**Bicyclo[3.2.1]Octane Synthons from Cyclopropenes: Functionalization of
Cycloadducts by Nucleophilic Additions**

Ravi S. Orugunty, Dennis L. Wright, Merle A. Battiste, Richard J. Helmich and Khalil Abboud

Supplemental Information

S1	Table of Contents
S2	General Experimental
S3	Figures 1-3, X-ray structures for compounds 11e , 23 and 24e
S4	¹ H NMR of compound 16a
S5	¹³ C NMR of compound 16a
S6	¹ H NMR of compound 25a
S7	¹³ C NMR of compound 25a
S8	¹ H NMR of compound 26
S9	¹³ C NMR of compound 26

General Methods and Materials. THF, diethyl ether were distilled from sodium-benzophenone. Methylene chloride was distilled from calcium hydride. Commercially available reagents were used as received. Tetrachlorocyclopropene and tetrabromocyclopropene were synthesized as per the procedure described by West.¹ ¹H NMR (300 MHz) and ¹³C NMR (75 MHz) spectra were recorded in CDCl₃ unless otherwise noted, chemical shifts are given in ppm relative to TMS (0.00 ppm) or CDCl₃ (7.27 ppm and 77.23 ppm for carbon). Flash chromatography was performed using 60Å silica gel. All reactions were performed in base washed and flame dried glassware under an atmosphere of Argon unless otherwise stated. Melting points were measured on Thomas Hoover capillary melting point apparatus and are reported uncorrected. Adducts **8a** and **8c-e** were synthesized according to the procedure reported by Tobey and Law² and the products purified by column chromatography.

1) Tobey, S.W.; West, R. *J. Am. Chem. Soc.* **1966**, 88, 2481.

2) Law, D. C. F.; Tobey, S. W. *J. Am. Chem. Soc.* **1968**, 90, 2376.

Figure 1. X-ray Structure of Alcohol **11e**.

Figure 2. X-ray Structure of Alcohol **23**.

Figure 3. X-ray Structure of Alcohol **24e**.

rs03-1568
Pulse Sequence: s2pul

mecupratemonoadditionpdt
 Pulse Sequence: s2pu1