

# Supplementary Information

## Diol Glycidyl Ether-Bridged Cyclens: Preparation and Their Applications in Gene Delivery

*Wen-Jing Yi<sup>1</sup>, Zhi-Hua Feng<sup>1</sup>, Qin-Fang Zhang, Ji Zhang<sup>\*</sup>, Ling-Dong Li, Wen Zhu<sup>\*</sup>, and*

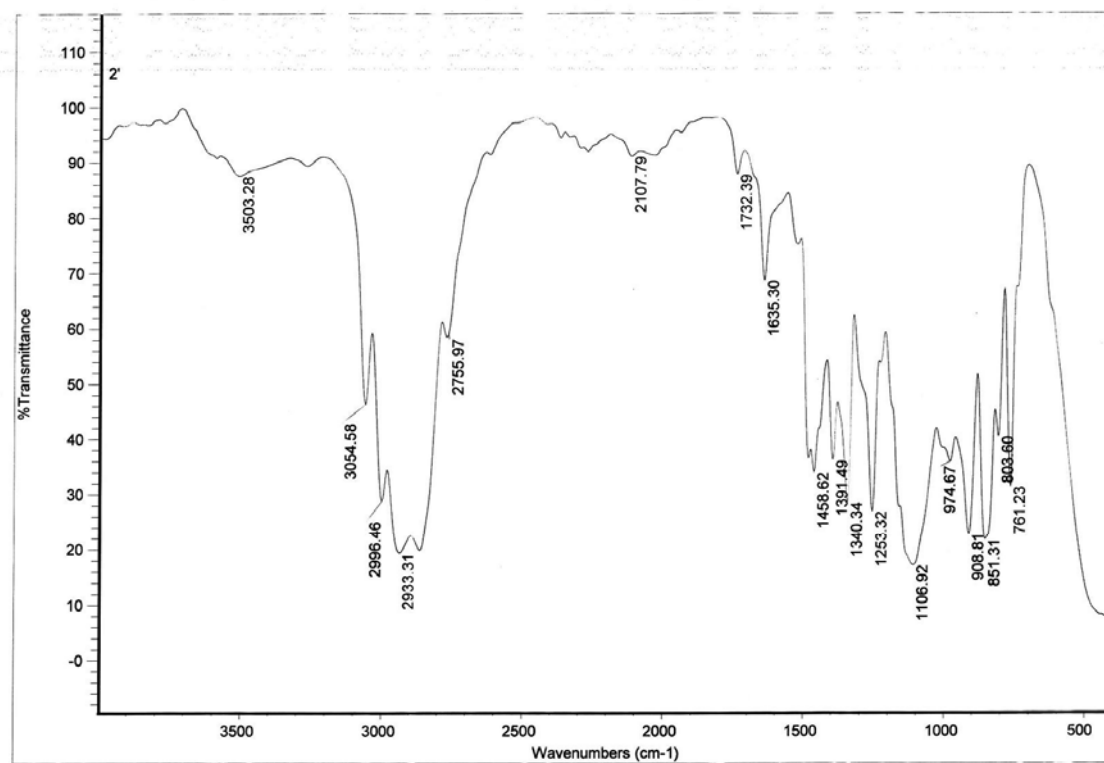
*Xiao-Qi Yu<sup>\*</sup>*

*Key Laboratory of Green Chemistry and Technology (Ministry of Education), College of Chemistry, and State Key Laboratory of Biotherapy, West China Hospital, Sichuan University, Chengdu 610064, People's Republic of China.*

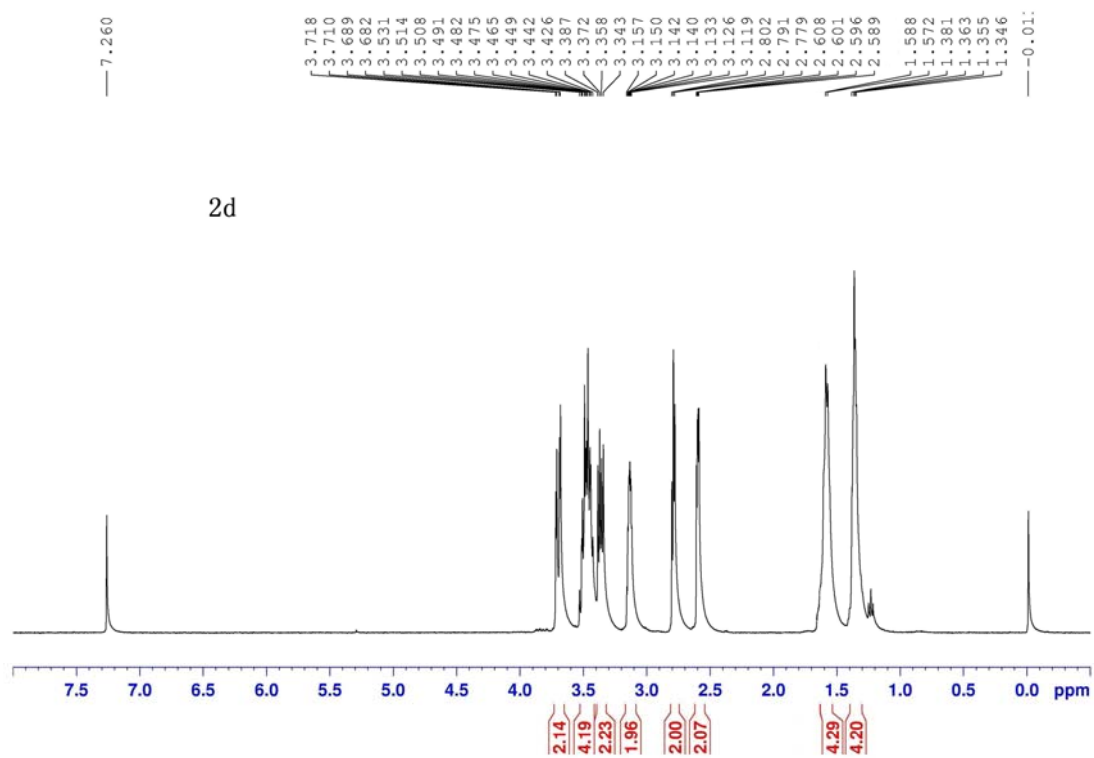
<sup>1</sup> These authors contributed equally to this work.

Characterization of compound <b>2d</b> .....	S1
Characterization of compound <b>2e</b> .....	S3
Characterization of polymers <b>5</b> .....	S5
GPC sheets.....	S10

