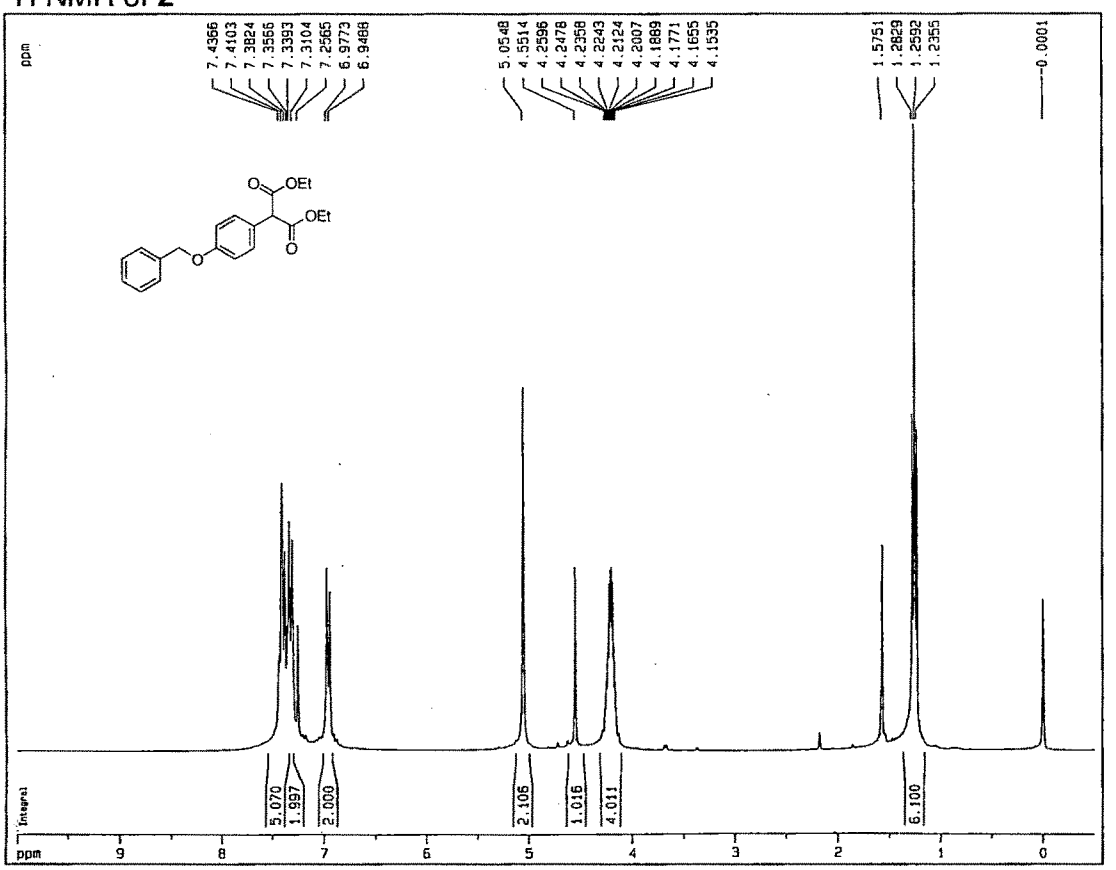
Spectra

"Science is nothing but developed perception, interpreted intent, common sense rounded out and minutely articulated"

