

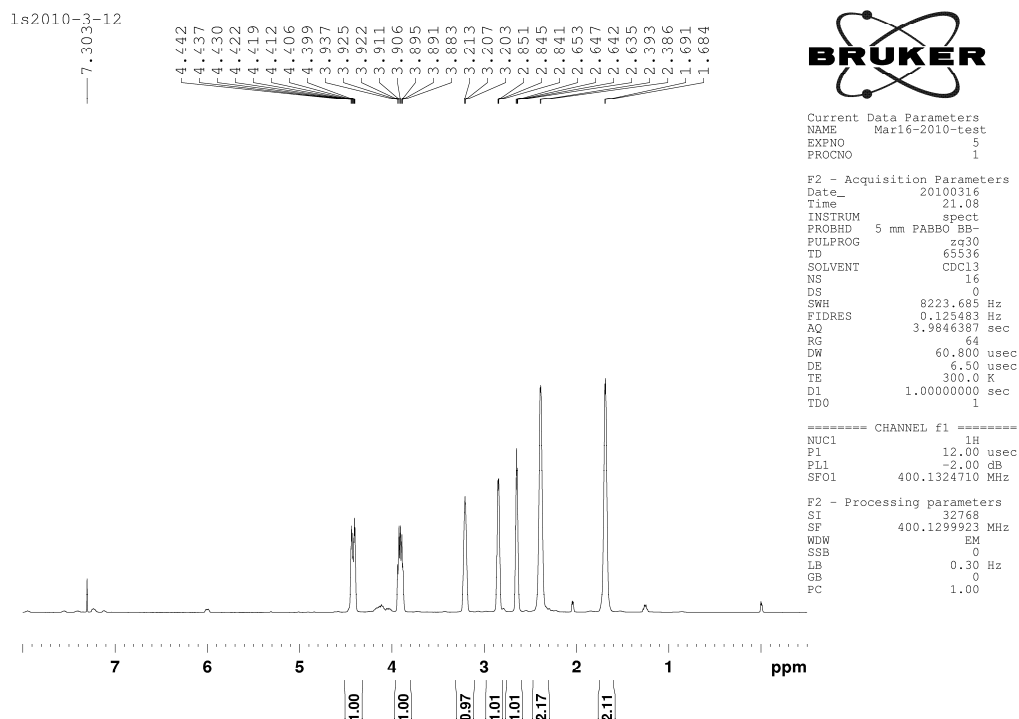
Supplementary information:

Biodegradable cross-linked poly(amino alcohol esters) based on LMW PEI for gene delivery

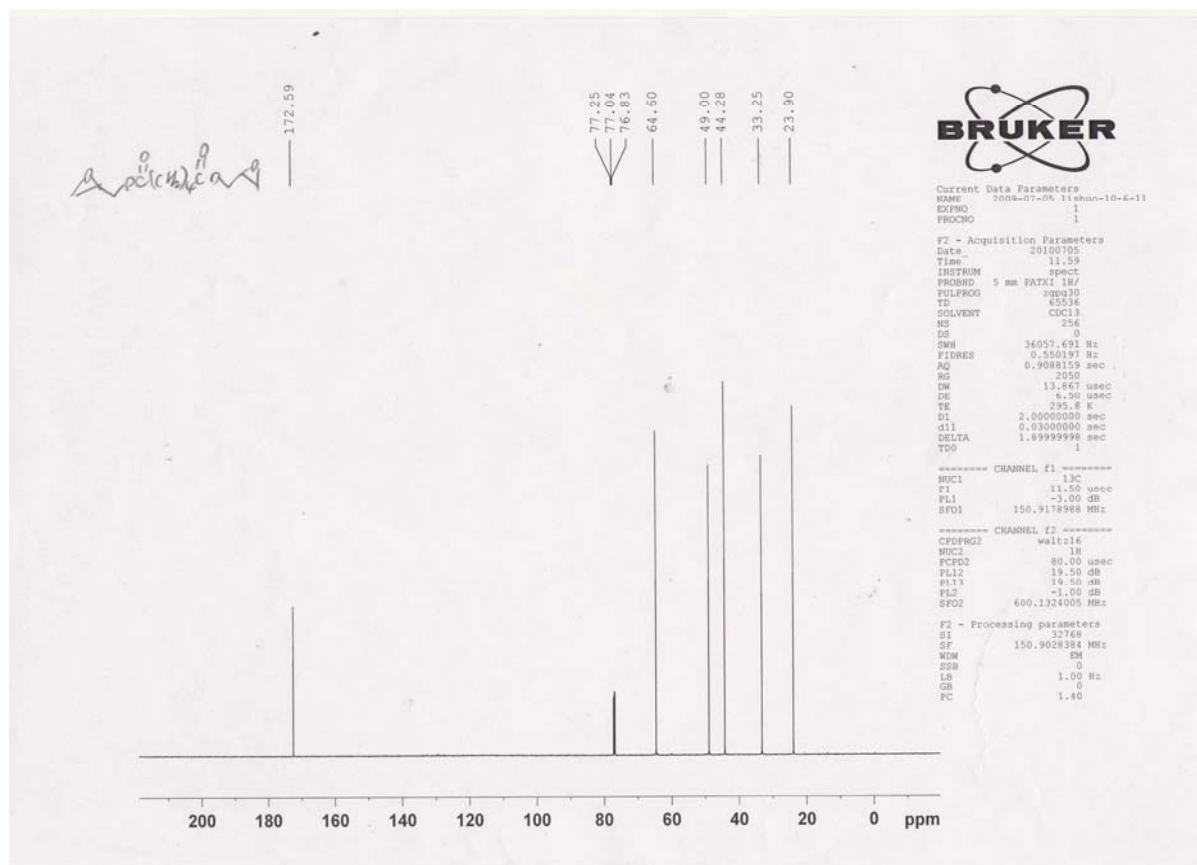
Shuo Li, Yu Wang, Ji Zhang^{}, Wei-Han Yang, Zhen-Hua Dai, Wen Zhu^{*}, and Xiao-Qi Yu^{*}*

Characterization of compound 2a	S1
Characterization of compound 2b	S3
Characterization of compound 2c	S5
Characterization of DA-PEI 3a	S7
Characterization of DS-PEI 3b	S8
Characterization of DO-PEI 3c	S9
GPC sheets.....	S10