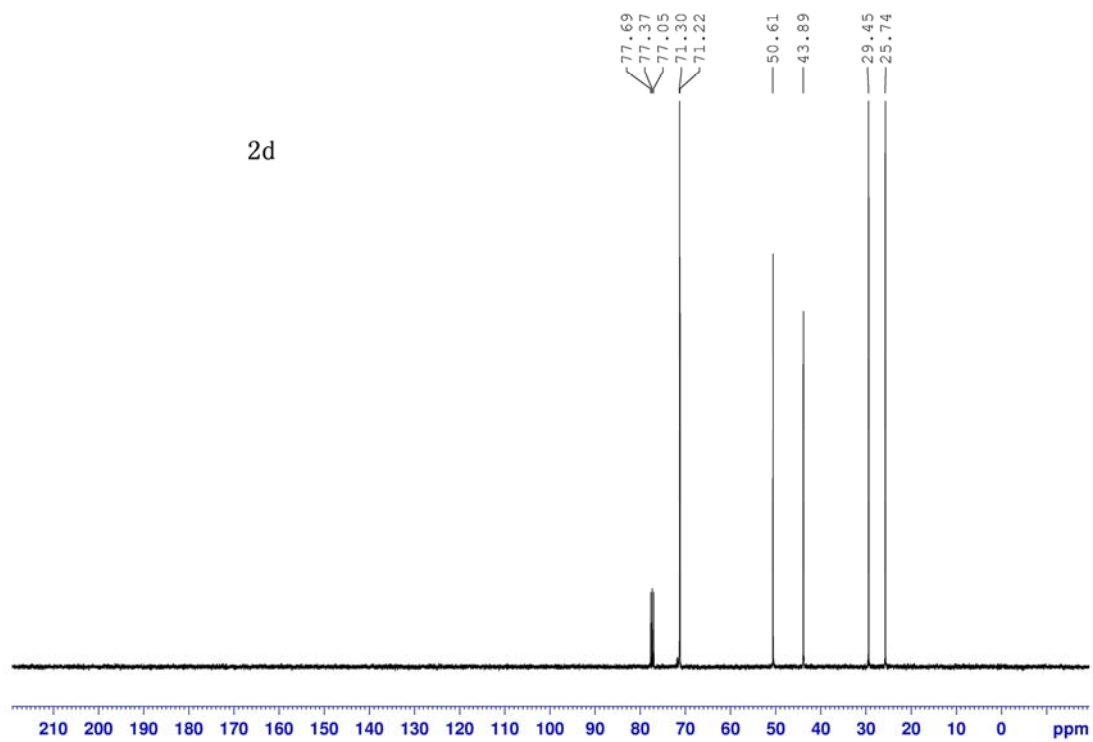
# IR spectrum of 2d



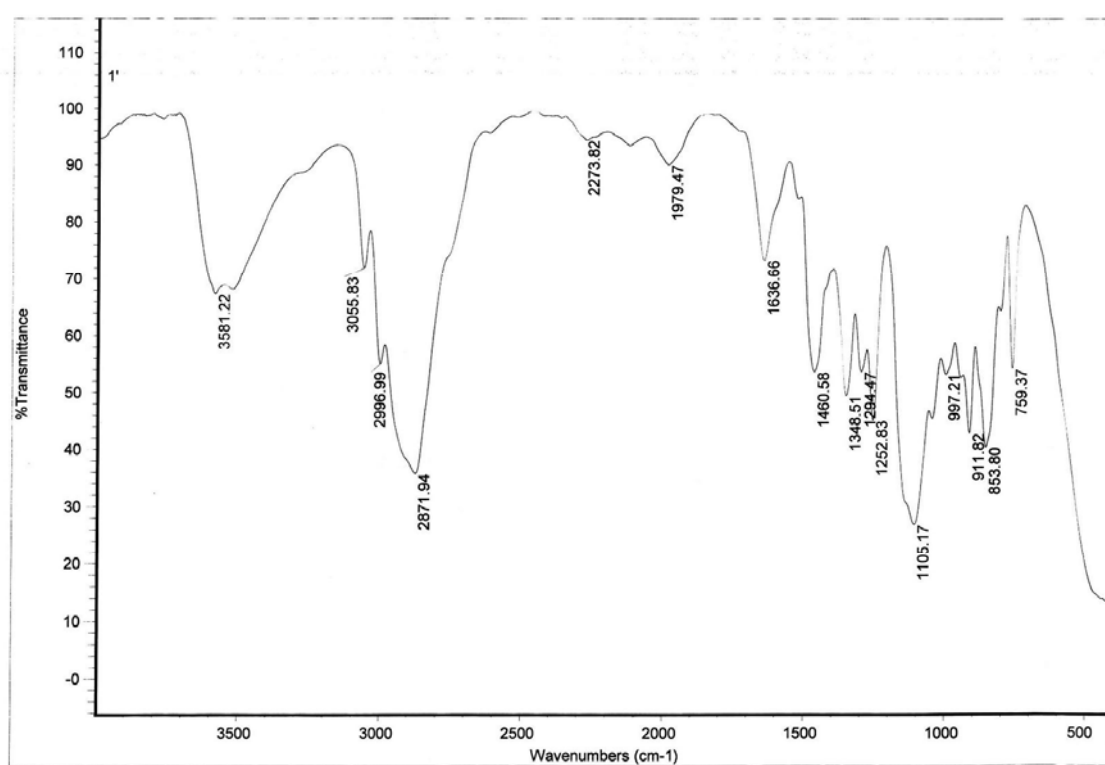
# <sup>1</sup>H NMR spectrum of 2d



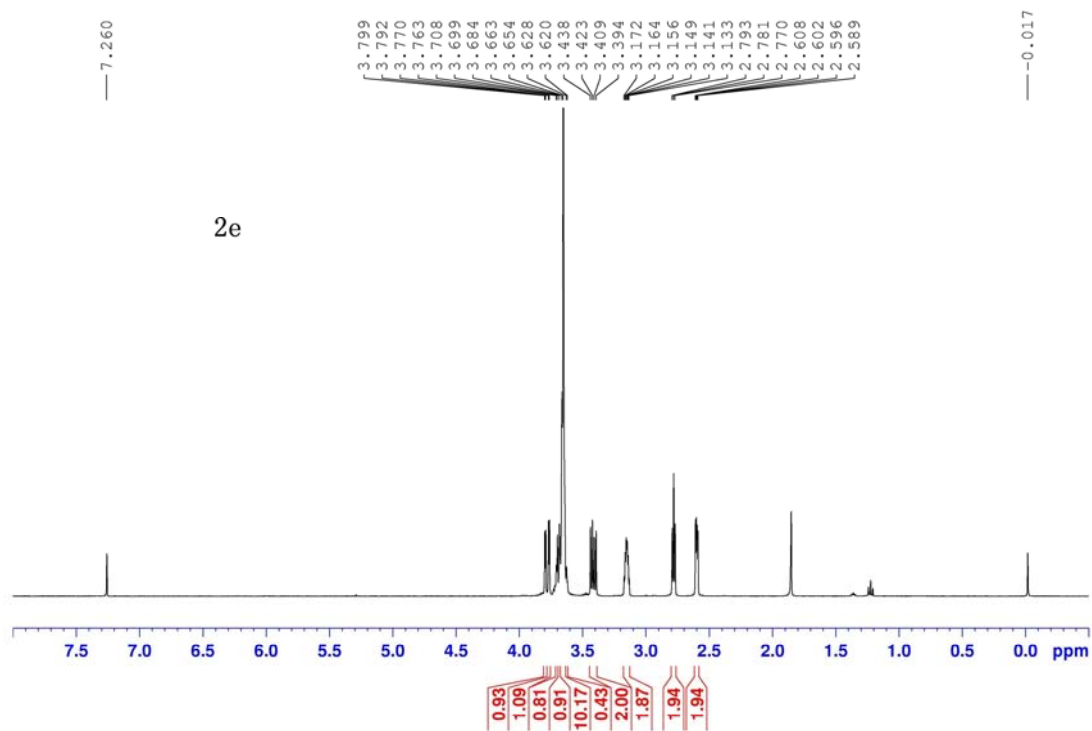