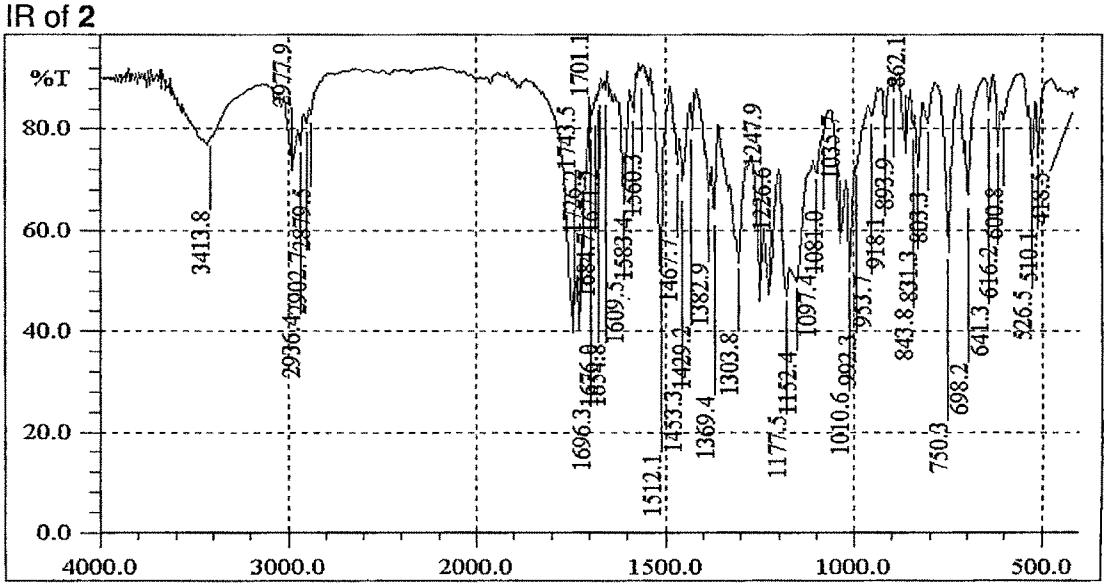
George Santayana

6. Spectra

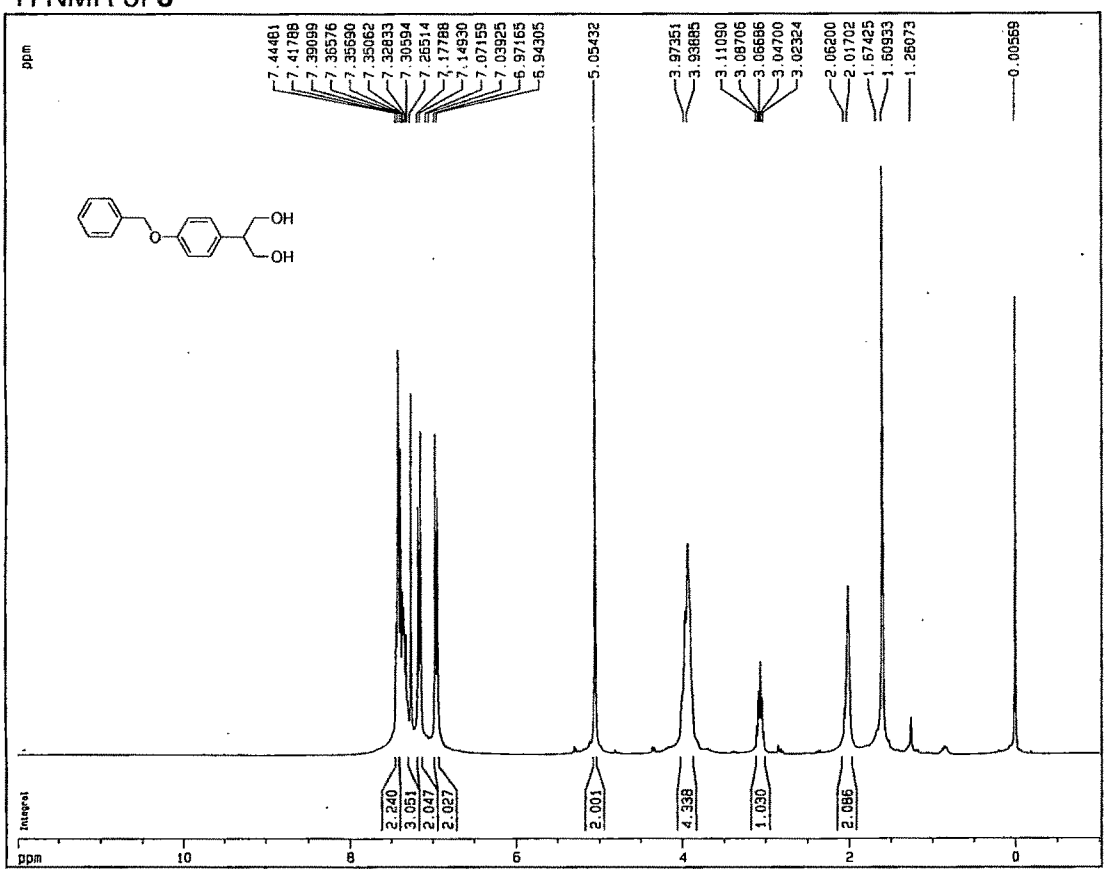
^{1}H NMR of **2**



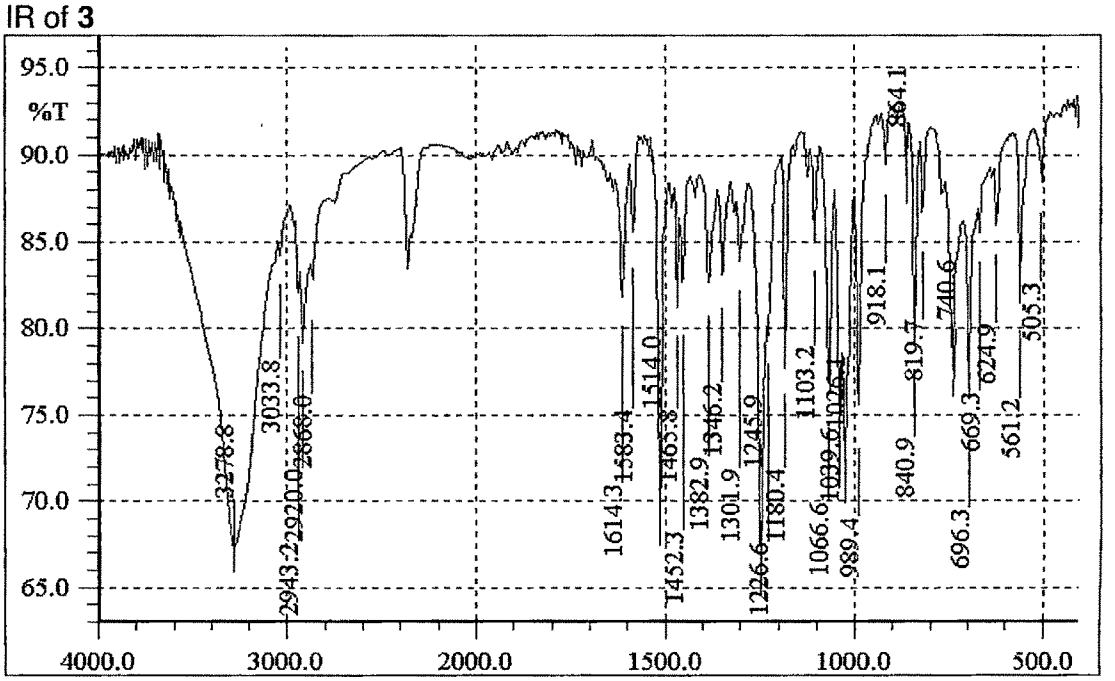
IR of **2**



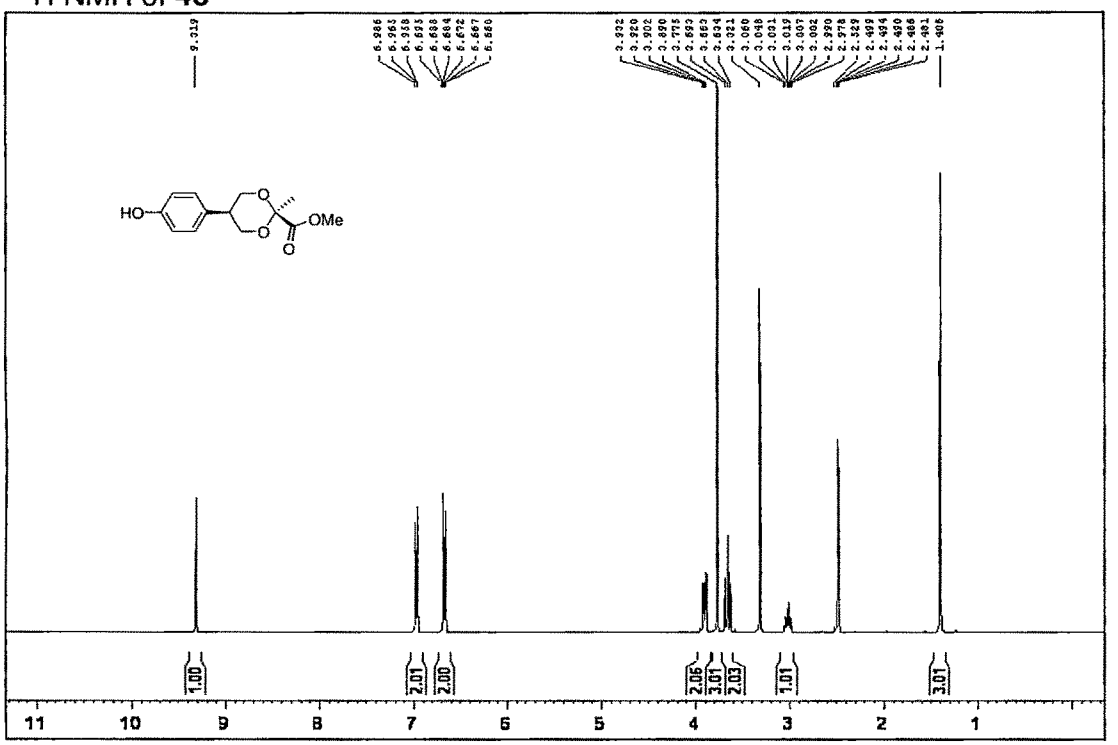
^{1}H NMR of **3**



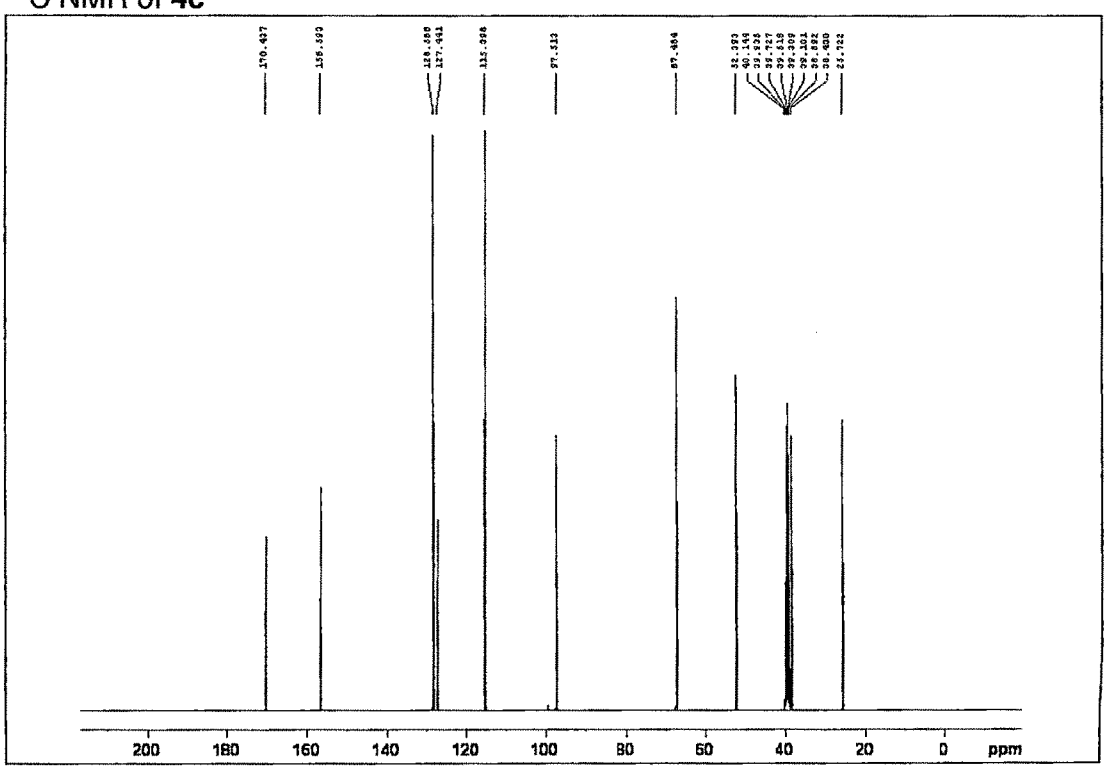