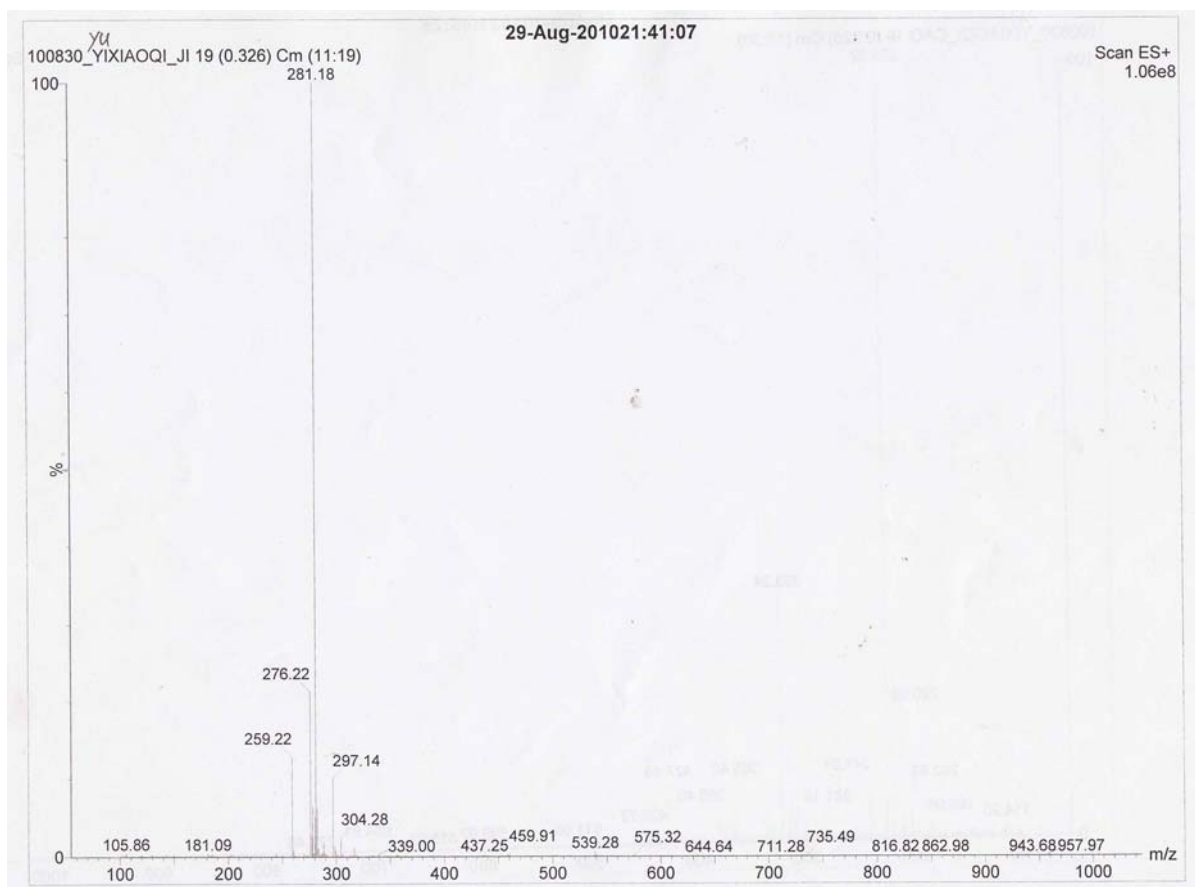
¹H NMR spectrum of **2a**



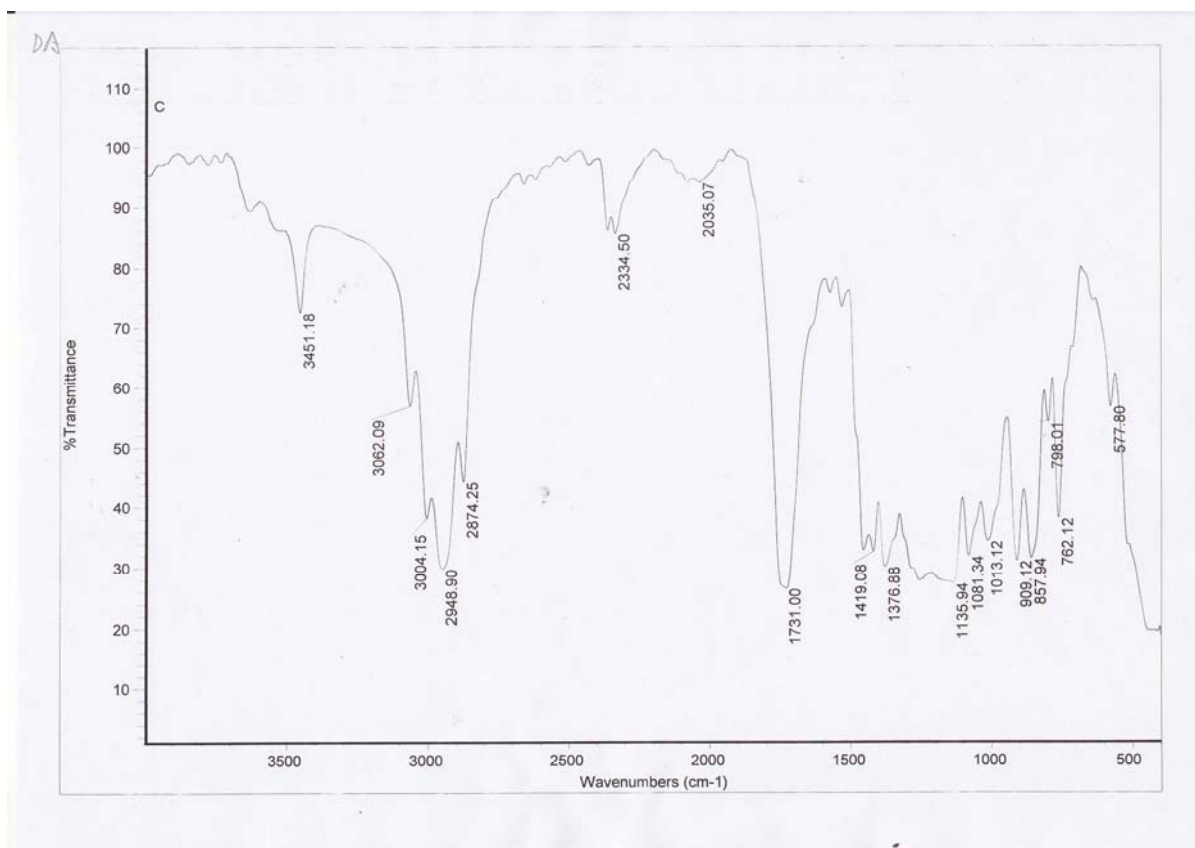
¹³C NMR spectrum of **2a**



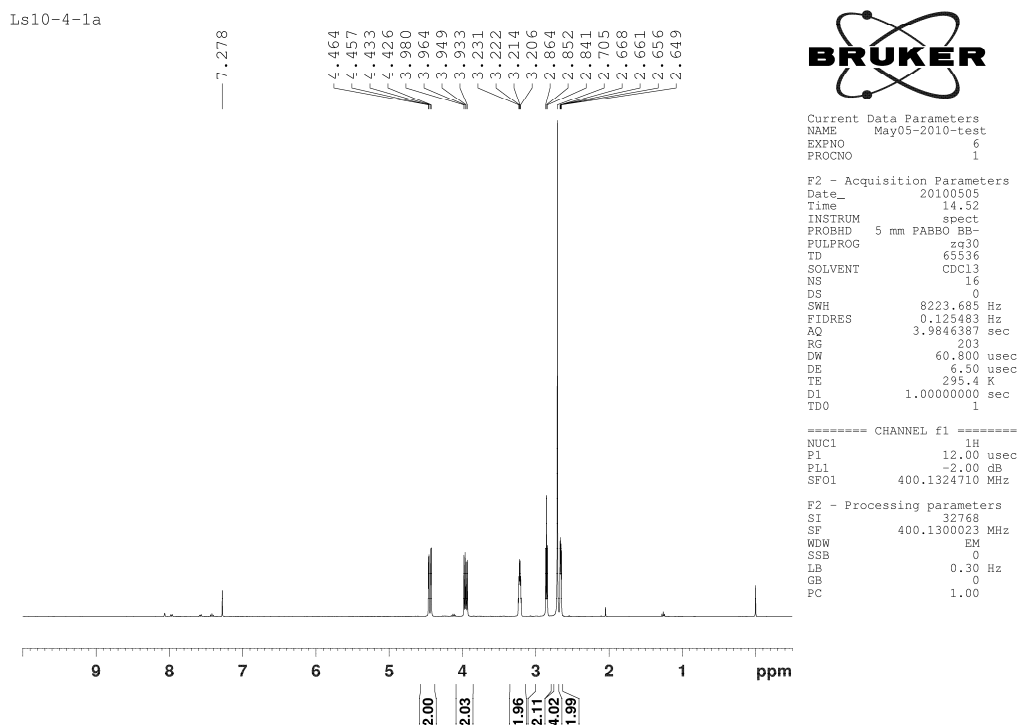
MS of **2a**



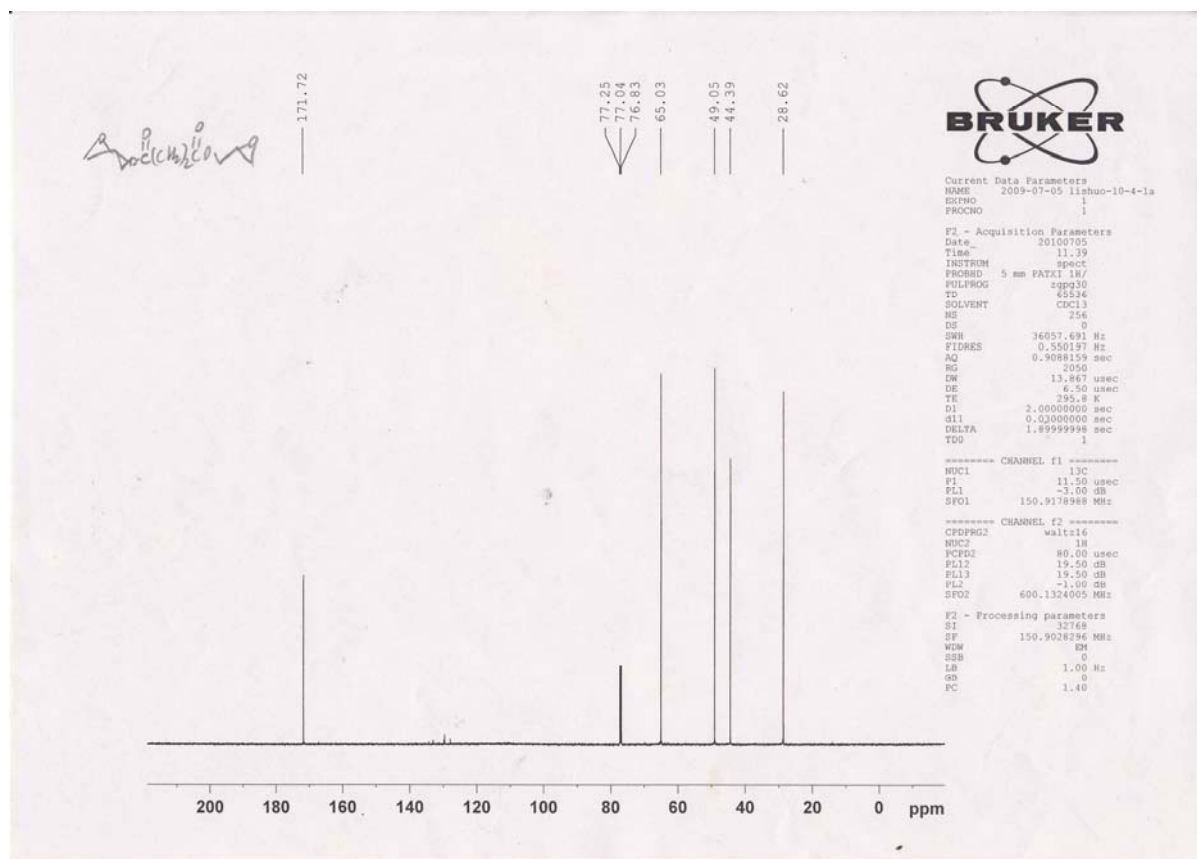