$^{13}\text{C}$  NMR spectrum of **2d**



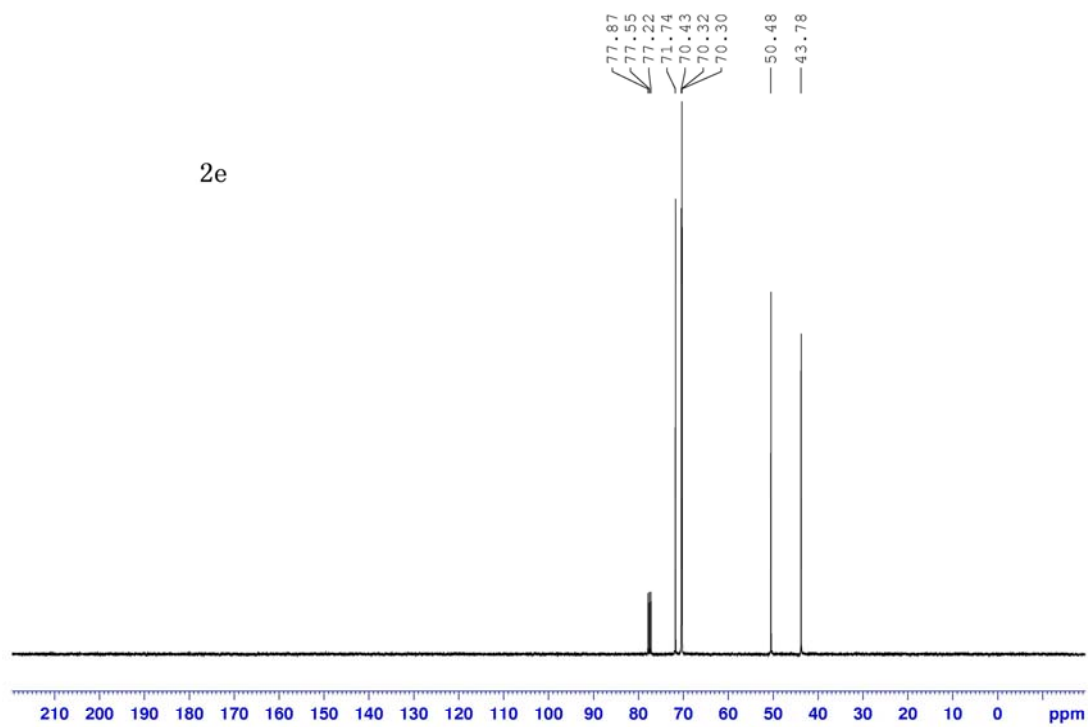
# IR spectrum of 2e



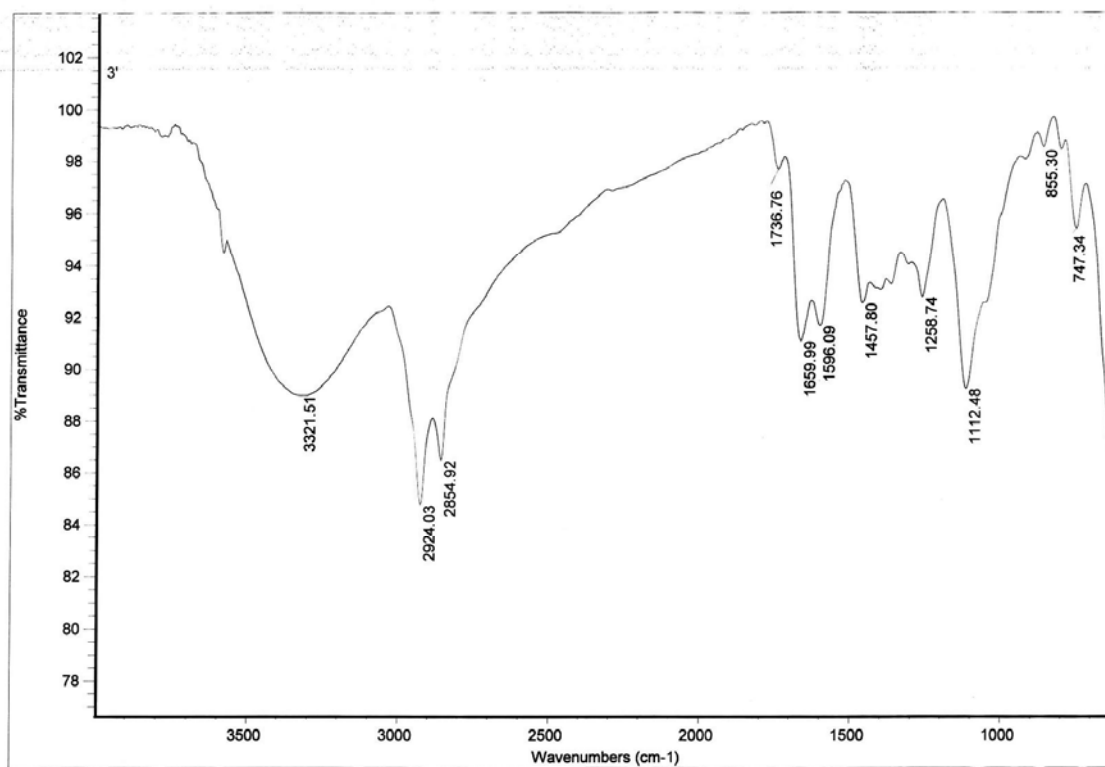
# <sup>1</sup>H NMR spectrum of 2e



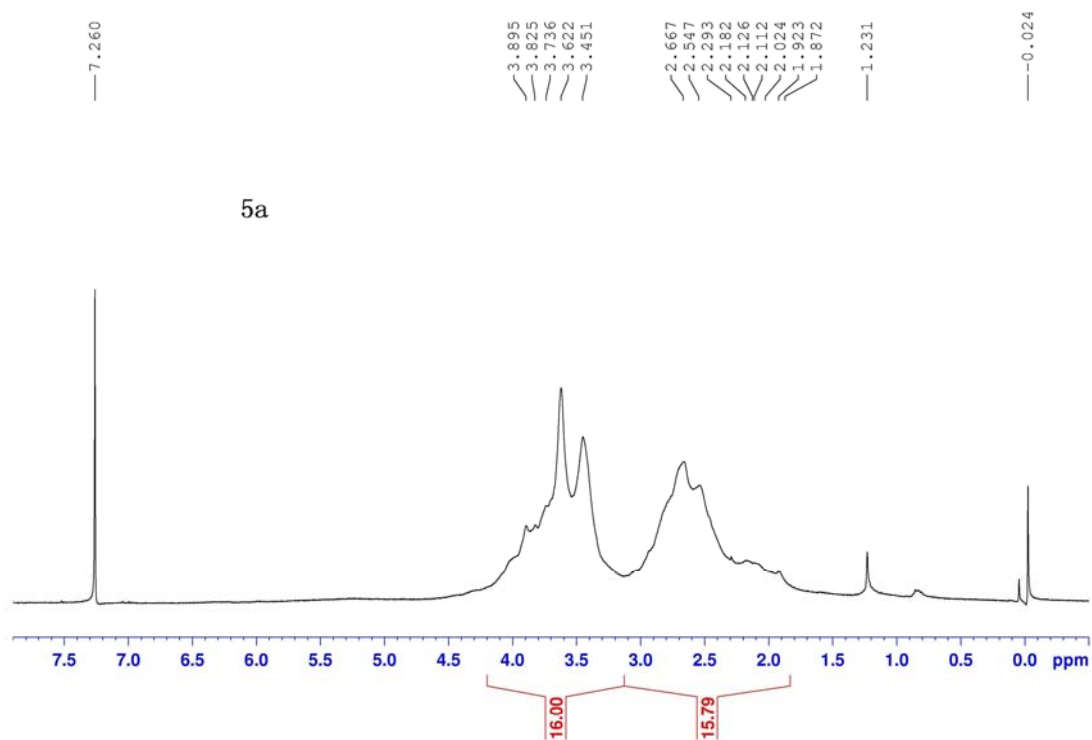