IR of **3**



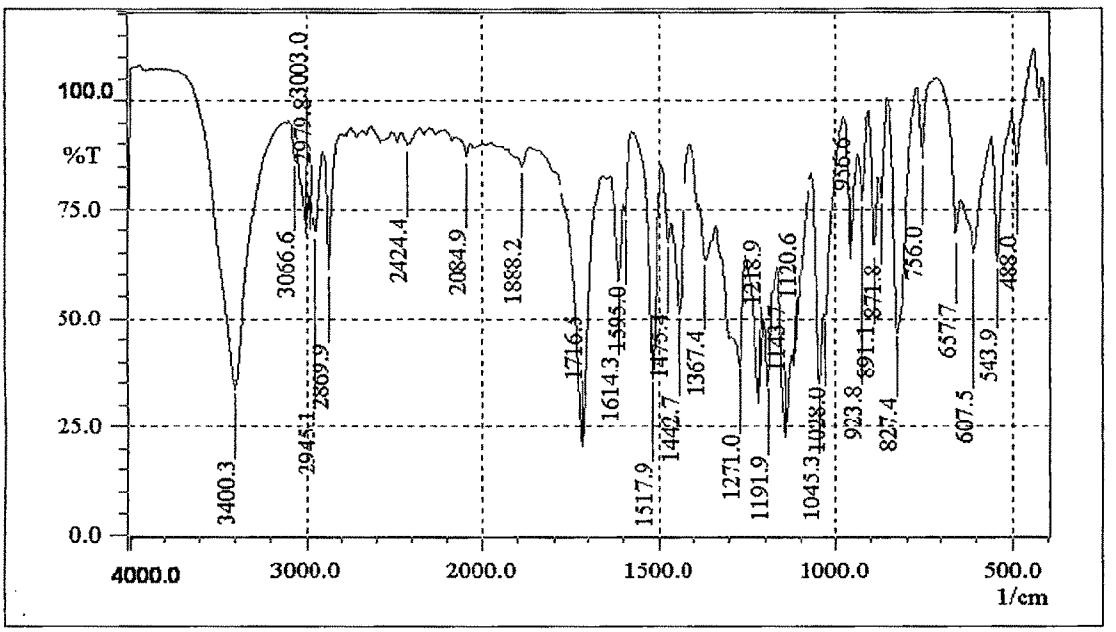
^{1}H NMR of **4c**



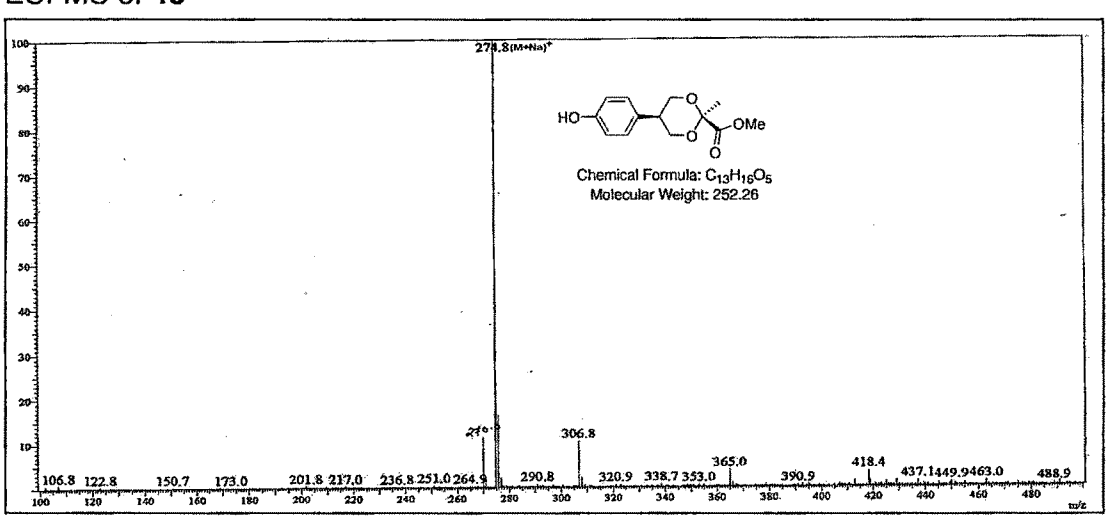
^{13}C NMR of **4c**



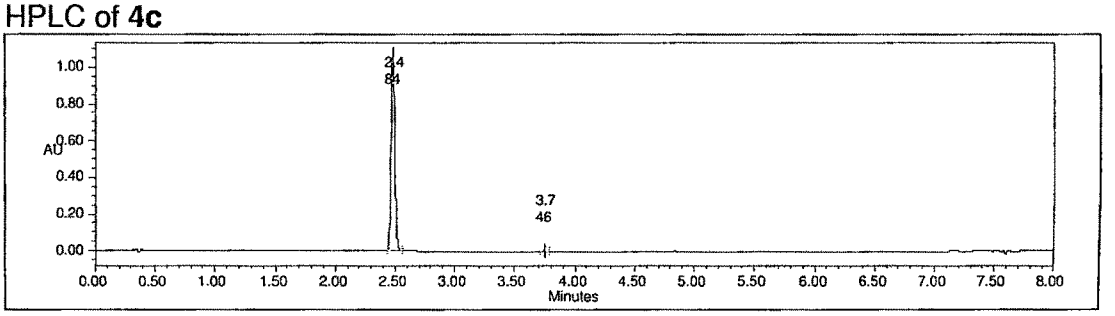
IR of **4c**



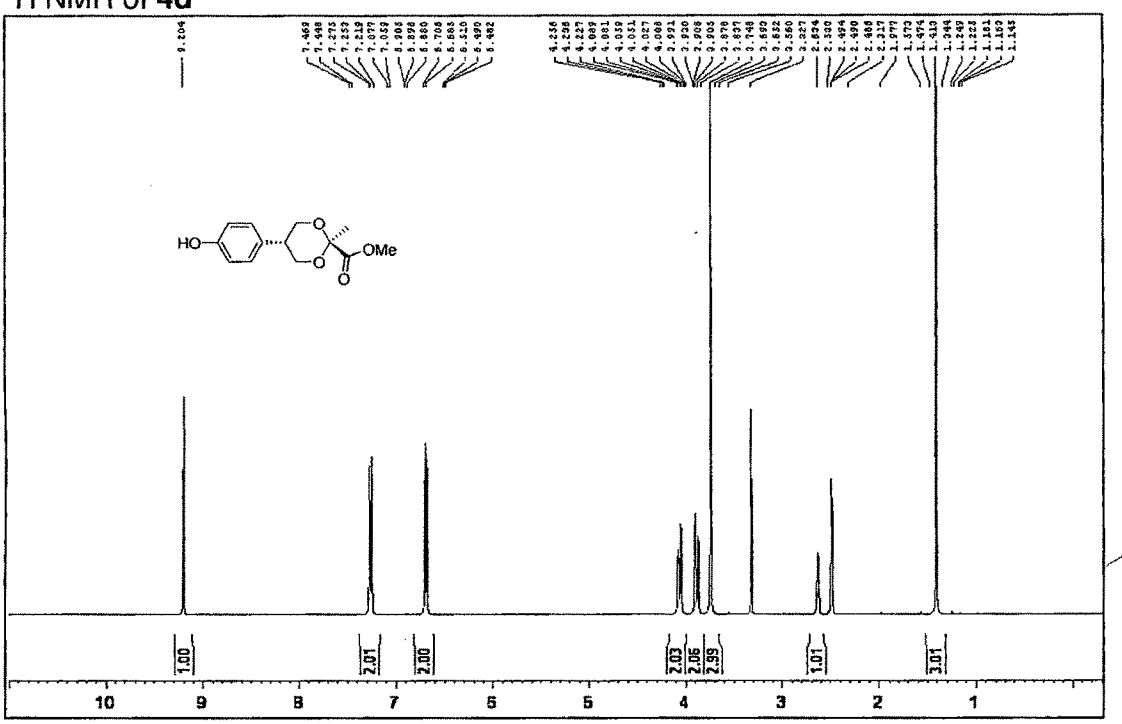
ESI-MS of **4c**



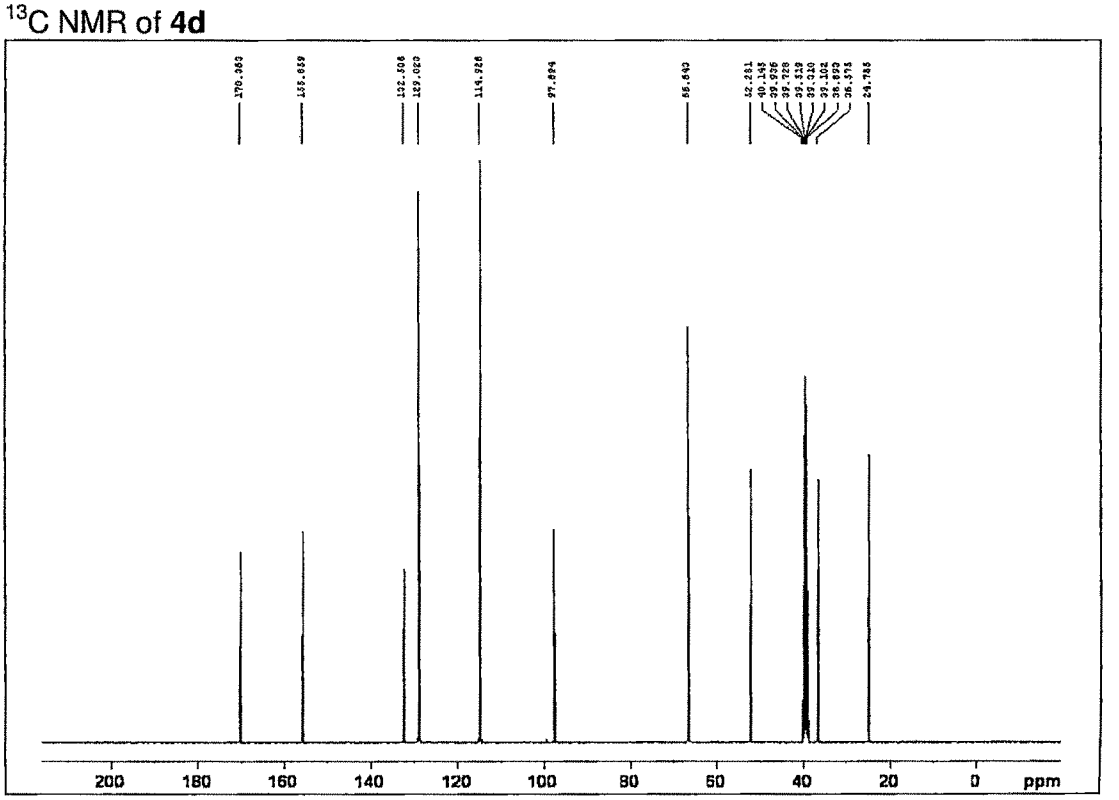