IR spectrum of **2a**



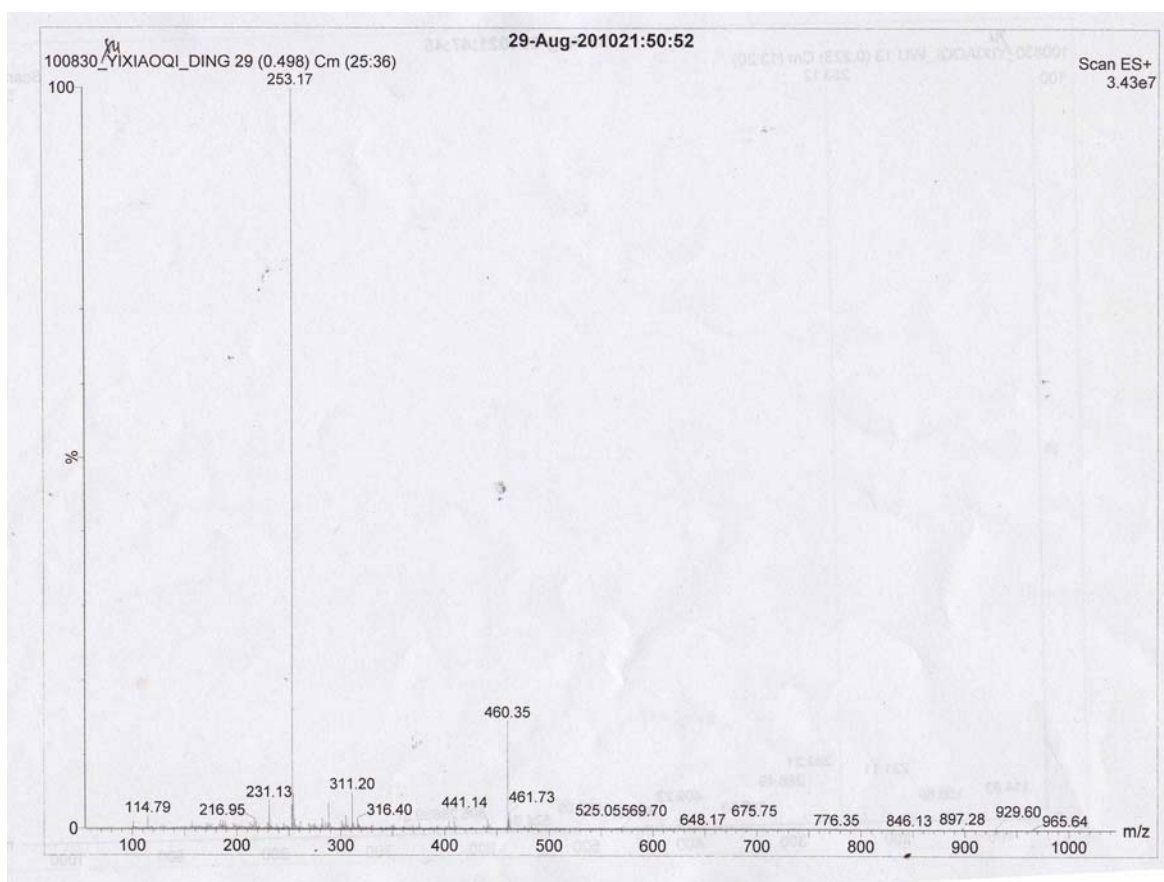
¹H NMR spectrum of **2b**



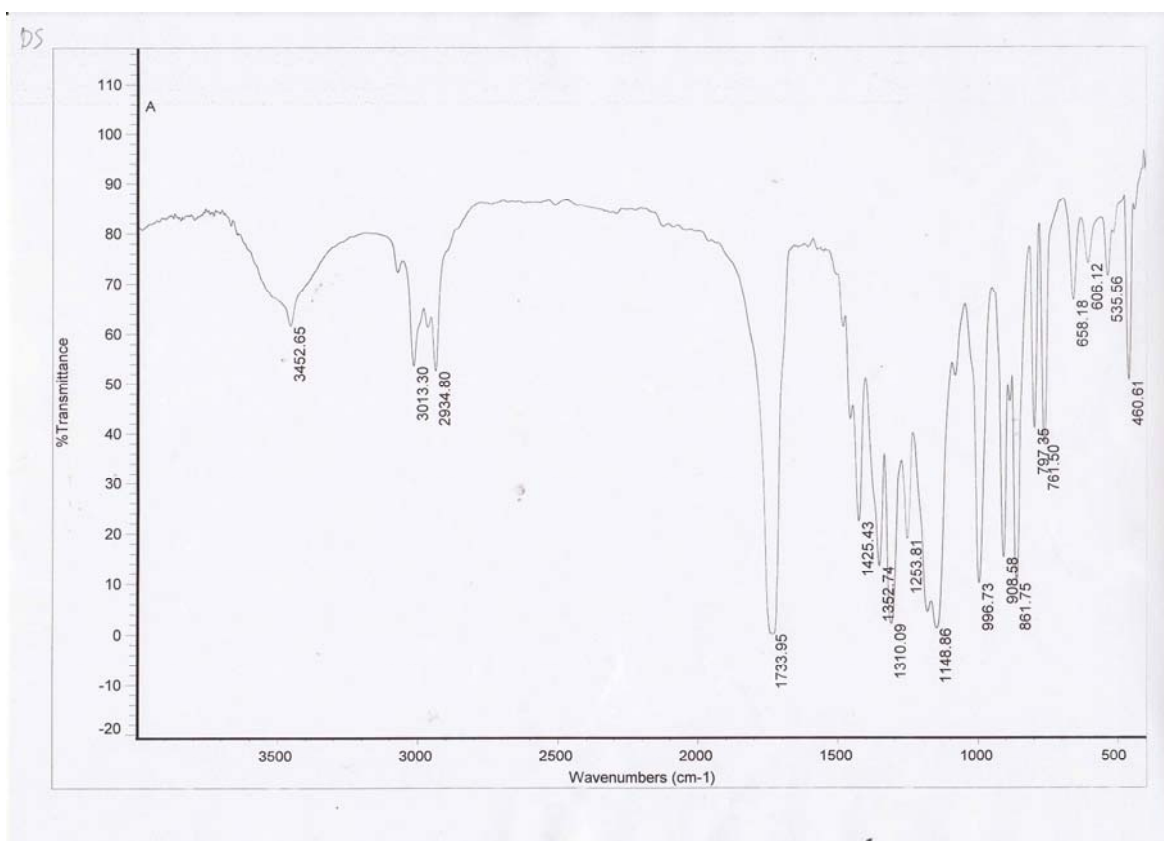
¹³C NMR spectrum of **2b**



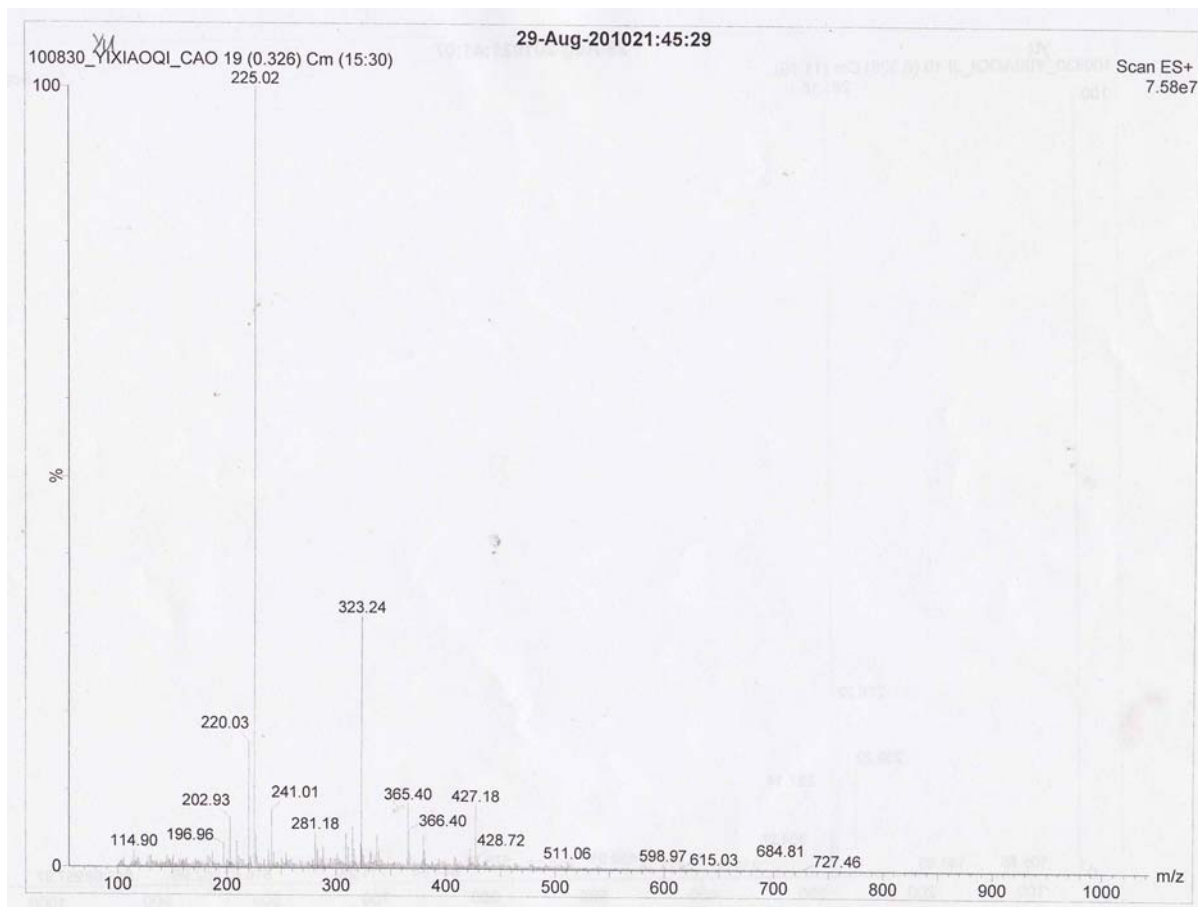
MS of **2b**



