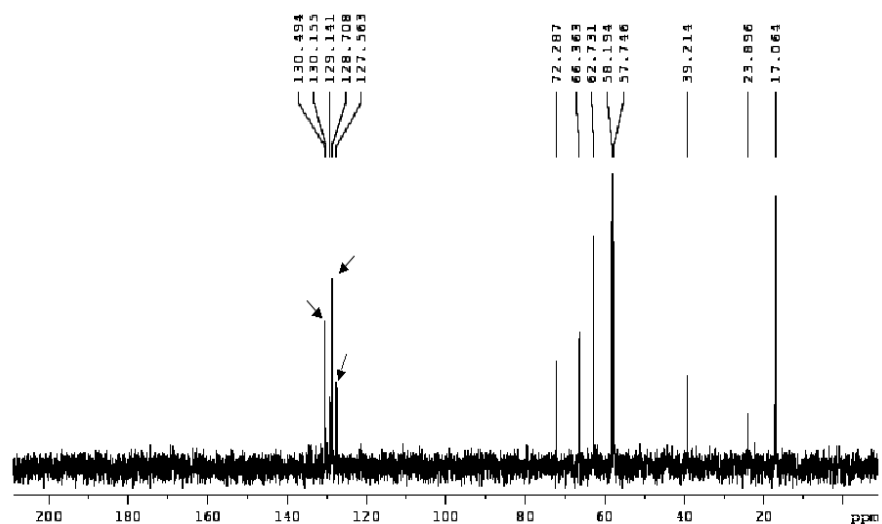


Figure 2 The ^{13}C NMR spectra of $\text{aroA}^{\text{Marburg}}$ catalyzed rearrangement of chorismate. A, The spectrum of the reaction mixture. A total volume of 1 ml reaction mixture containing the enzyme (53 nmoles in 10 mM BTP buffer), chorismate (0.04 mmol), and sodium phosphate buffer pH 6.0 (0.10 mmol) was incubated at 37 °C for 2 h. The reaction mixture was freeze-dried, reconstituted in 0.5 ml of D_2O . Arrows denote resonances due to the formation of prephenate; B, The spectrum of the reaction mixture after treatment with DCl. The resonances due to prephenate disappeared and those due to phenylpyruvic acid remained. Arrows denote the resonances corresponding to the aromatic carbon atoms of phenylpyruvic acid.