HPLC of **4c**



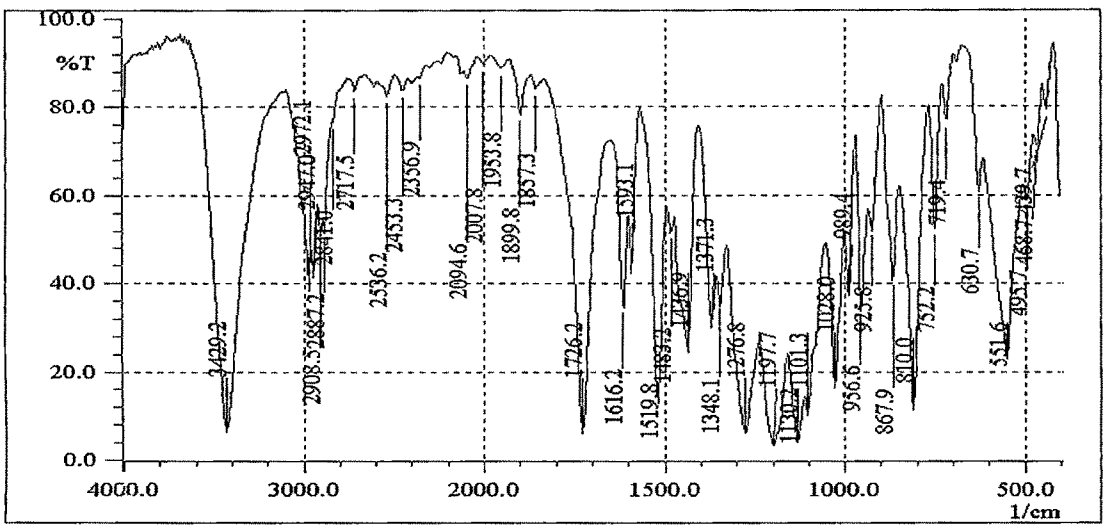
^{1}H NMR of **4d**



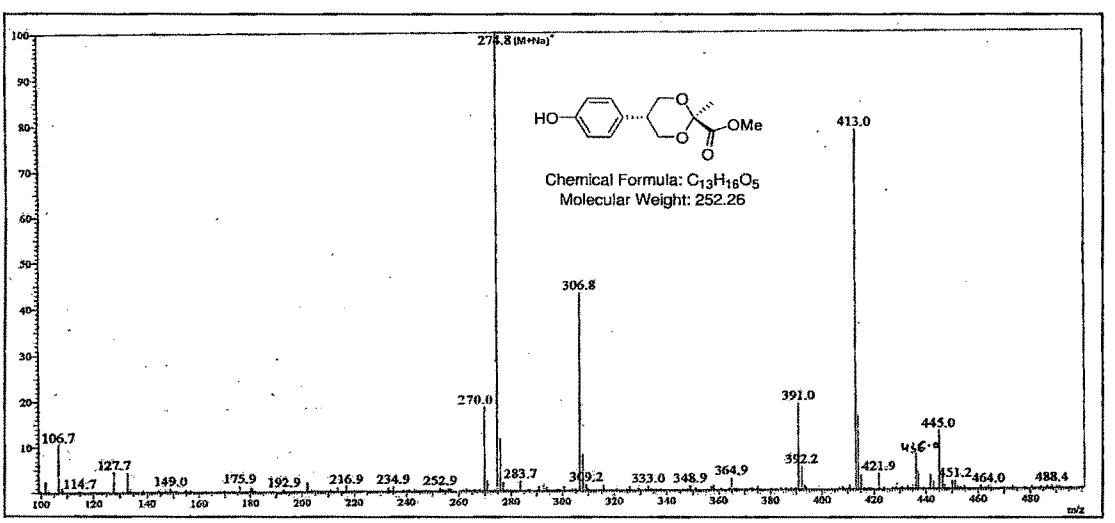
^{13}C NMR of **4d**



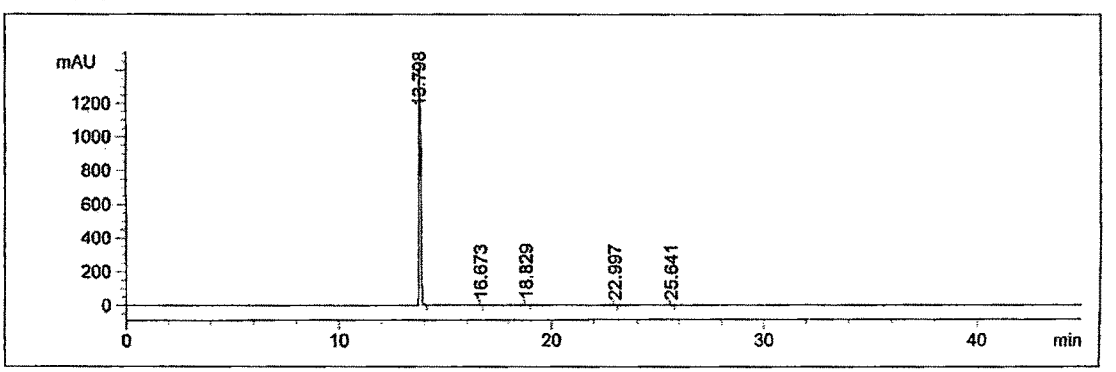
IR of **4d**



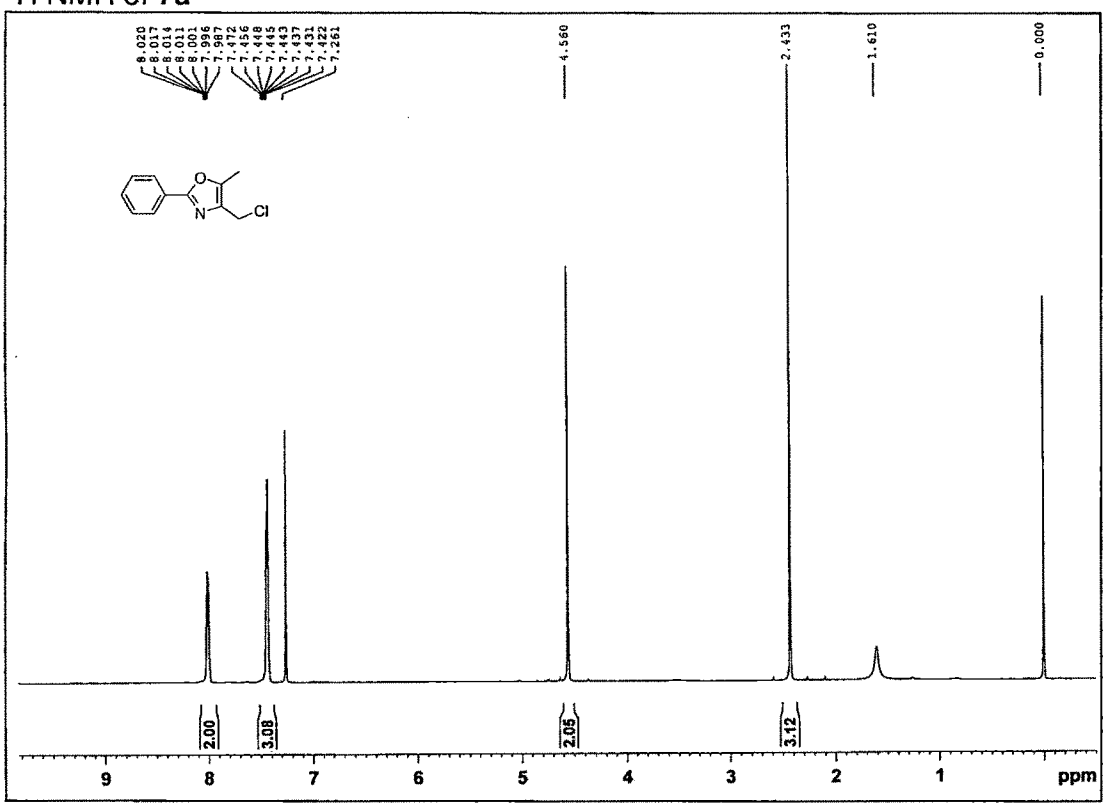
ESI-MS of **4d**



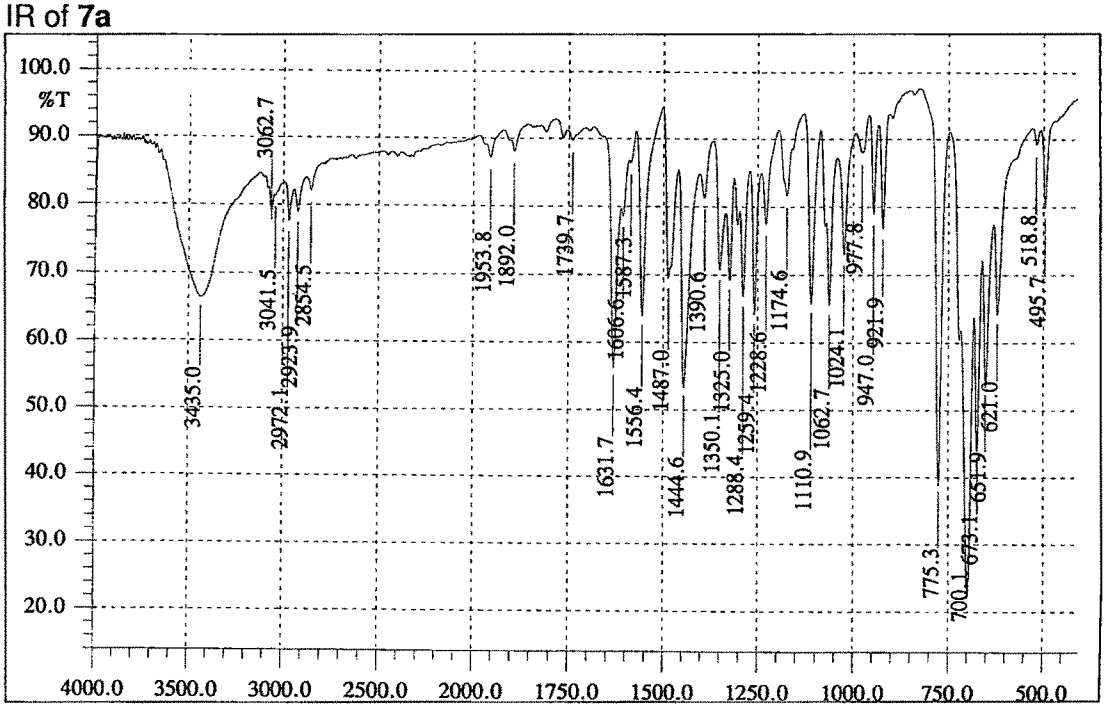