$^{13}\text{C}$  NMR spectrum of **2e**



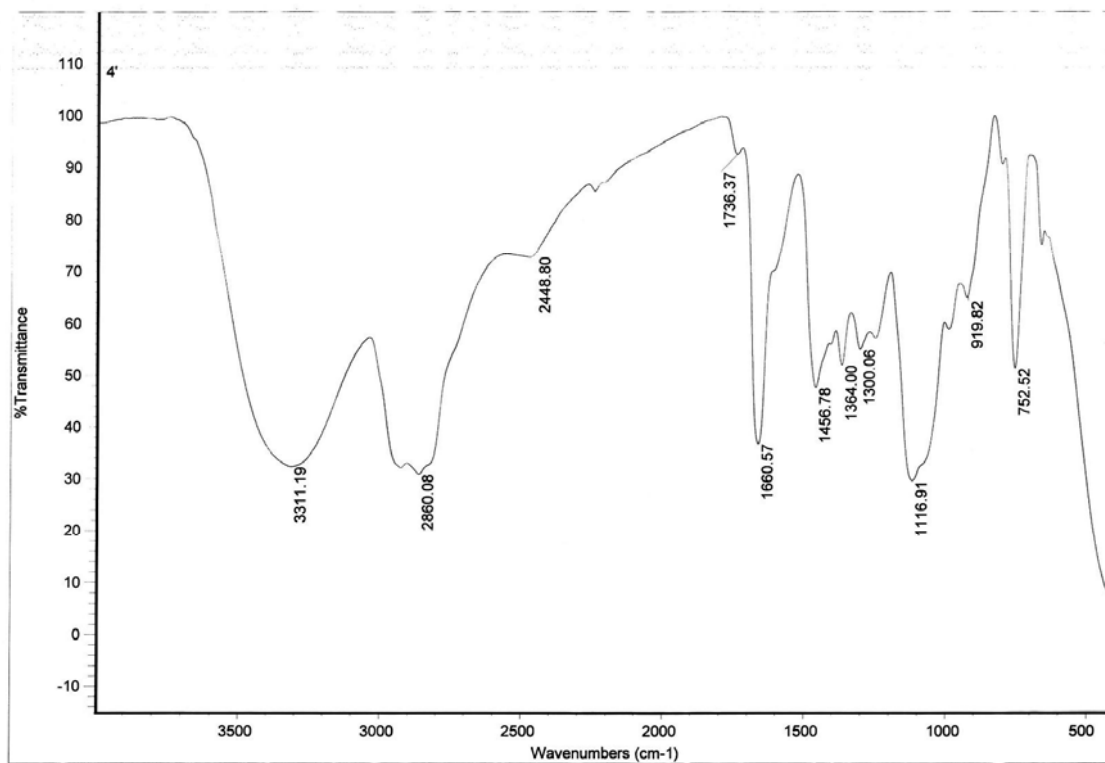
### IR spectrum of **5a**



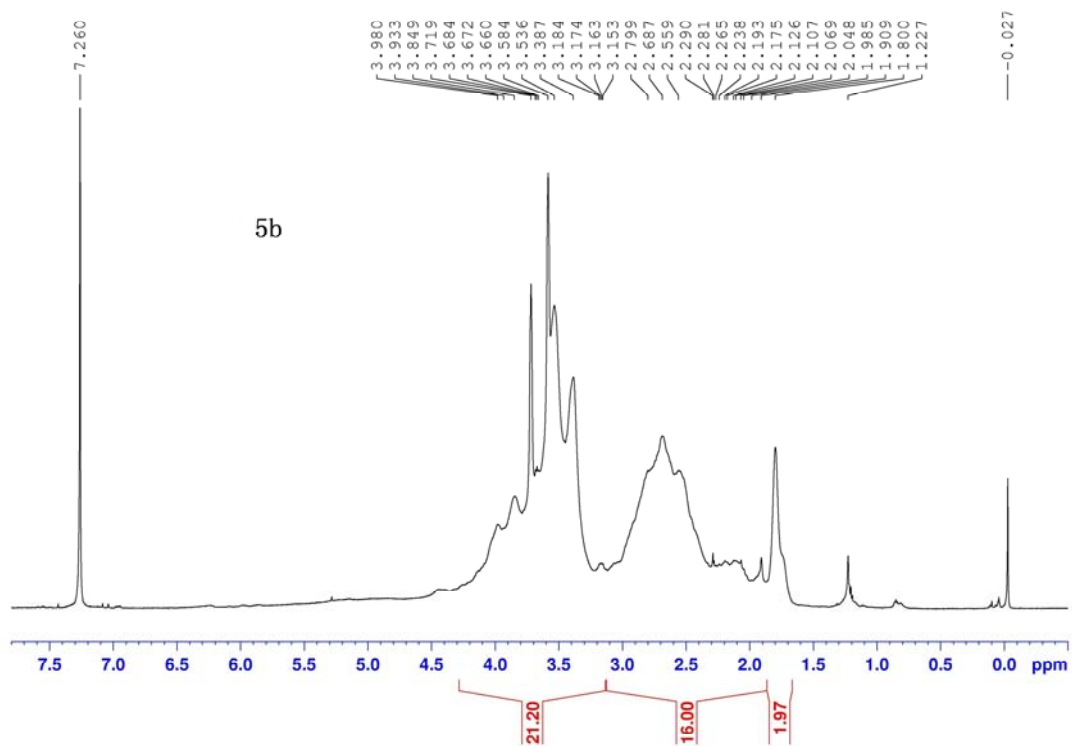
### <sup>1</sup>H NMR spectrum of **5a**