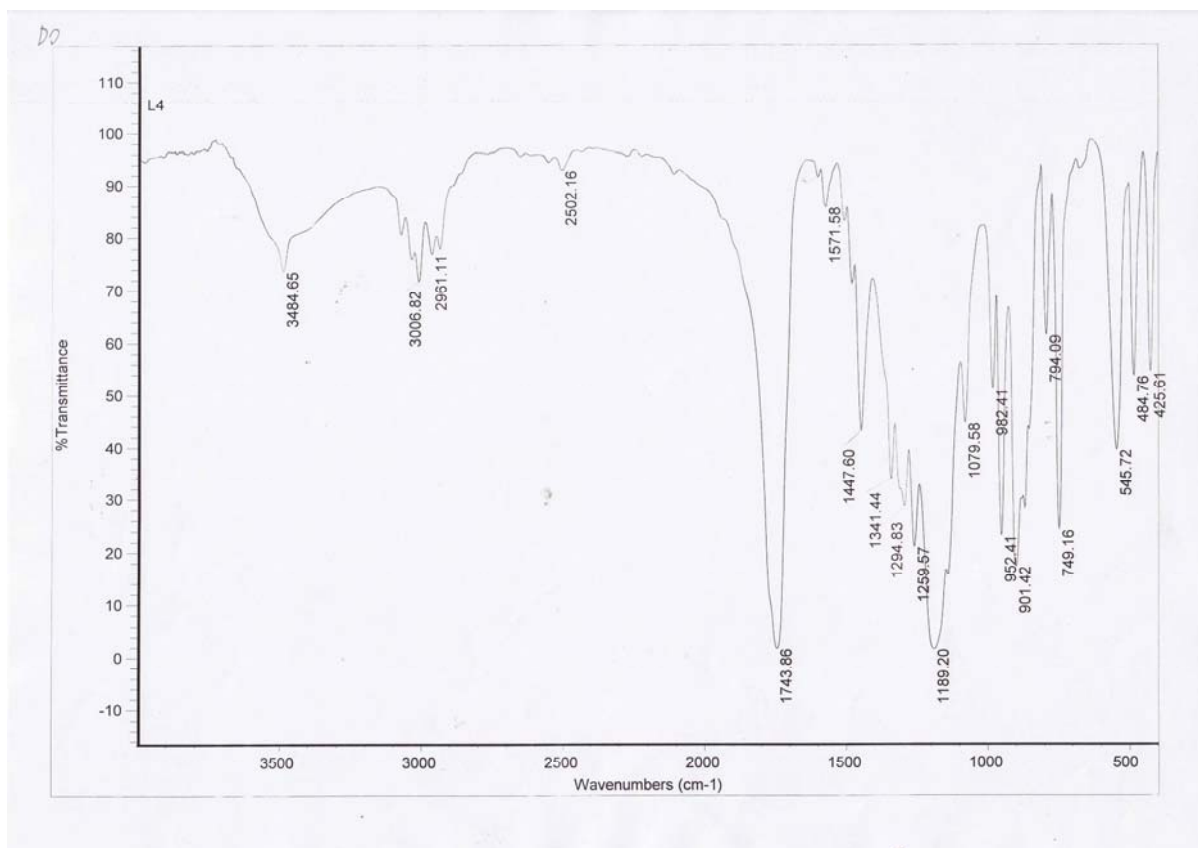
IR spectrum of **2b**



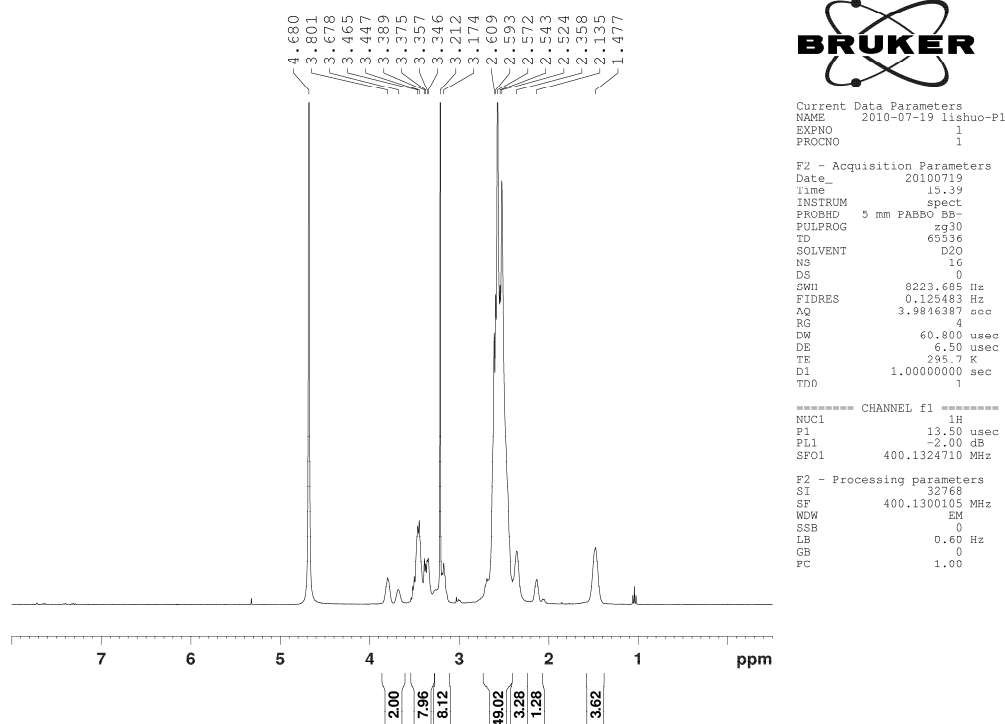
MS of **2c**



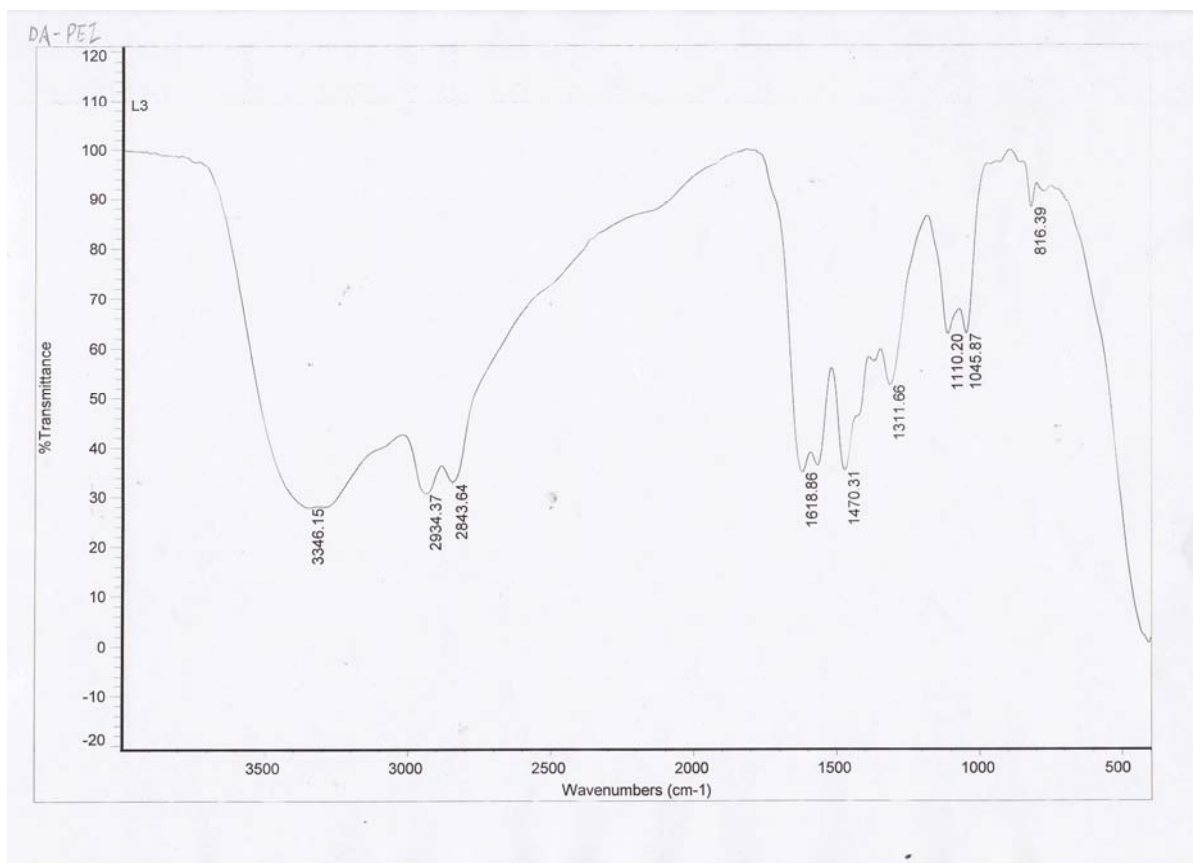
IR spectrum of **2c**



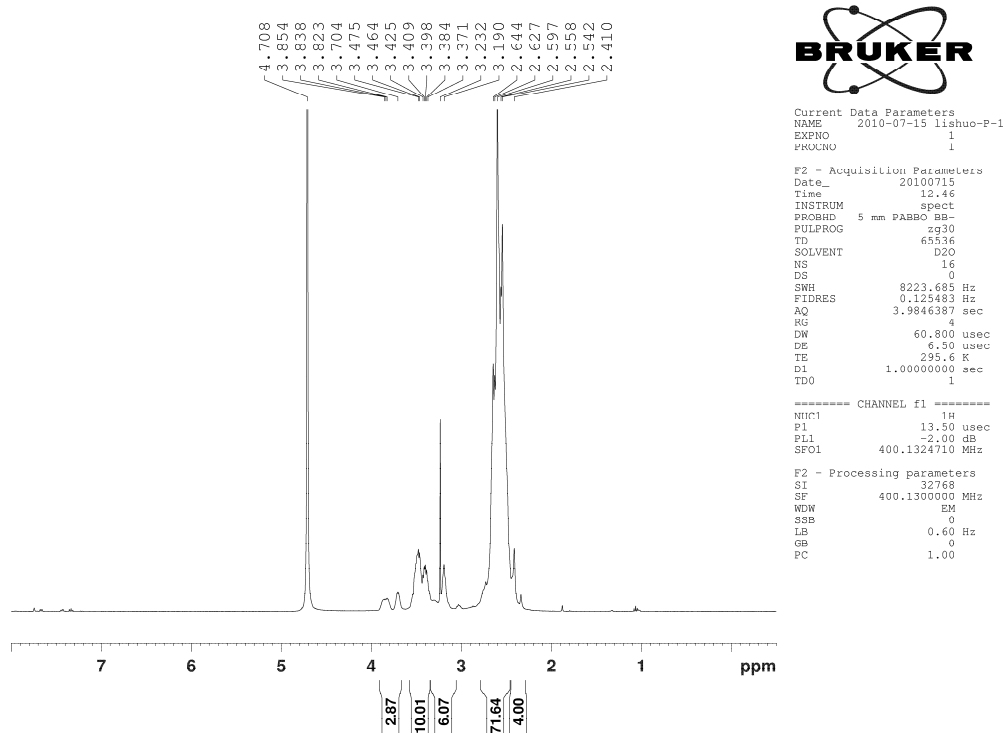