HPLC of **4d**



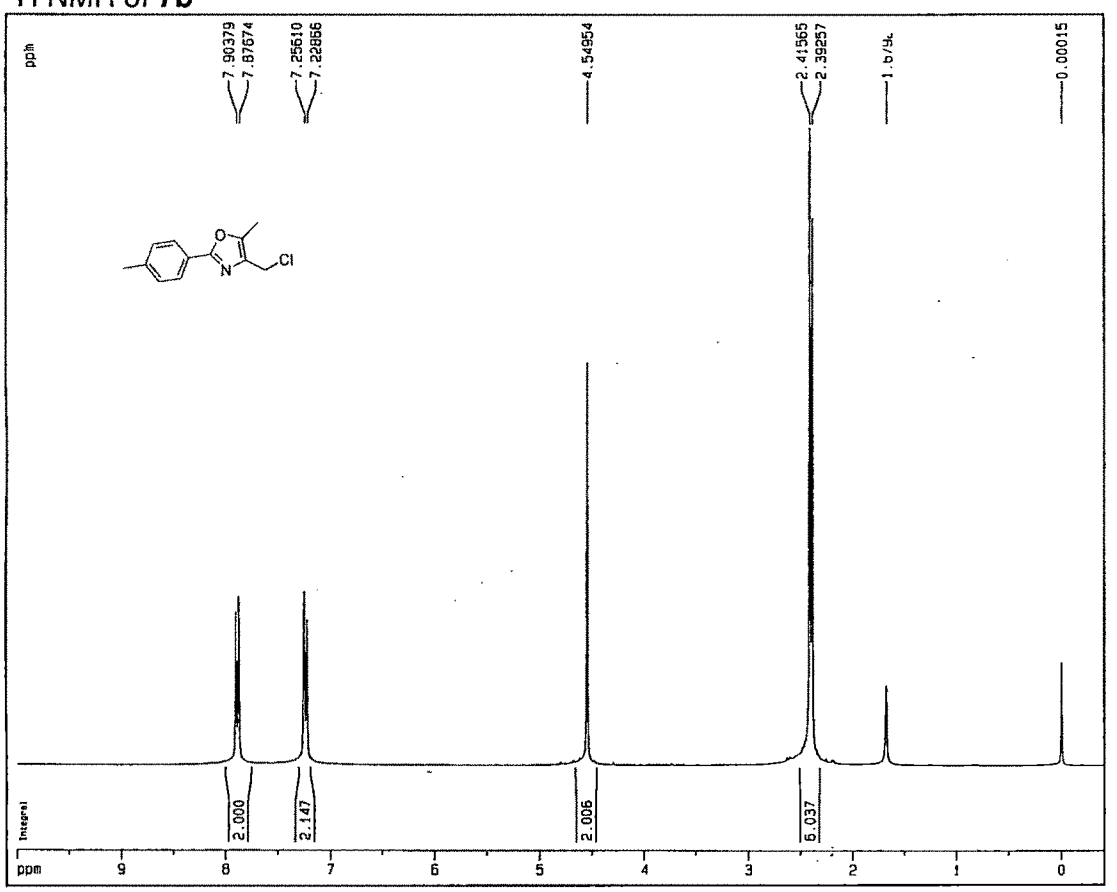
^{1}H NMR of **7a**



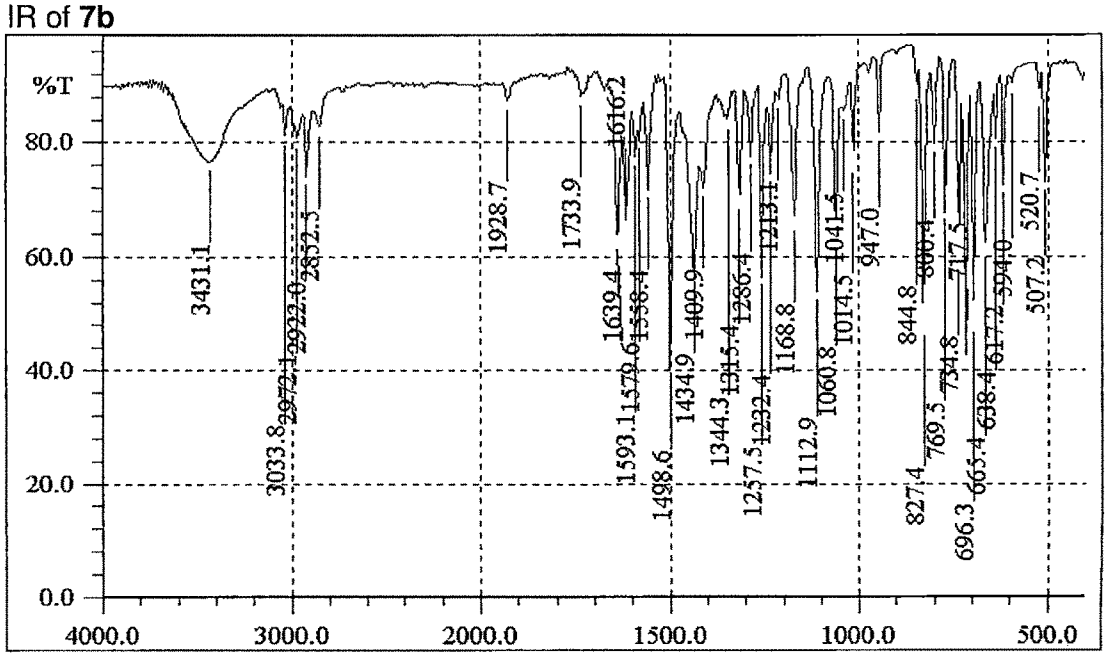
IR of **7a**



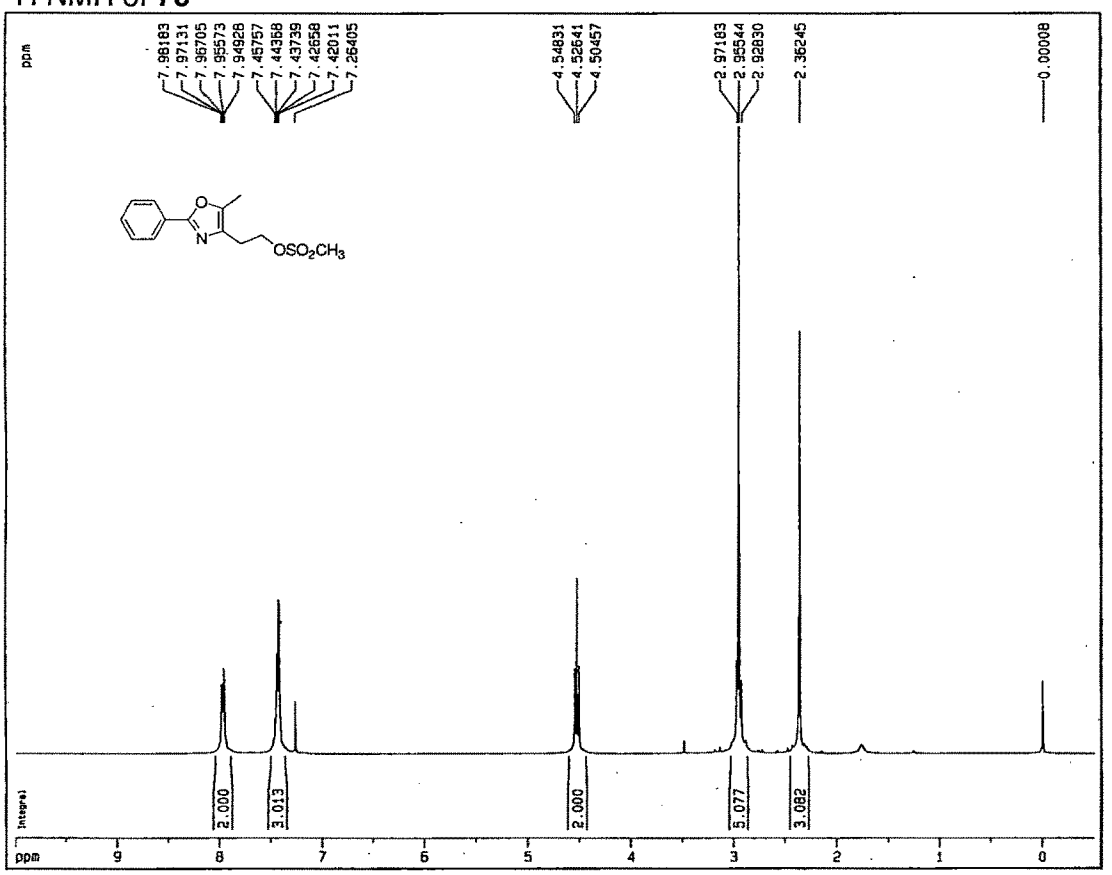
^{1}H NMR of **7b**



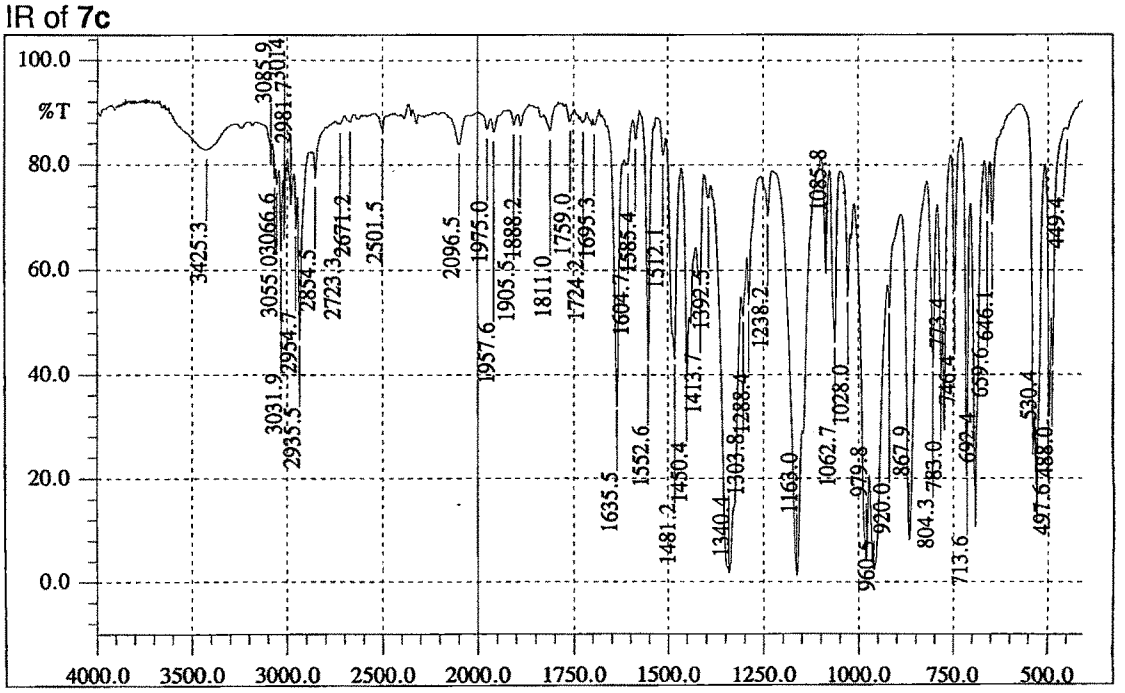
IR of **7b**



