A Stereoselective Synthesis of Fully Substituted Tetrahydrofurans through 1,3-Dipolar Cycloadditions with Cinnamaldehydes: An Easy Access to Chroman Derivatives

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1. Crystal data of 4f (CCDC 939643)



Bond precisi	on: C-C =	0.0022 A	Wavelength=0.71073
Cell:	a=9.2228(6)	b=7.4537(5)	c=16.9570(12)
alpha=90		beta=96.151(2)	gamma=90
Temperature:	296 K		
	Calculat	ed	Reported
Volume	1158.98	(14)	1158.98(14)
Space group	P 21		P2(1)
Hall group P 2yb		?	
Moiety formu	la C27 H25	N 06	?
Sum formula	C27 H25	N OG	C27 H25 N 06
Mr	459.48		459.48
Dx,g cm-3	1.317		1.317
Z	2		2
Mu (mm-1)	0.093		0.093
F000	484.0		484.0
F000'	484.25		
h,k,lmax	10,8,20		10,8,20
Nref	2204[40)66]	3663
Tmin,Tmax	0.968,0.	989	0.957,0.989
Tmin'	0.956		
Correction m	ethod= MULTI-S	CAN	
Data complet	eness= 1.66/0.9	90 Theta(max)=	25.000
R(reflection	us)= 0.0273(350	65) wR2(refle	ections)= 0.0731(3663)
S = 1.079	Npar=	= 307	

2. Characterization Data of Products





































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3. ¹H NMR NOESY spectrum of **6a** (Major Diastereomer)







4. ¹H NMR NOESY spectrum of **4h** Minor Diastereomer