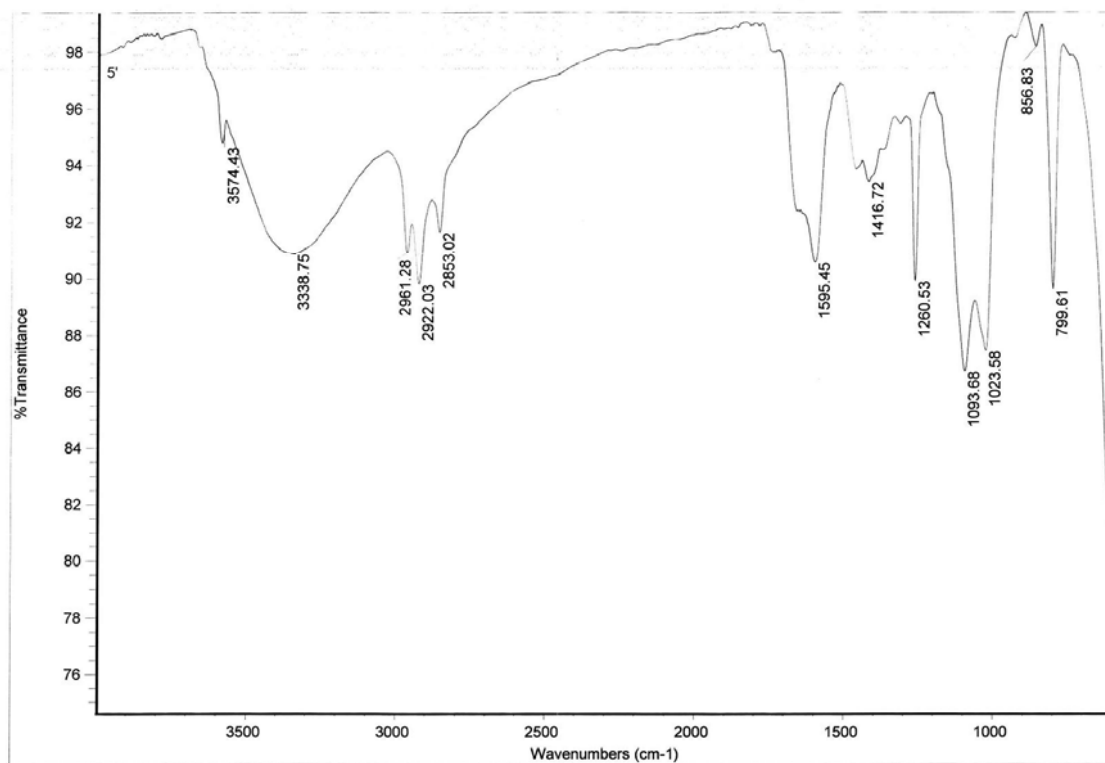
### IR spectrum of **5b**



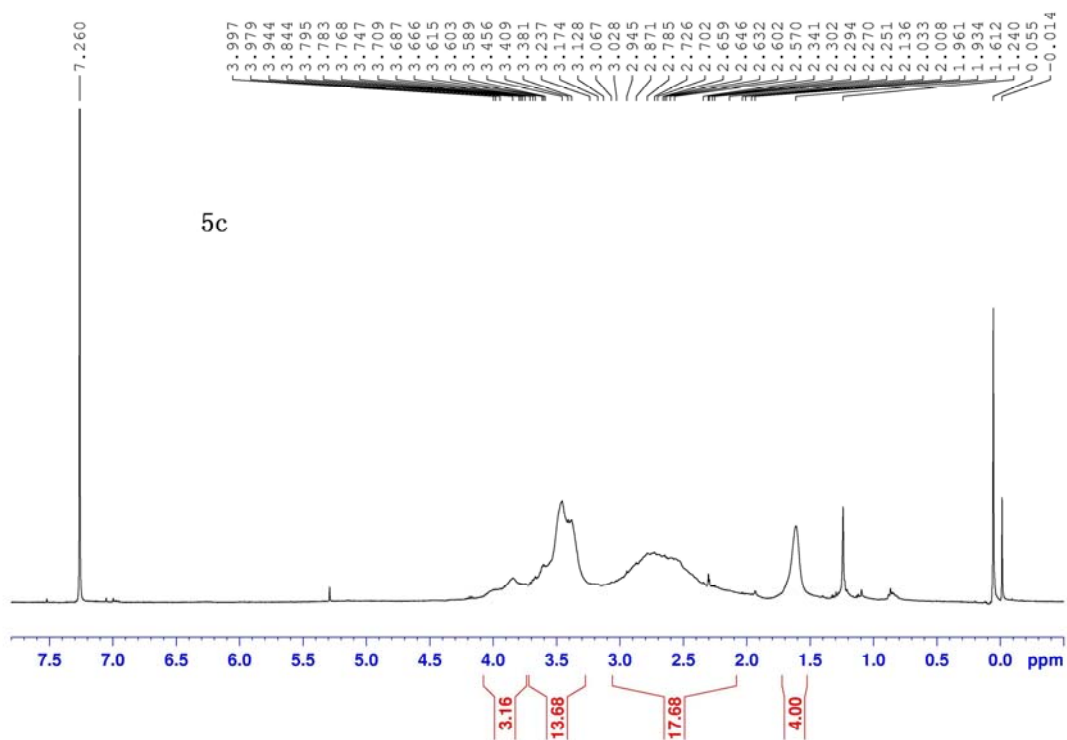
### <sup>1</sup>H NMR spectrum of **5b**