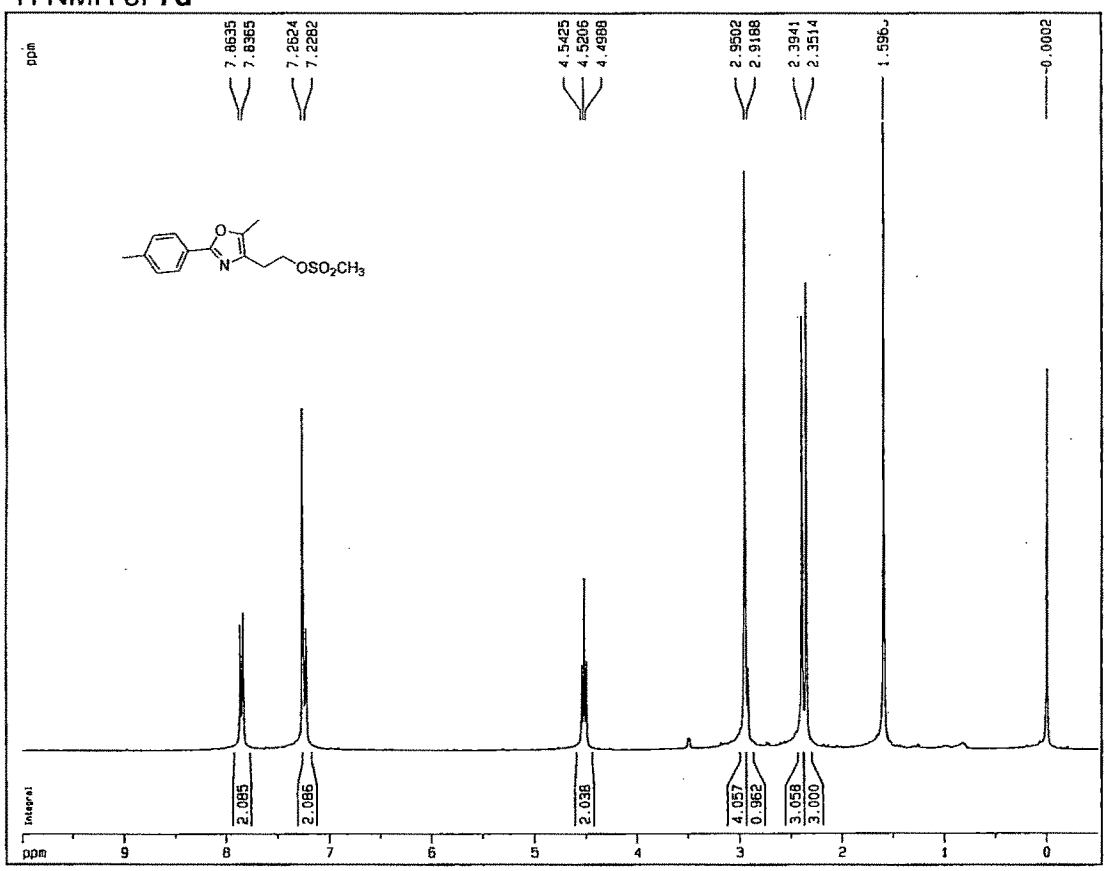
^{1}H NMR of **7c**



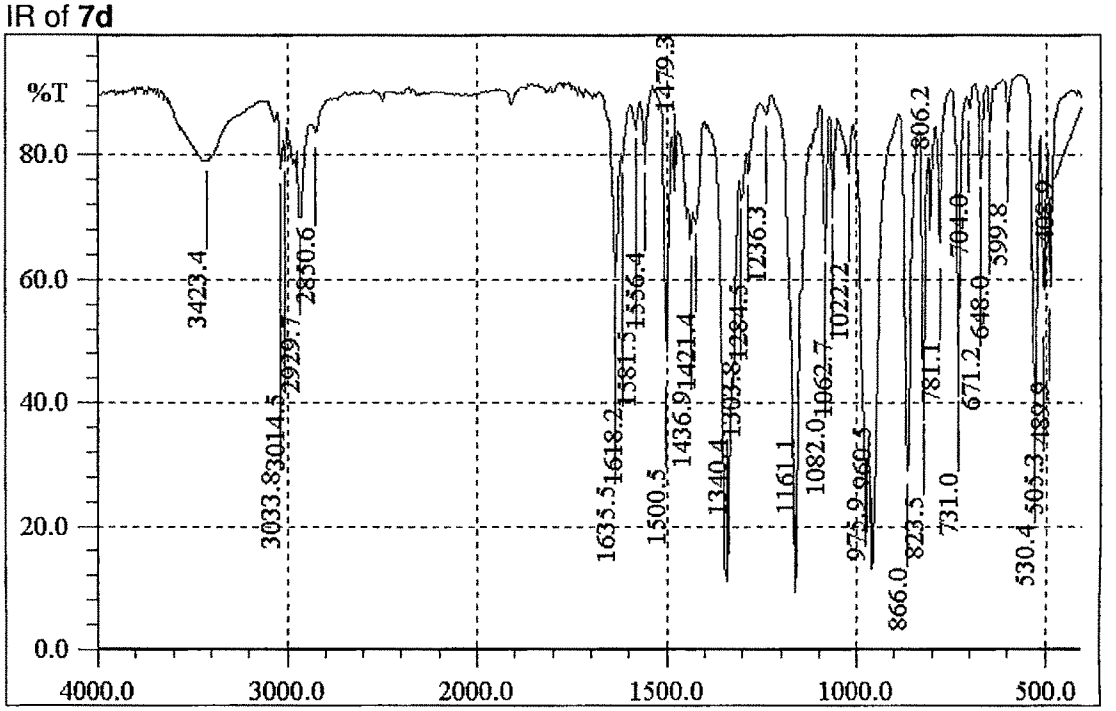
IR of **7c**



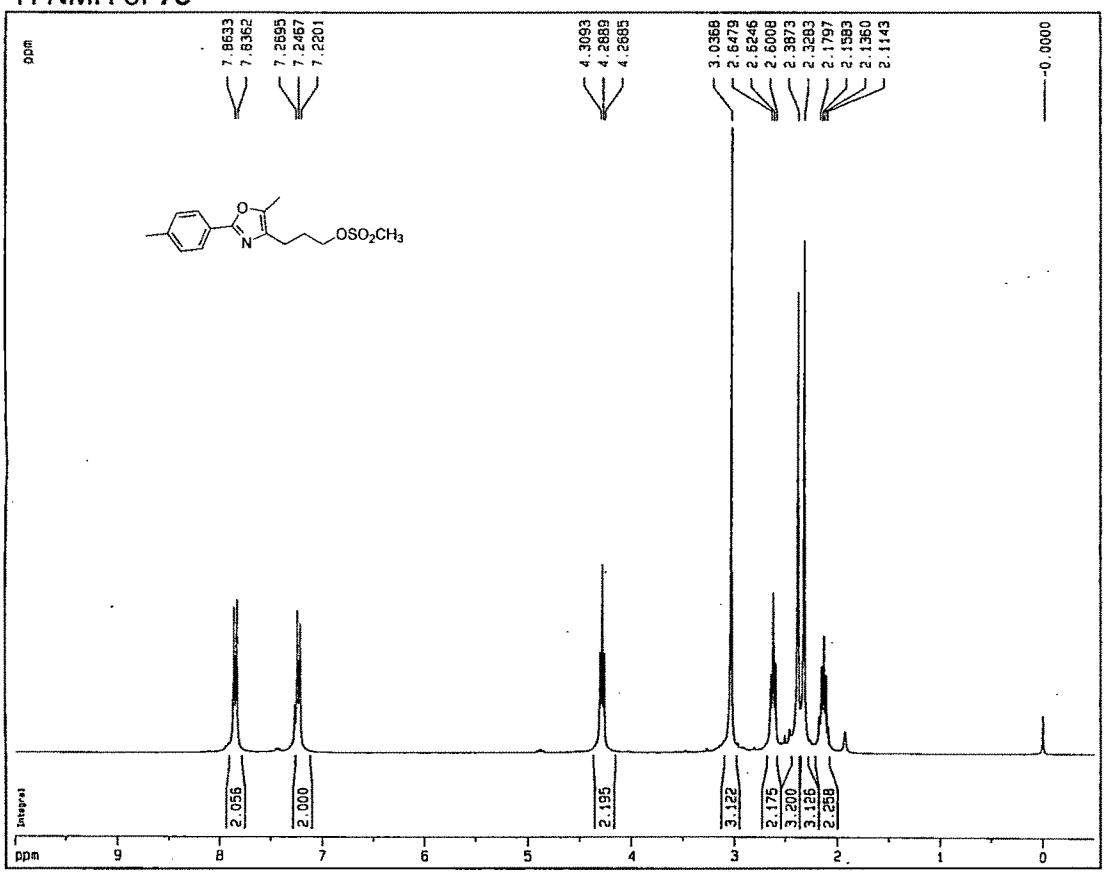
^{1}H NMR of **7d**



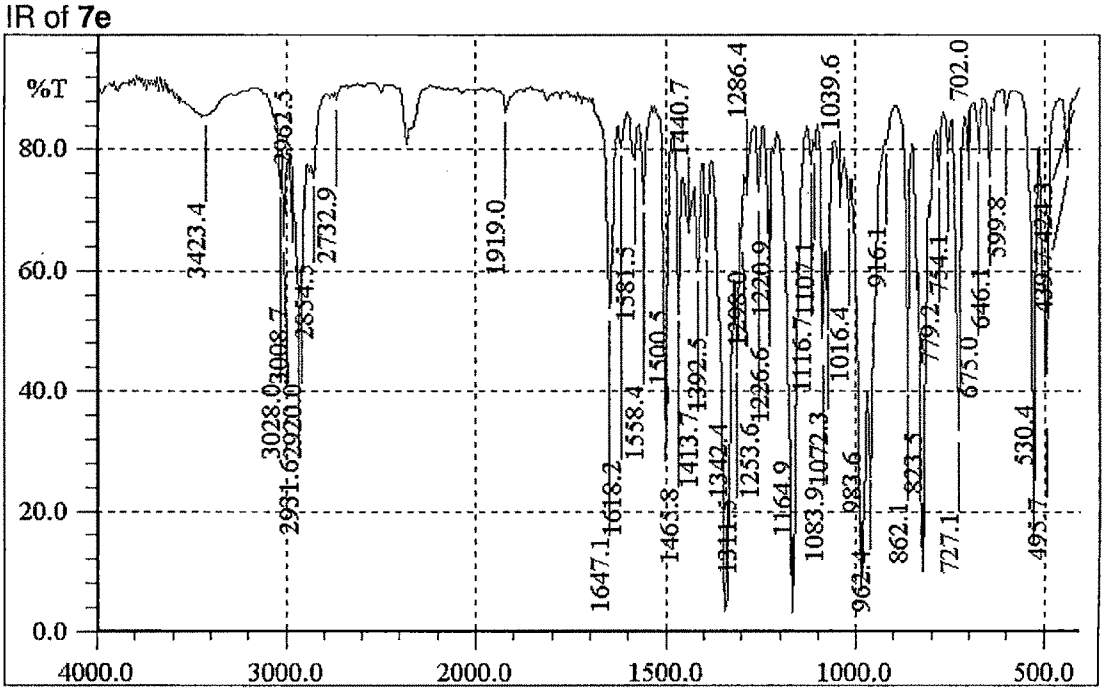
IR of **7d**



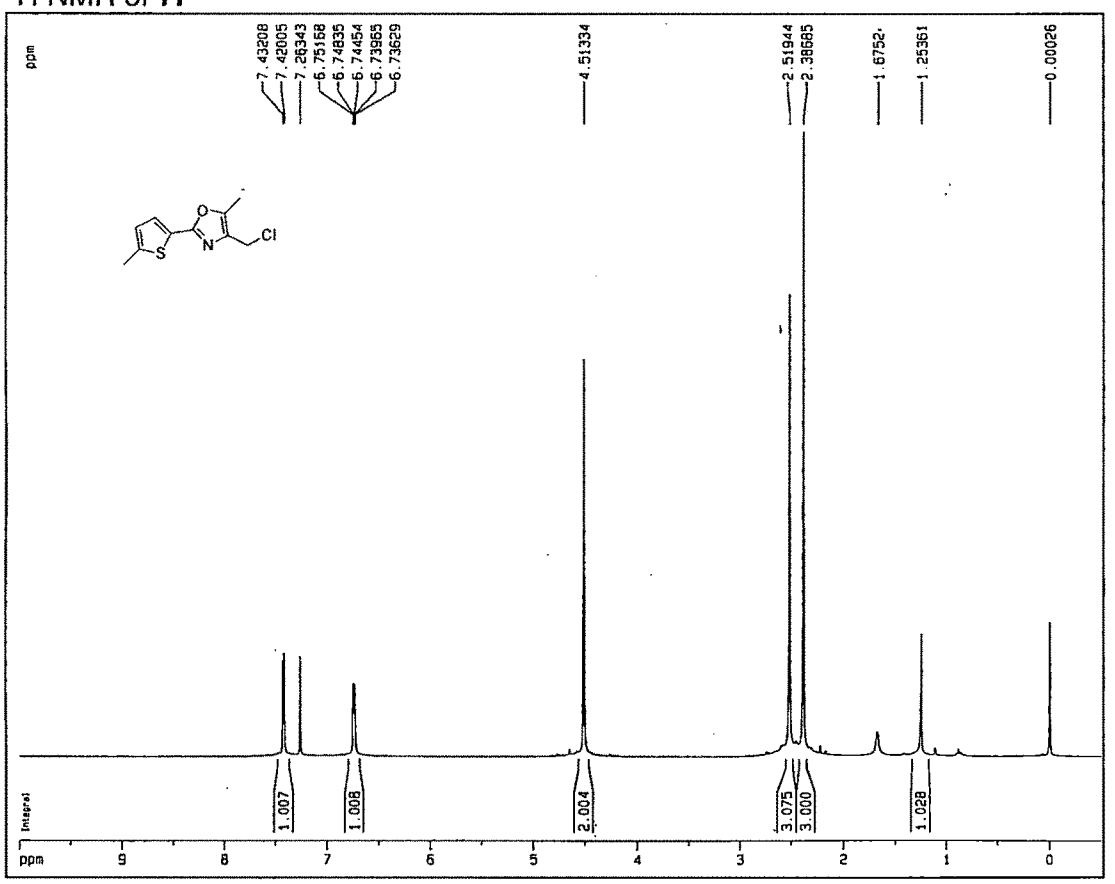
^{1}H NMR of **7e**