¹H NMR spectrum of **3a**



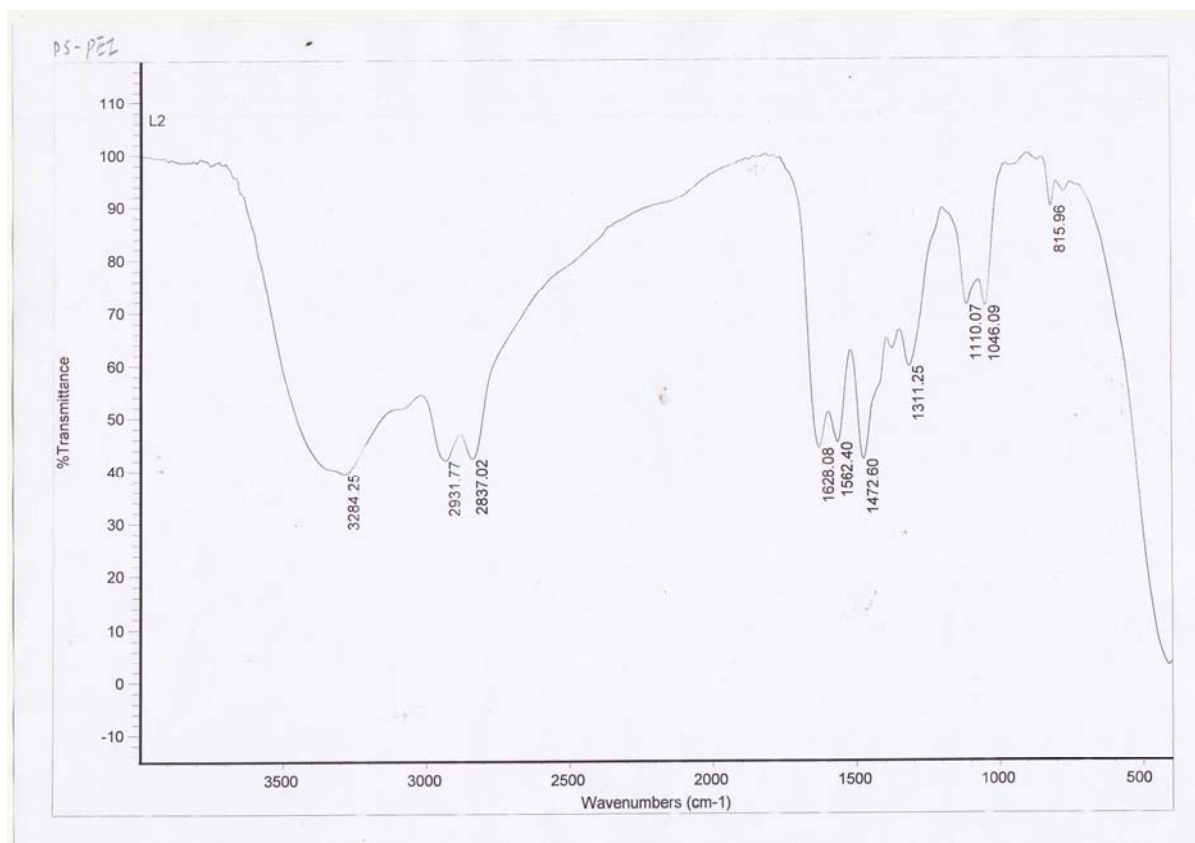
IR spectrum of **3a**



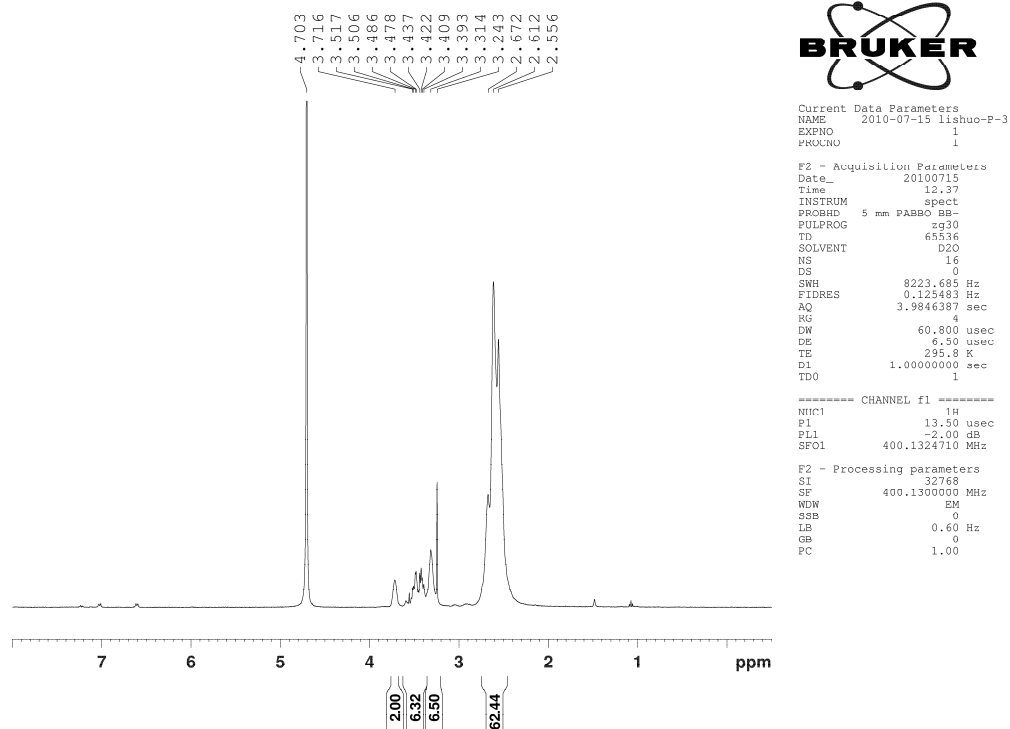
¹H NMR spectrum of **3b**



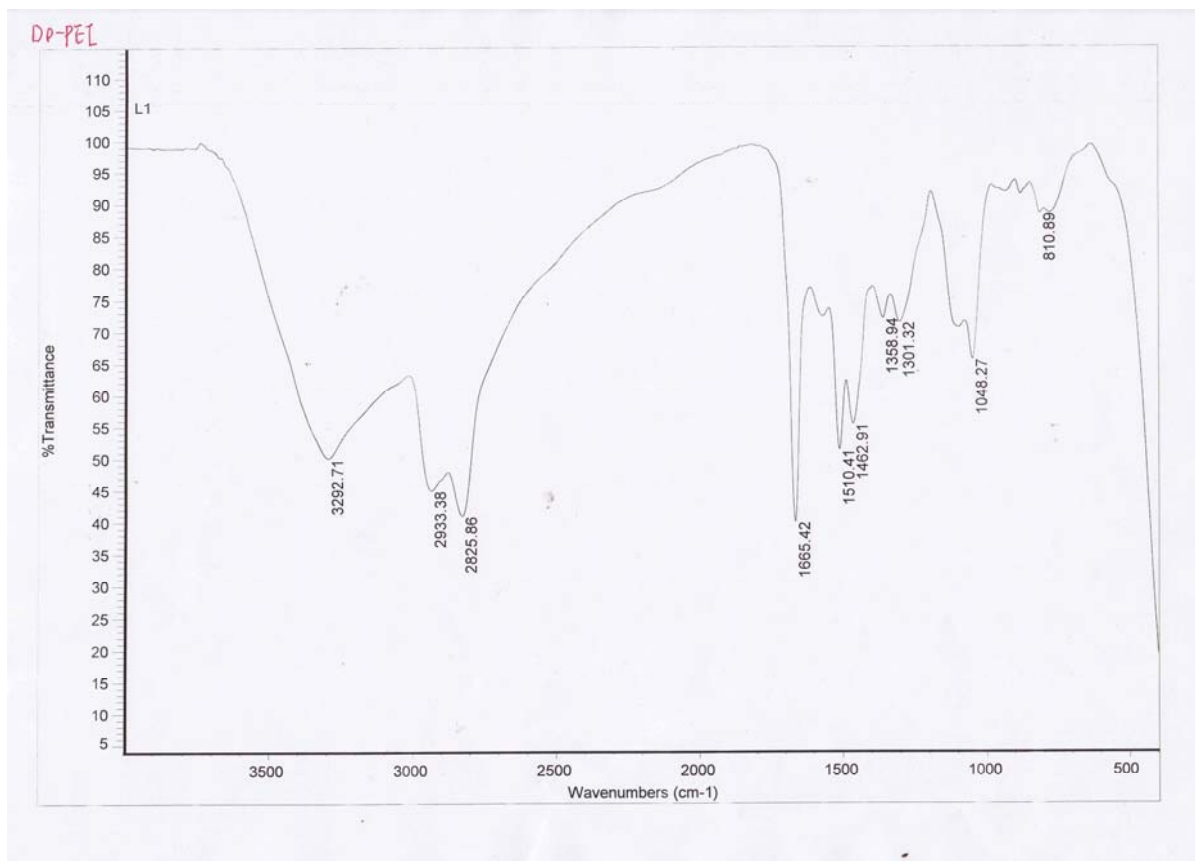