### IR spectrum of **5c**

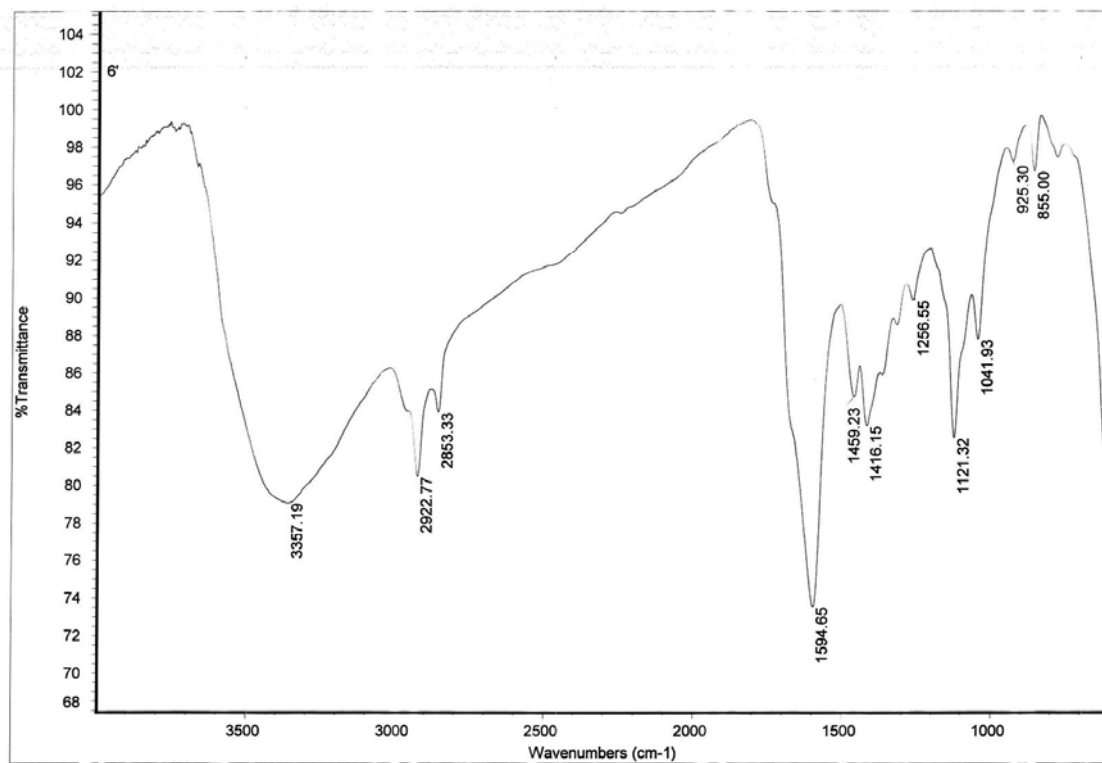


### <sup>1</sup>H NMR spectrum of **5c**

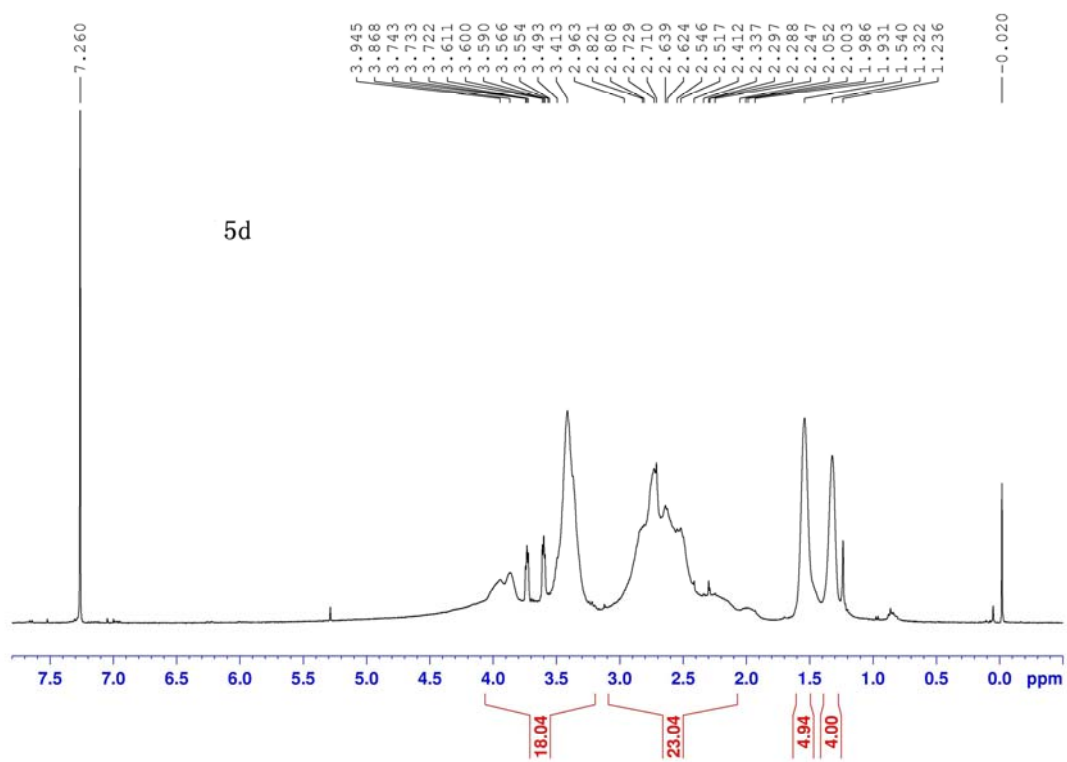




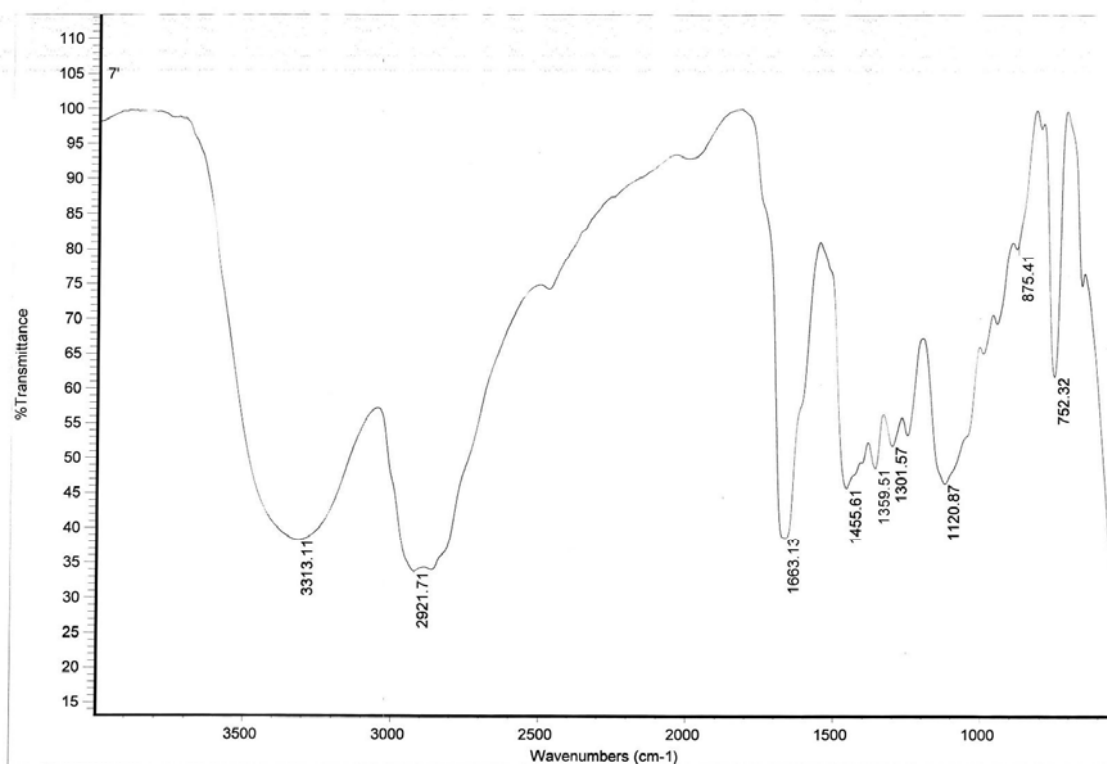
### IR spectrum of **5d**



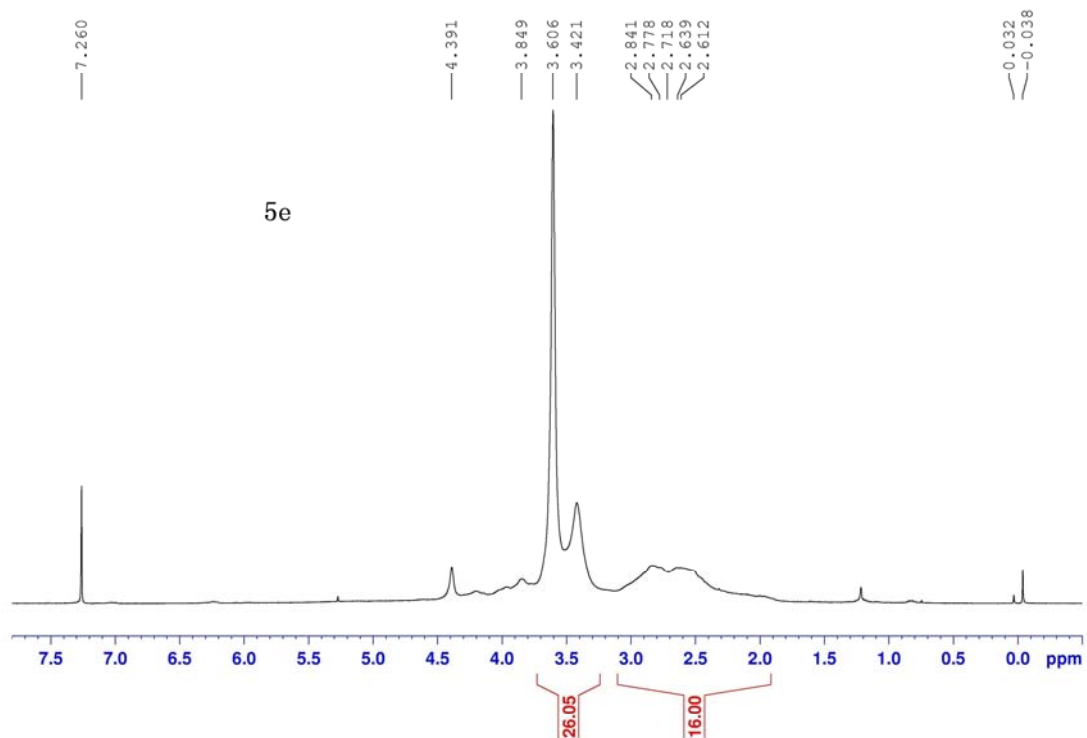
### <sup>1</sup>H NMR spectrum of **5d**