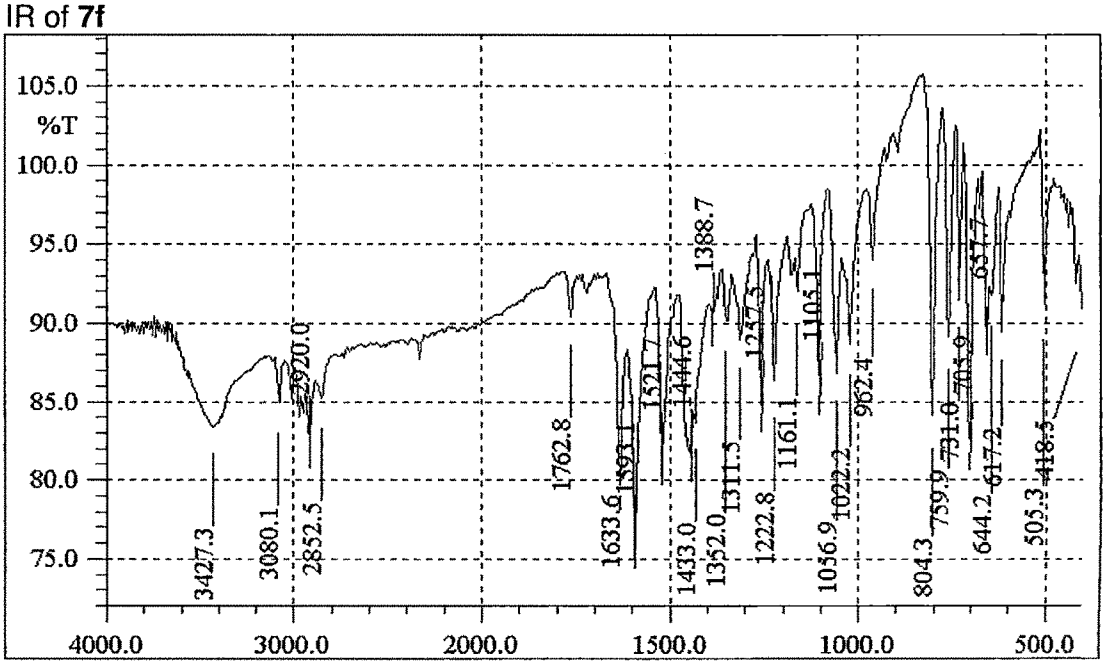
IR of **7e**



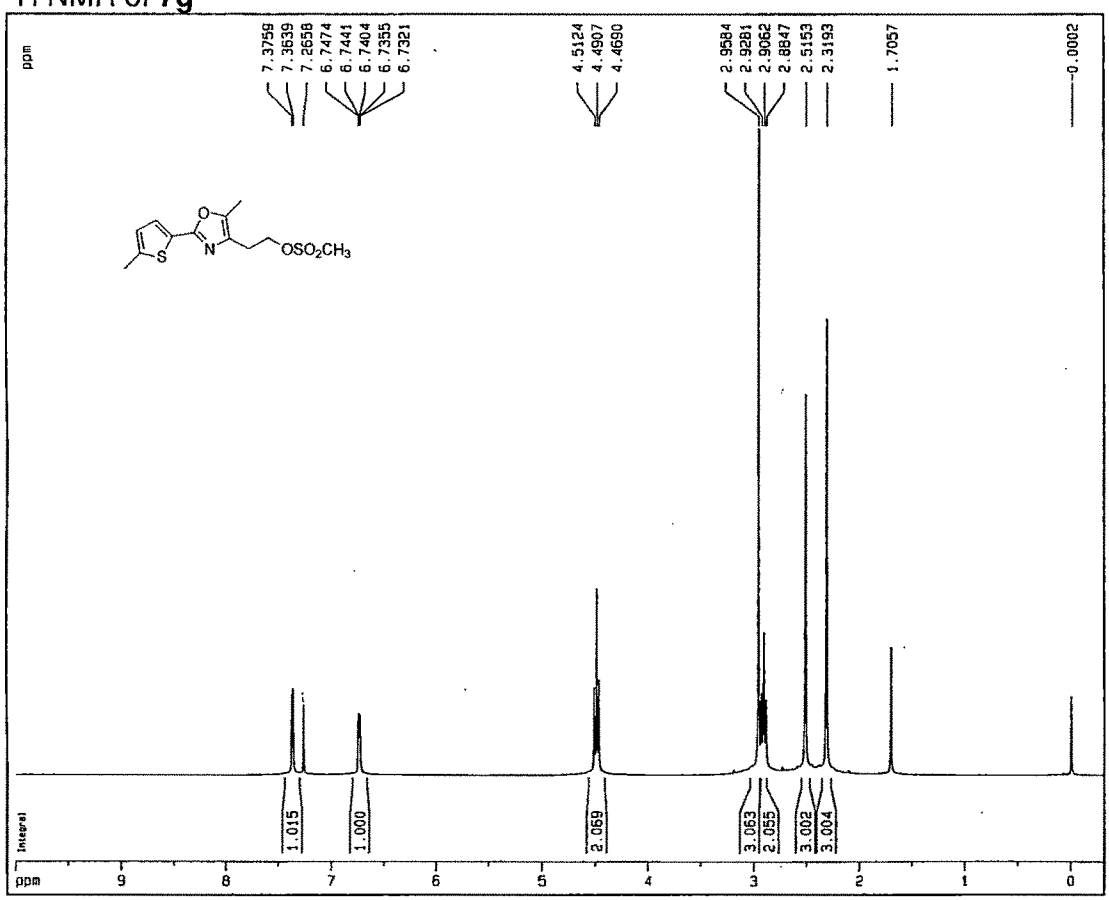
^{1}H NMR of **7f**



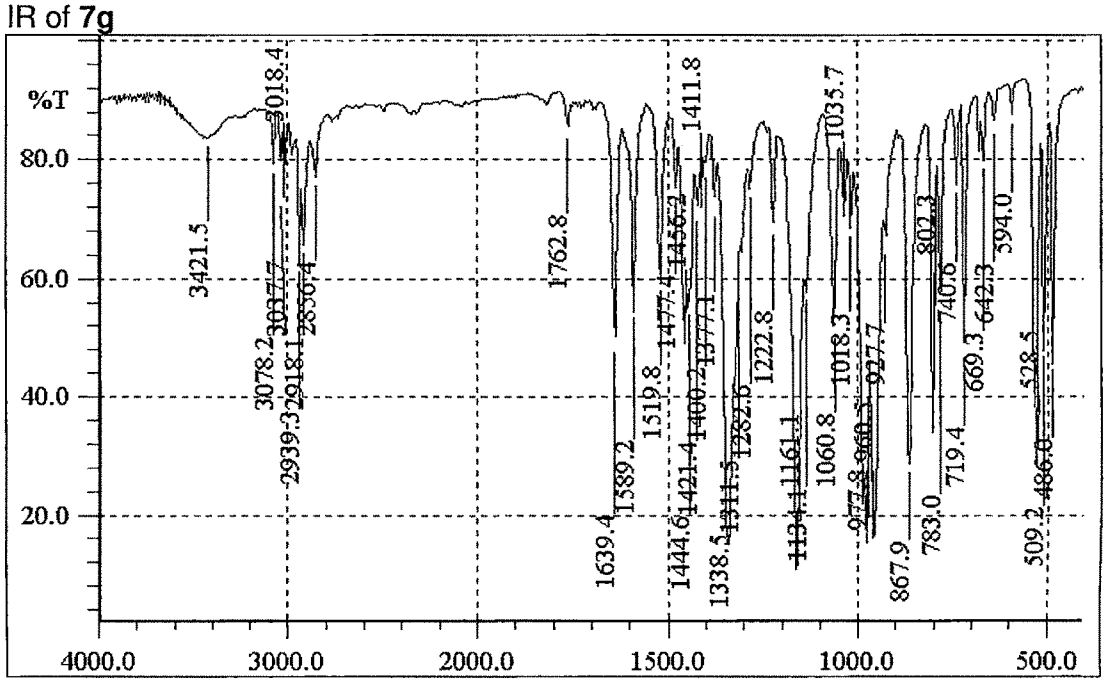
IR of **7f**



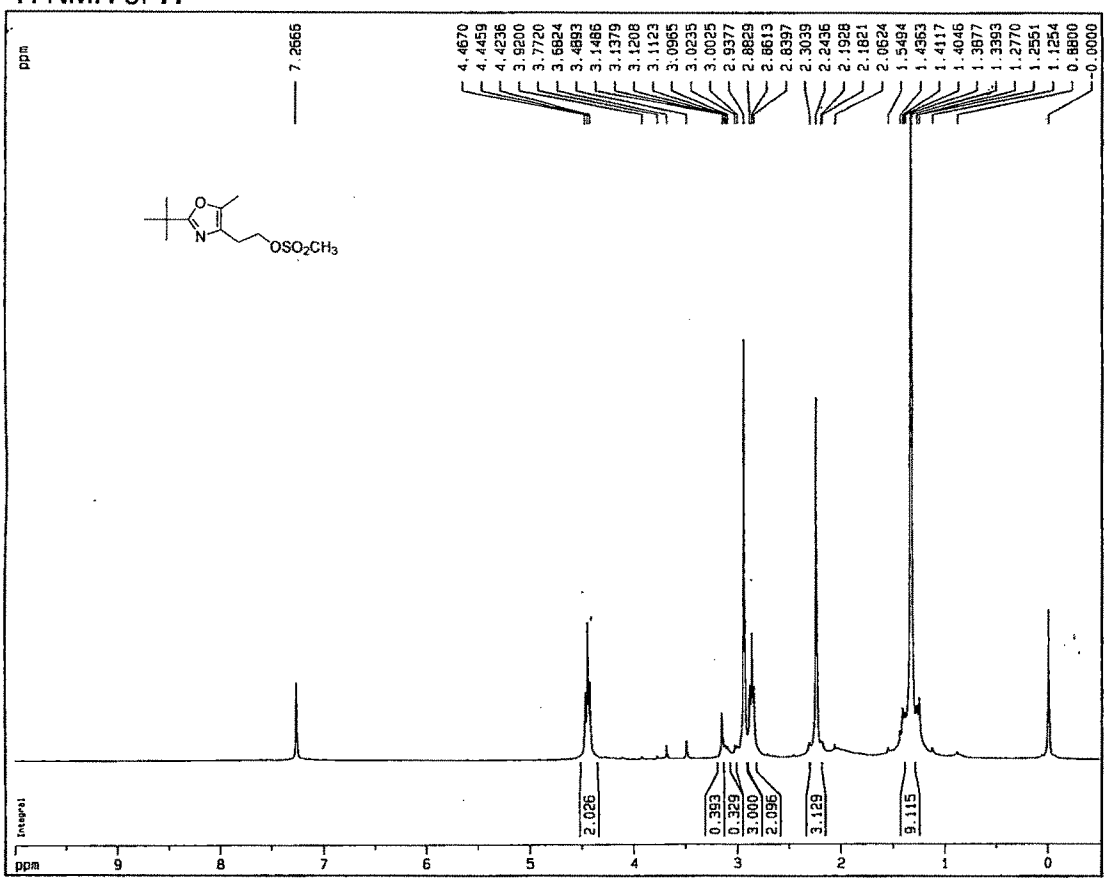
^{1}H NMR of **7g**



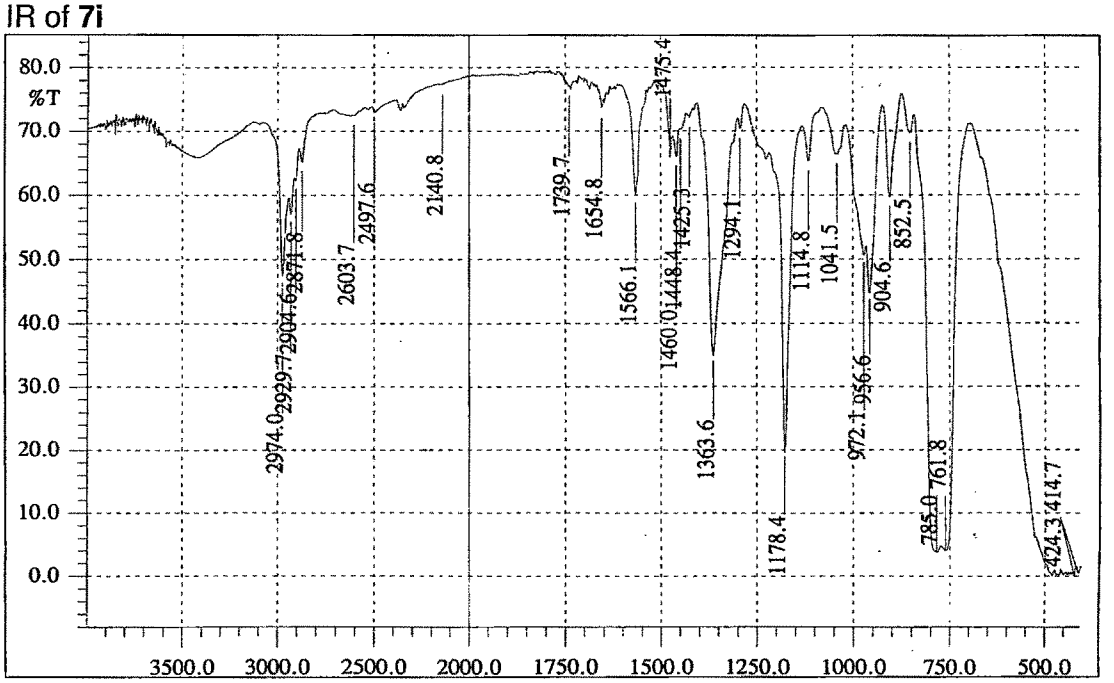
IR of **7g**