IR spectrum of **3b**



¹H NMR spectrum of **3c**



IR spectrum of **3c**



GPC of DS-PEI(6)



PEG

Reported by User: System

Project Name: GPC

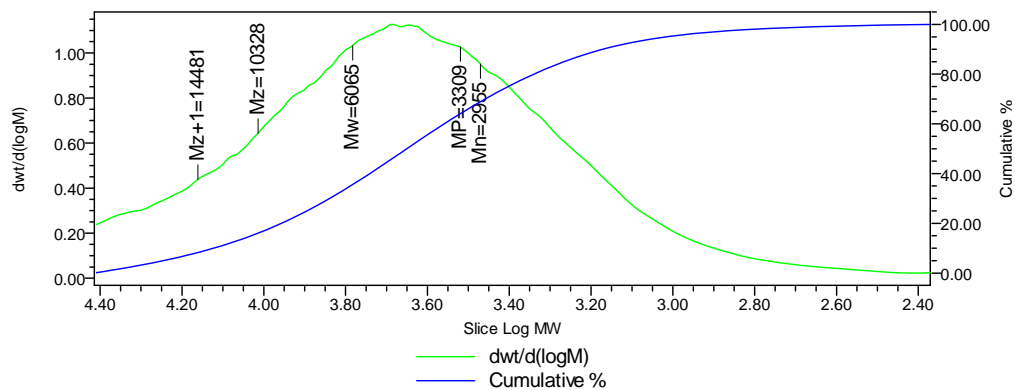
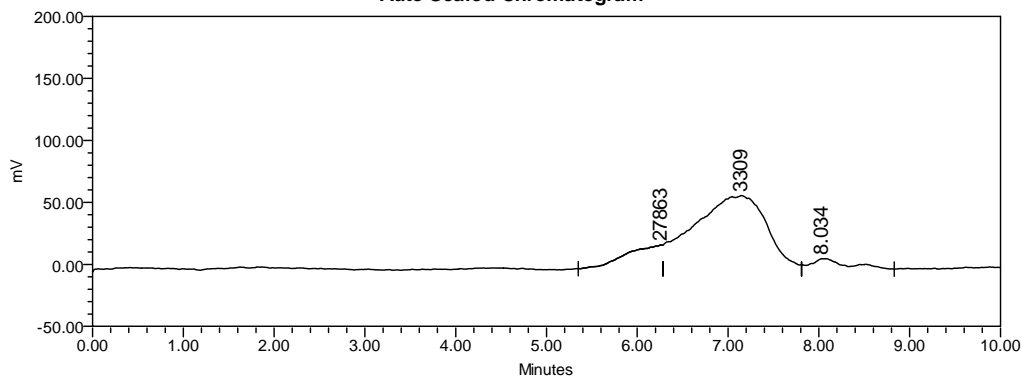
送样单位:

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:	LS P-1A	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-8-4 13:18:18
Vial:	1	Acq. Method Set:	GPC
Injection #:	9	Date Processed:	2010-9-1 16:05:32
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	27863			
2	3309	6065	2955	2.05
3				

Report Method: PEG

Printed 16:08:17

2010-9-1

GPC of DS-PEI(12)



PEG

Reported by User: System

Project Name: GPC

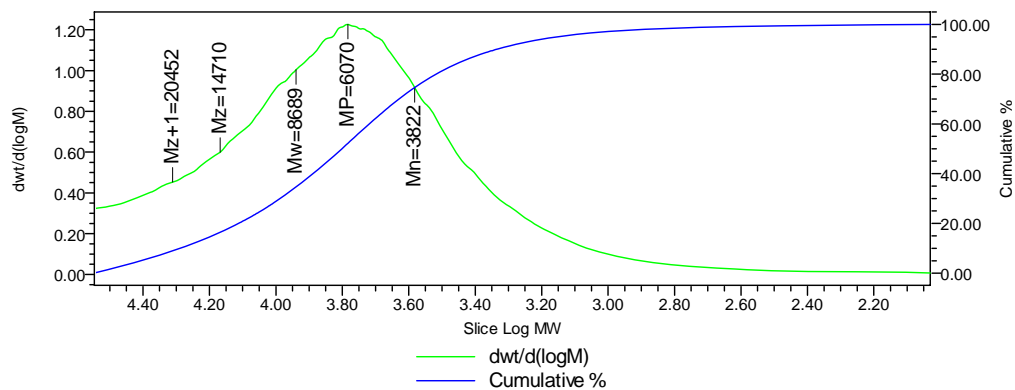
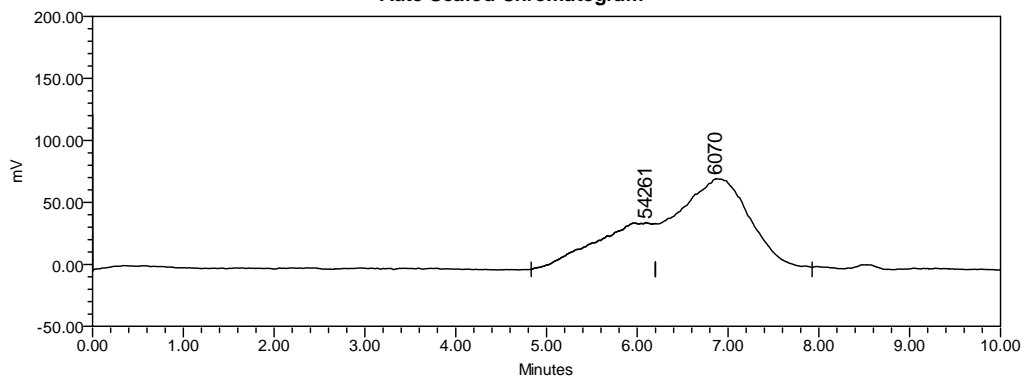
送样单位:

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:	LS P-1B	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-8-4 12:23:12
Vial:	1	Acq. Method Set:	GPC
Injection #:	7	Date Processed:	2010-9-1 16:06:32
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	54261			
2	6070	8689	3822	2.27

Report Method: PEG

Printed 16:07:49

2010-9-1

GPC of DS-PEI(3b)



PEG

Reported by User: System

Project Name: GPC

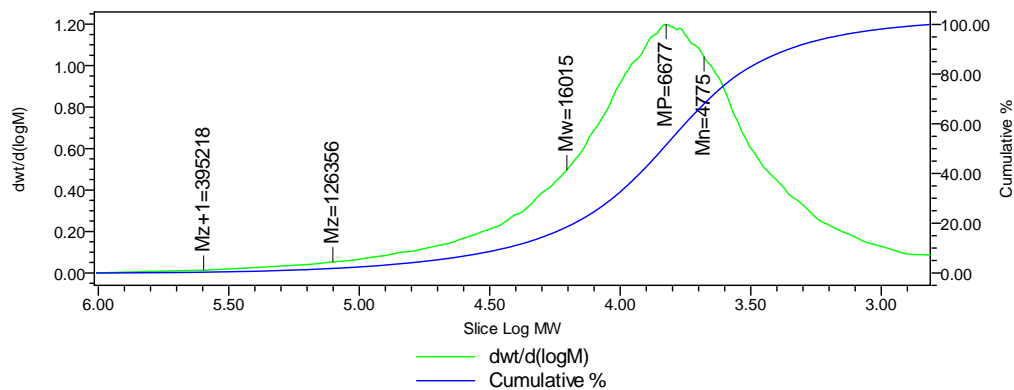
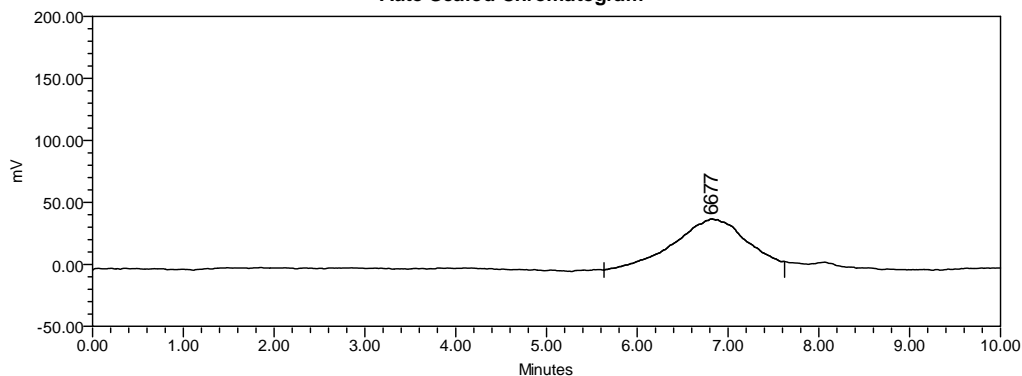
送样单位:

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:	LS P-1C	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-8-4 13:29:41
Vial:	1	Acq. Method Set:	GPC
Injection #:	10	Date Processed:	2010-9-1 16:09:47
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	6677	16015	4775	3.35

Report Method: PEG

Printed 16:10:06

2010-9-1

GPC of DS-PEI(48)