### IR spectrum of **5e**



### <sup>1</sup>H NMR spectrum of **5e**





Reported by User: System

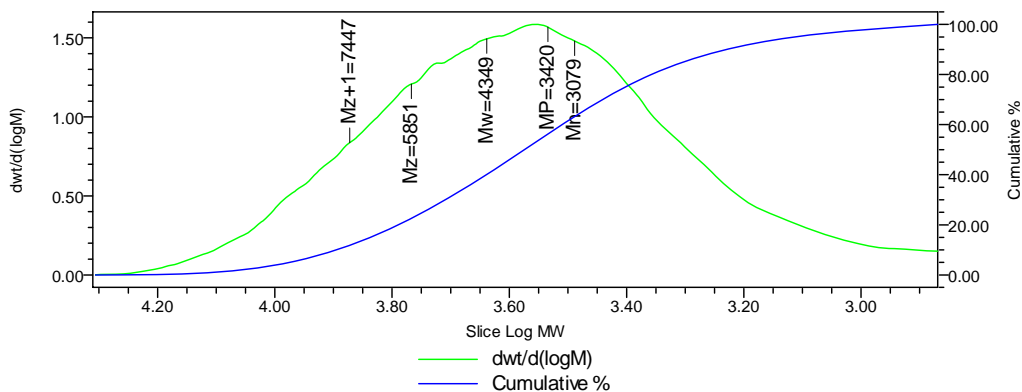
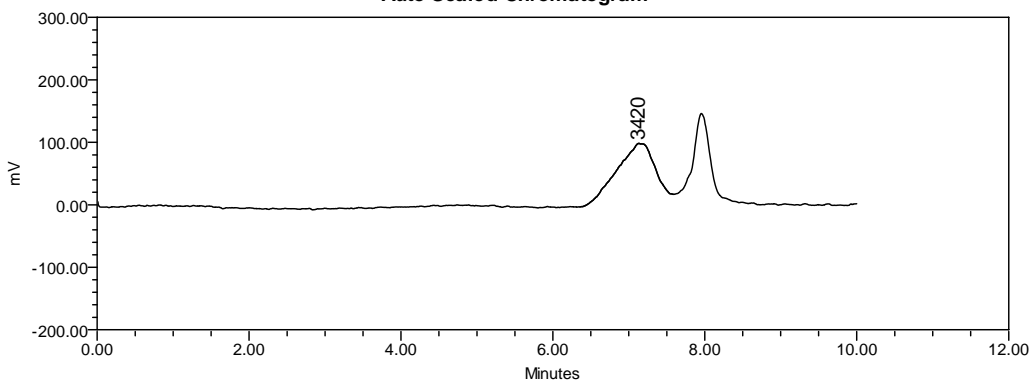
Project Name: GPC

送样单位:

检测单位: 中国科学院成都分院分析测试中心 检测人员: 龙远德 028-85223712

SAMPLE INFORMATION			
Sample Name:	Y-5-a	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-7-6 12:38:05
Vial:	1	Acq. Method Set:	GPC
Injection #:	2	Date Processed:	2010-7-6 17:58:10
Injection Volume:	20.00 ul	Processing Method:	PEG
Run Time:	10.0 Minutes	Channel Name:	Satin Ch 1
Sample Set Name:		Proc. Chnl. Descr.:	GPC

Auto-Scaled Chromatogram



GPC Results

	MP (Daltons)	Mw	Mn	Polydispersity
1	3420	4349	3079	1.41



Reported by User: System

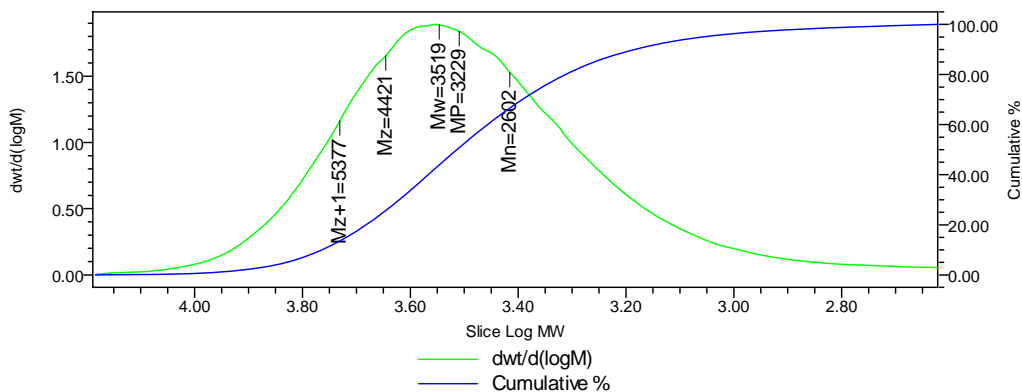
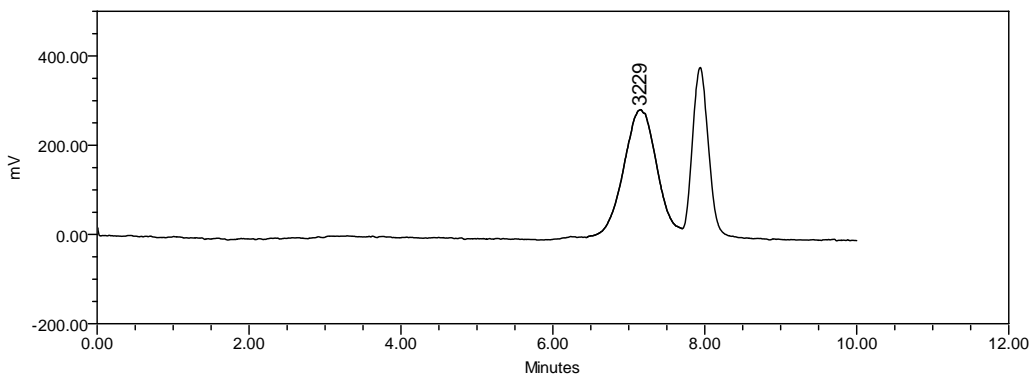
Project Name: GPC

送样单位:

检测单位: 中国科学院成都分院分析测试中心 检测人员: 龙远德 028-85223712

SAMPLE INFORMATION			
Sample Name:	Y-5-b	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-7-6 13:07:32
Vial:	1	Acq. Method Set:	GPC
Injection #:	3	Date Processed:	2010-7-6 17:58:34
Injection Volume:	10.00 ul	Processing Method:	PEG
Run Time:	10.0 Minutes	Channel Name:	Satin Ch 1
Sample Set Name:		Proc. Chnl. Descr.:	GPC

Auto-Scaled Chromatogram



GPC Results

	MP (Daltons)	Mw	Mn	Polydispersity
1	3229	3519	2602	1.35



Reported by User: System

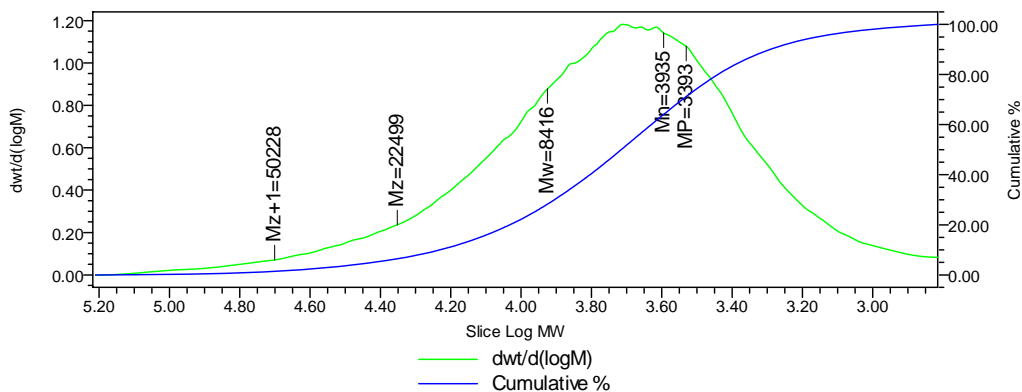
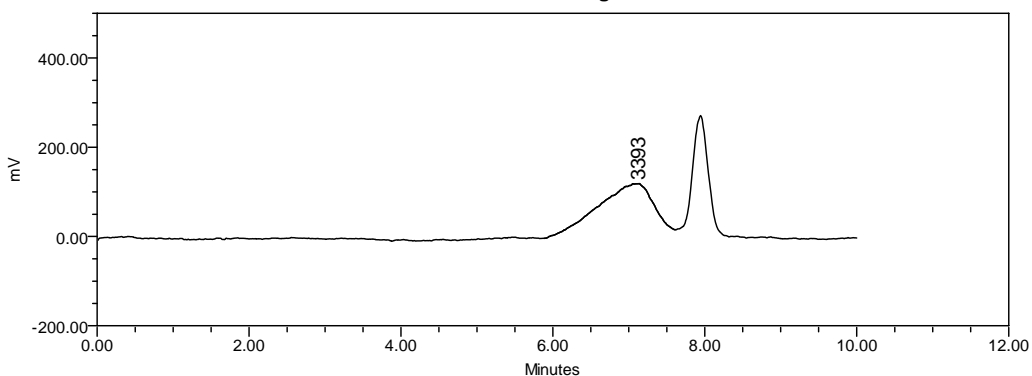
Project Name: GPC

