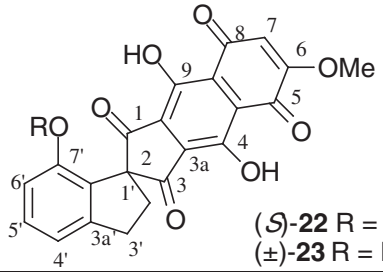
SUPPORTING INFORMATION

Enantiodivergent Synthesis of Either Enantiomer of ABCDE-Ring Analog of Antitumor Antibiotic, Fredericamycin A via Intramolecular [4+2] Cycloaddition Approach

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Table 1. ^{1}H NMR data for (*S*)-**22** and (±)-**23** in $CDCl_3$



(*S*)-**22** R = Me
(±)-**23** R = H

	(*S*)-**22**	(±)-**23**
C-2' H_2	2.49 (t, *J* = 7.0 Hz)	2.53 (t, *J* = 7.3 Hz)
C-3' H_2	3.26 (t, *J* = 7.0 Hz)	3.28 (t, *J* = 7.3 Hz)
C-7' OMe	3.51 (s)	—
C-6 OMe	4.01 (s)	4.02 (s)
C-7 H	6.31 (s)	6.31 (s)
C-6' H	6.58 (d, *J* = 8.0 Hz)	6.47 (d, *J* = 8.0 Hz)
C-4' H	6.93 (d, *J* = 7.5 Hz)	6.94 (d, *J* = 8.0 Hz)
C-5' H	7.23 (dd, *J* = 8.0, 7.5 Hz)	7.14 (m)
C-4 OH	12.56 (s)	12.57 (s)
C-9 OH	13.20 (s)	13.21 (s)

Table 2. ^{13}C NMR data for (*S*)-**22** and (±)-**23** in $CDCl_3$

	(*S*)-**22**	(±)-**23**
C-3'	32.4	32.6
C-2'	35.3	35.8
C-7' OMe	55.5	—
C-6 OMe	57.3	57.7
C-2	65.3	65.7
C-4'	108.5	111.2
C-7	111.0	113.5
C-8a, C-4a, C-7a'	117.5, 117.6, 117.7	118.0, 118.6, 126.8
C-5'	128.4	131.1
C-6'	130.6	131.2
C-9a	135.4	135.1
C-3a	137.3	136.8
C-9	148.3	149.1
C-4	152.8	150.9
C-3a'	153.7	151.0
C-7'	154.8	153.3
C-6	161.2	161.6
C-5	183.3	183.6
C-8	188.6	189.0
C-3	199.0	200.8
C-1	200.2	201.3