凝胶色谱

Reported by User: System

Project Name: SEC

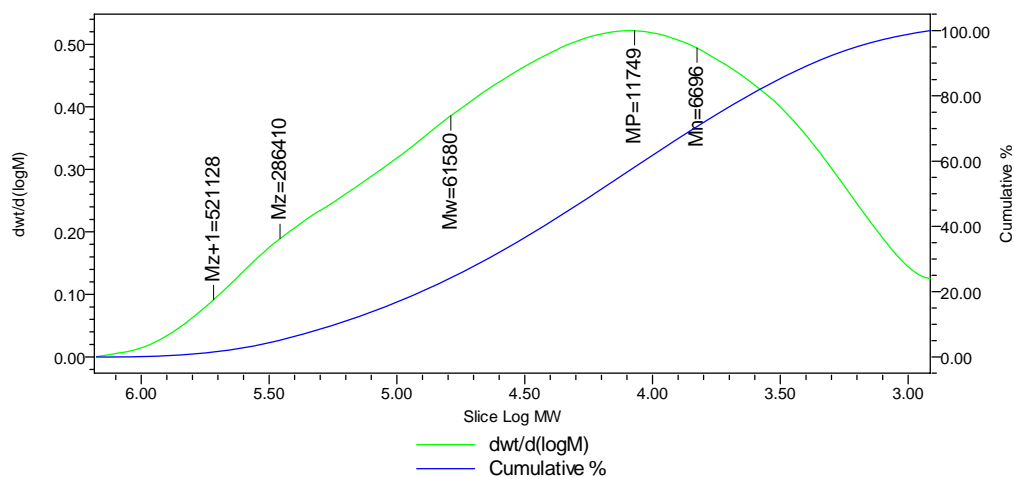
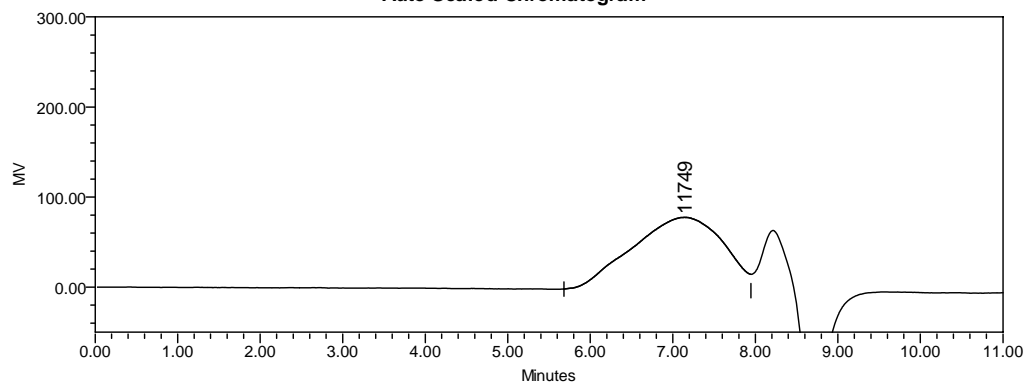
检测单位: 中国科学院成都分院分析测试中心

分析人员: 龙远德 (028-85223712)

SAMPLE INFORMATION

Sample Name:	DZH10-3-24	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-4-26 13:37:43
Vial:	1	Acq. Method Set:	GPC
Injection #:	16	Date Processed:	2010-4-26 14:02:01
Injection Volume:	5.00 ul	Processing Method:	GPC
Run Time:	11.0 Minutes	Channel Name:	410
Sample Set Name:		Proc. Chnl. Descr.:	410

Auto-Scaled Chromatogram



GPC Results

	Mw	Mn	Polydispersity
1	6.16e+004	6.70e+003	9.20

Report Method: 凝胶色谱

Printed 14:31:39

2010-4-26

GPC of DA-PEI(3a)



PEG

Reported by User: System

Project Name: GPC

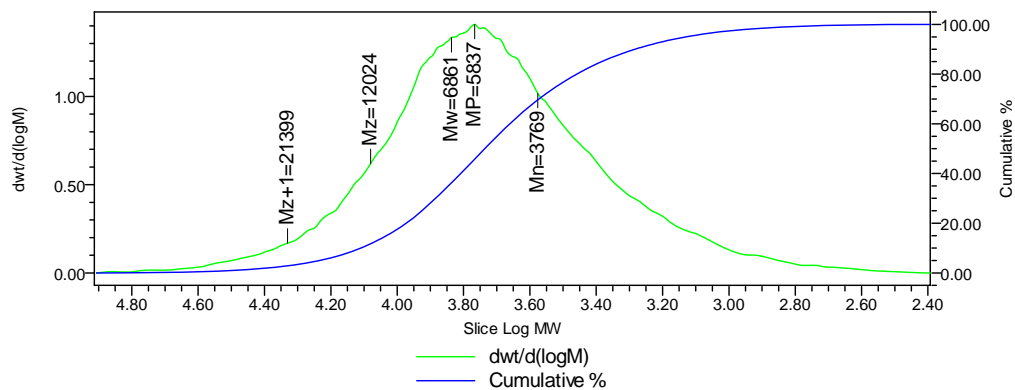
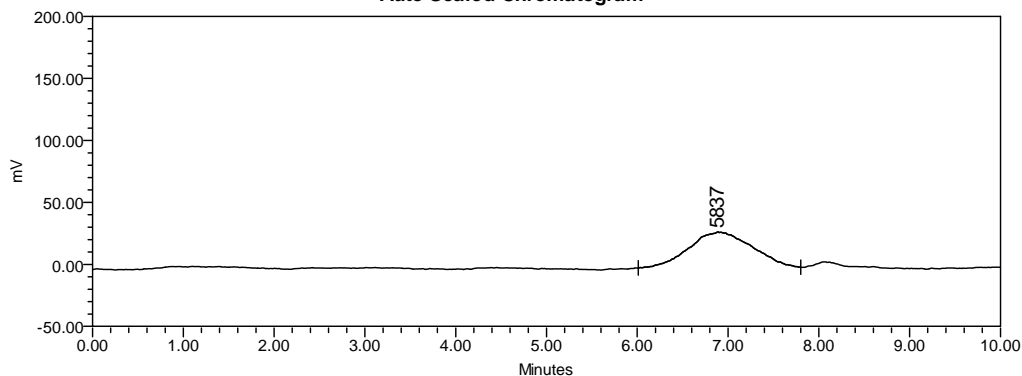
送样单位:

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:	LS P-2	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-8-4 12:34:52
Vial:	1	Acq. Method Set:	GPC
Injection #:	8	Date Processed:	2010-8-4 13:48:46
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	5837	6861	3769	1.82

Report Method: PEG

Printed 16:08:04

2010-9-1

GPC of DO-PEI(3c)



PEG

Reported by User: System

Project Name: GPC

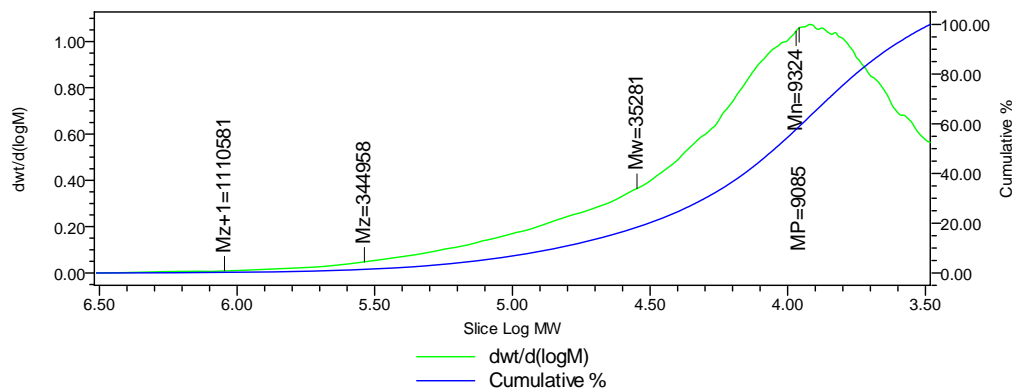
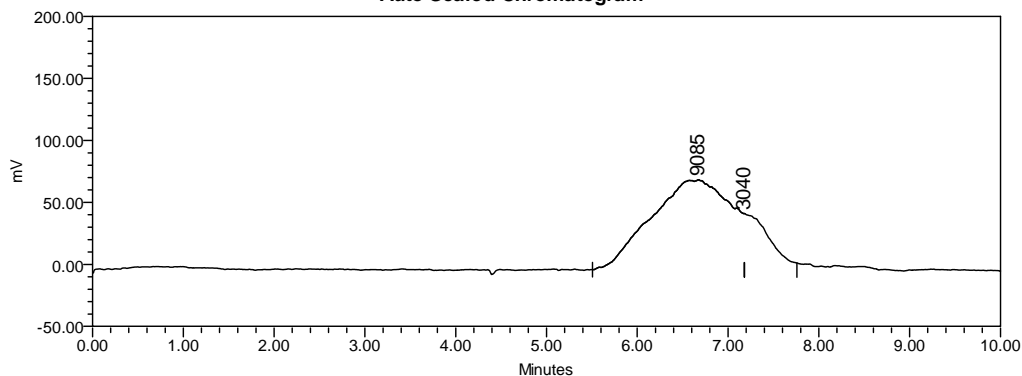
送样单位:

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:	LS P-3	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	2010-8-4 12:09:35
Vial:	1	Acq. Method Set:	GPC
Injection #:	6	Date Processed:	2010-9-1 16:11:11
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	9085	35281	9324	3.78
2	3040			

Report Method: PEG

Printed 16:11:29

2010-9-1