送样单位:

检测单位: 中国科学院成都分院分析测试中心 检测人员: 龙远德 028-85223712

SAMPLE INFORMATION			
Sample Name:	Y-5-c	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-7-6 13:19:16
Vial:	1	Acq. Method Set:	GPC
Injection #:	4	Date Processed:	2010-7-6 17:58:55
Injection Volume:	10.00 ul	Processing Method:	PEG
Run Time:	10.0 Minutes	Channel Name:	Satin Ch 1
Sample Set Name:		Proc. Chnl. Descr.:	GPC

Auto-Scaled Chromatogram



GPC Results

	MP (Daltons)	Mw	Mn	Polydispersity
1	3393	8416	3935	2.14



Reported by User: System

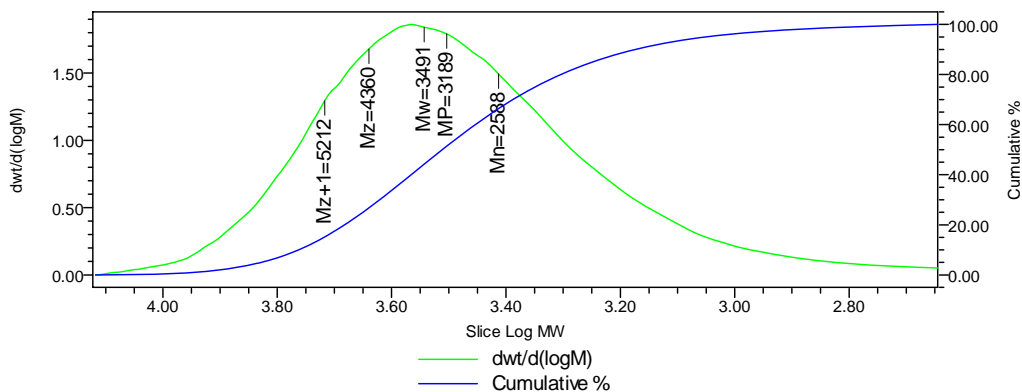
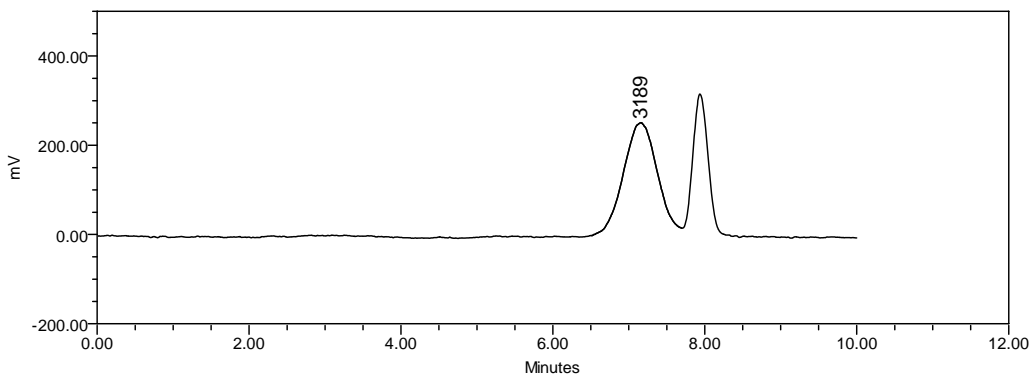
Project Name: GPC

送样单位:

检测单位: 中国科学院成都分院分析测试中心 检测人员: 龙远德 028-85223712

SAMPLE INFORMATION			
Sample Name:	Y-5-d	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-7-6 13:32:43
Vial:	1	Acq. Method Set:	GPC
Injection #:	5	Date Processed:	2010-7-6 18:01:03
Injection Volume:	10.00 ul	Processing Method:	PEG
Run Time:	10.0 Minutes	Channel Name:	Satin Ch 1
Sample Set Name:		Proc. Chnl. Descr.:	GPC

Auto-Scaled Chromatogram



GPC Results

	MP (Daltons)	Mw	Mn	Polydispersity
1	3189	3491	2588	1.35



Reported by User: System

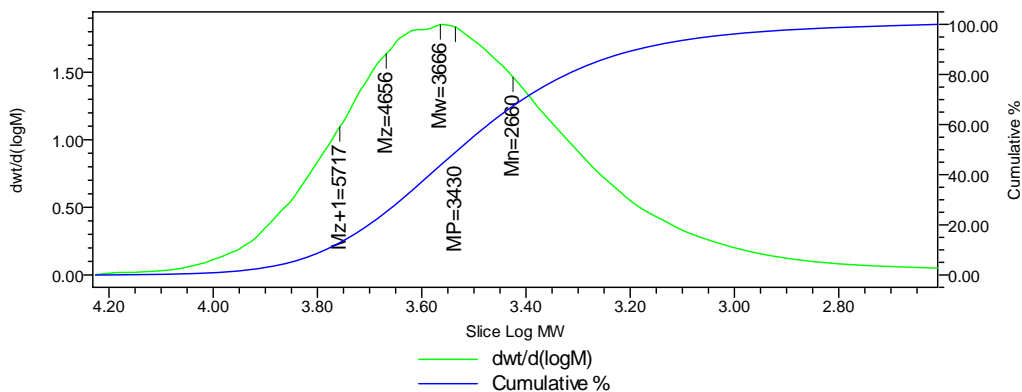
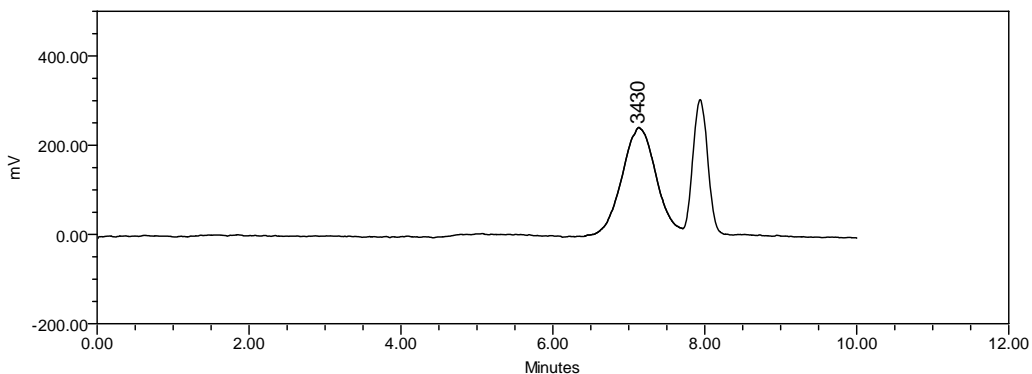
Project Name: GPC

送样单位:

检测单位: 中国科学院成都分院分析测试中心 检测人员: 龙远德 028-85223712

SAMPLE INFORMATION			
Sample Name:	Y-5-e	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-7-6 13:45:53
Vial:	1	Acq. Method Set:	GPC
Injection #:	6	Date Processed:	2010-7-6 17:59:55
Injection Volume:	10.00 ul	Processing Method:	PEG
Run Time:	10.0 Minutes	Channel Name:	Satin Ch 1
Sample Set Name:		Proc. Chnl. Descr.:	GPC

Auto-Scaled Chromatogram



GPC Results

	MP (Daltons)	Mw	Mn	Polydispersity
1	3430	3666	2660	1.38