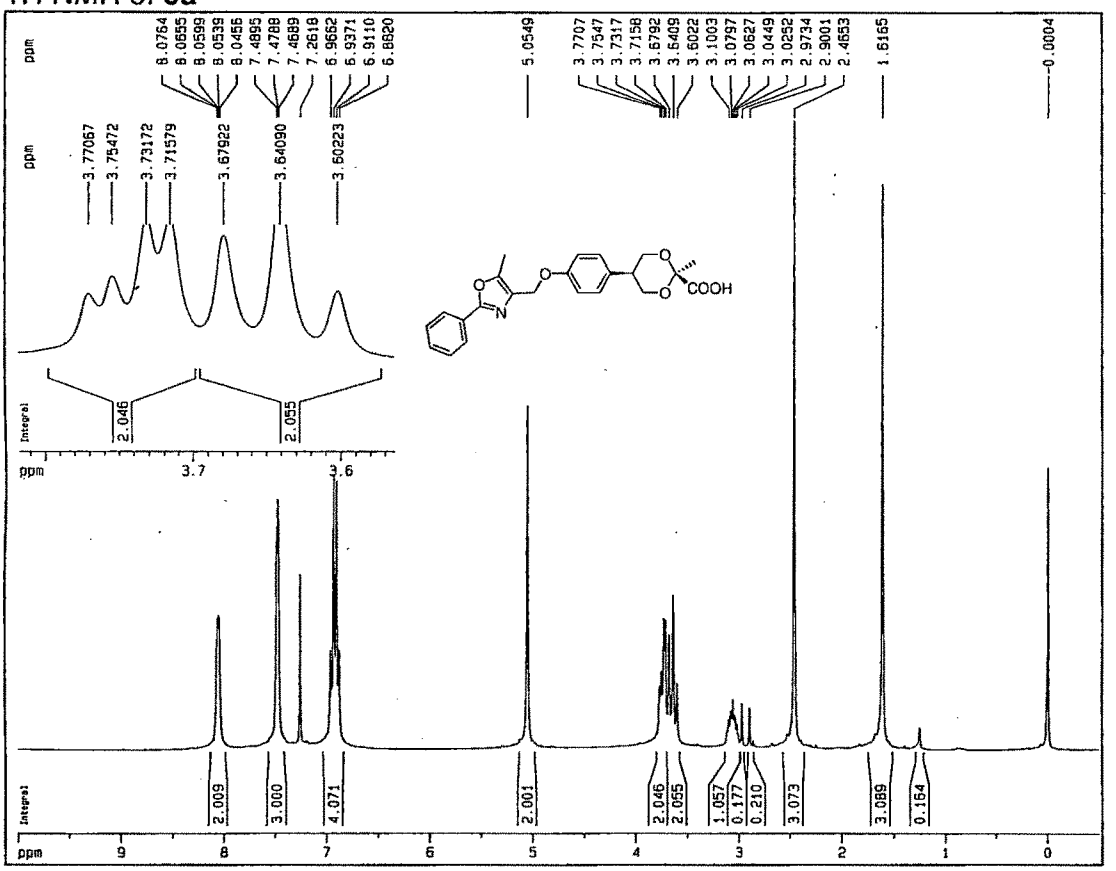
^{1}H NMR of **7i**



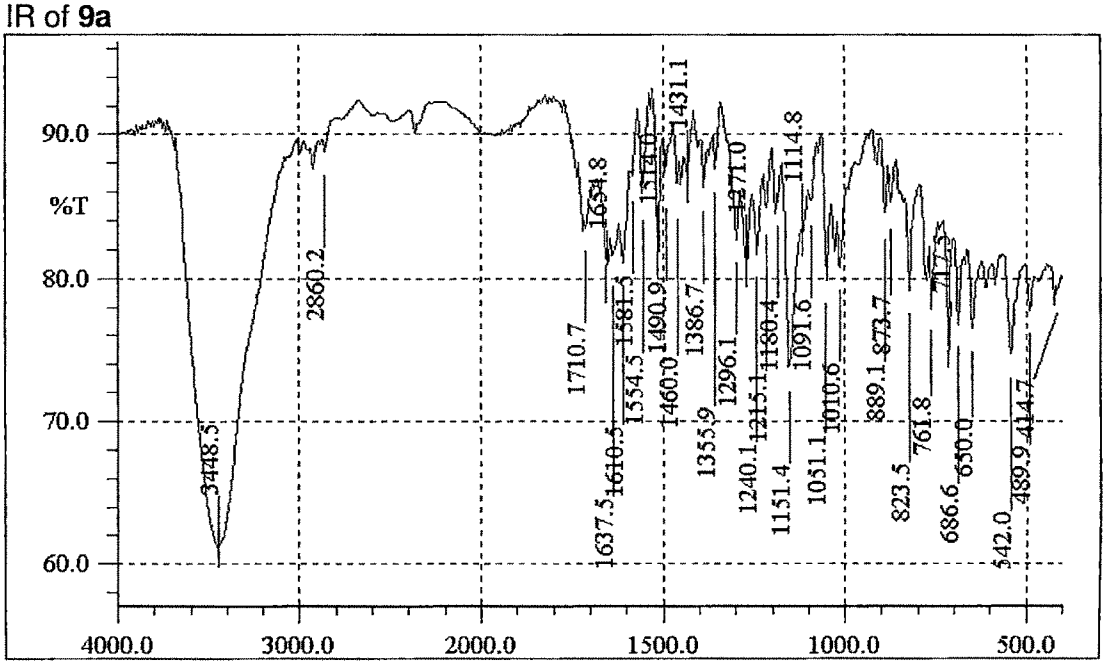
IR of **7i**



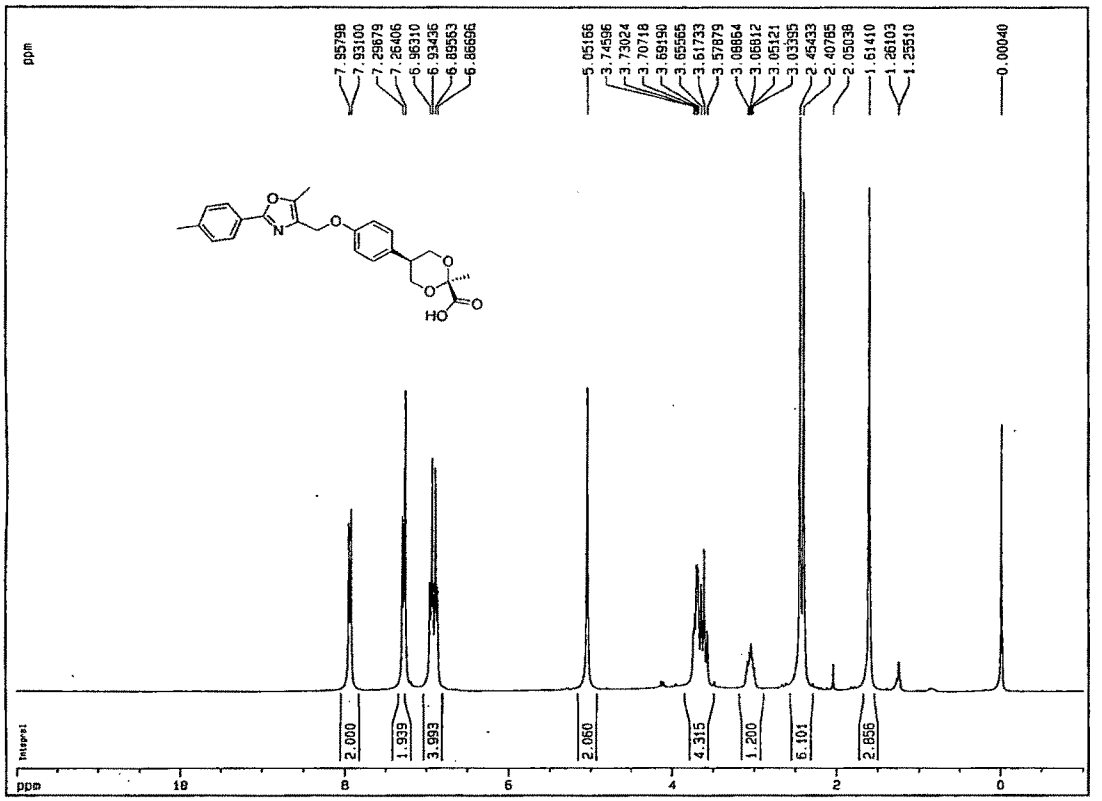
1H NMR of **9a**



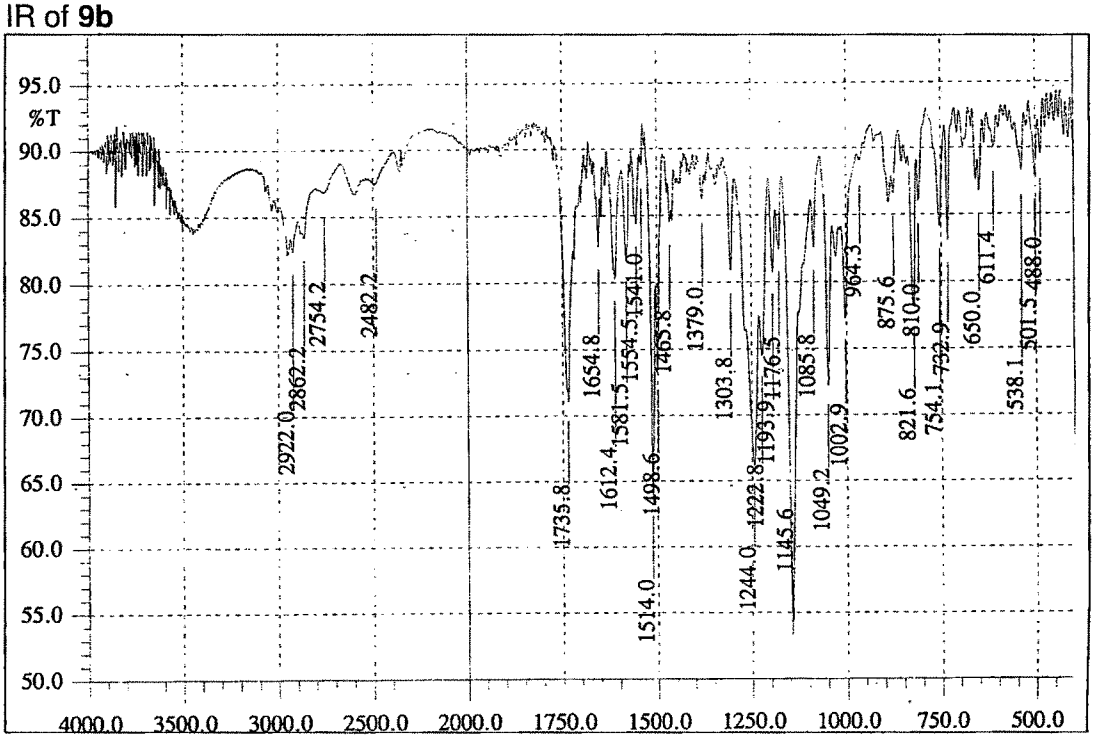
IR of **9a**



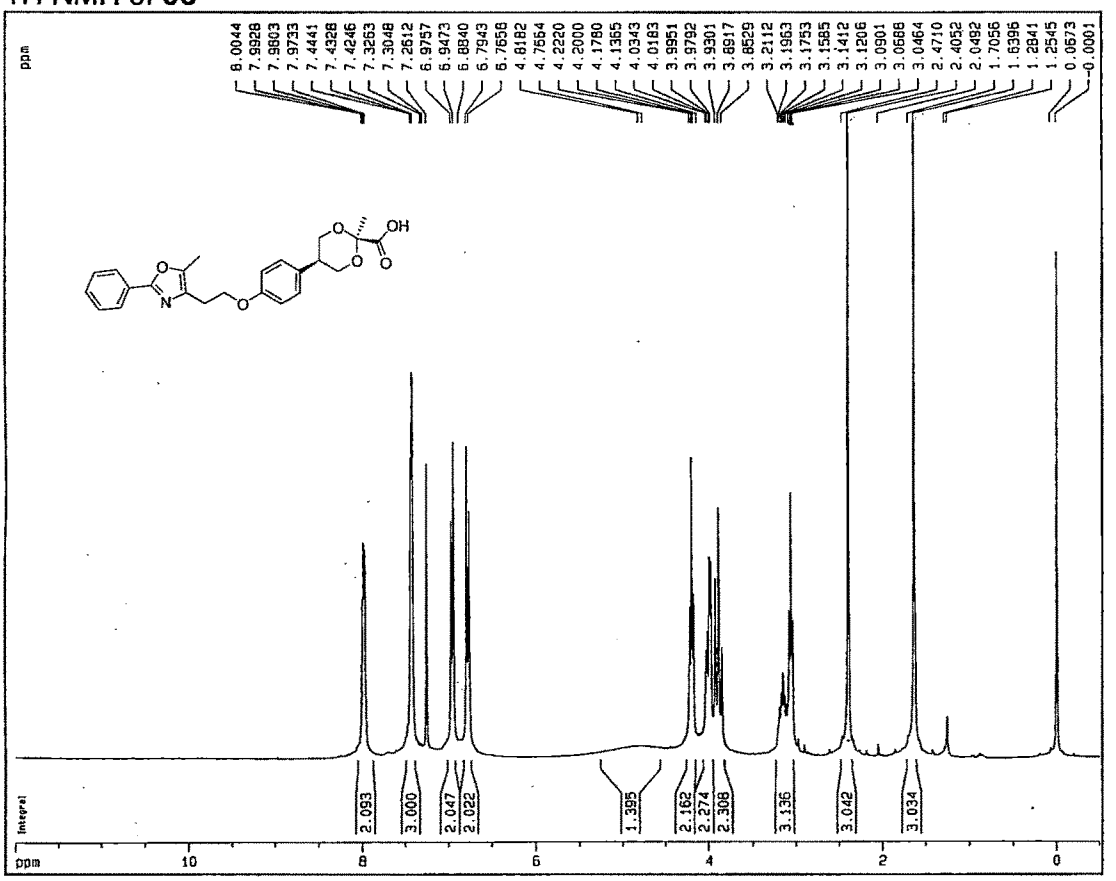
1H NMR of **9b**



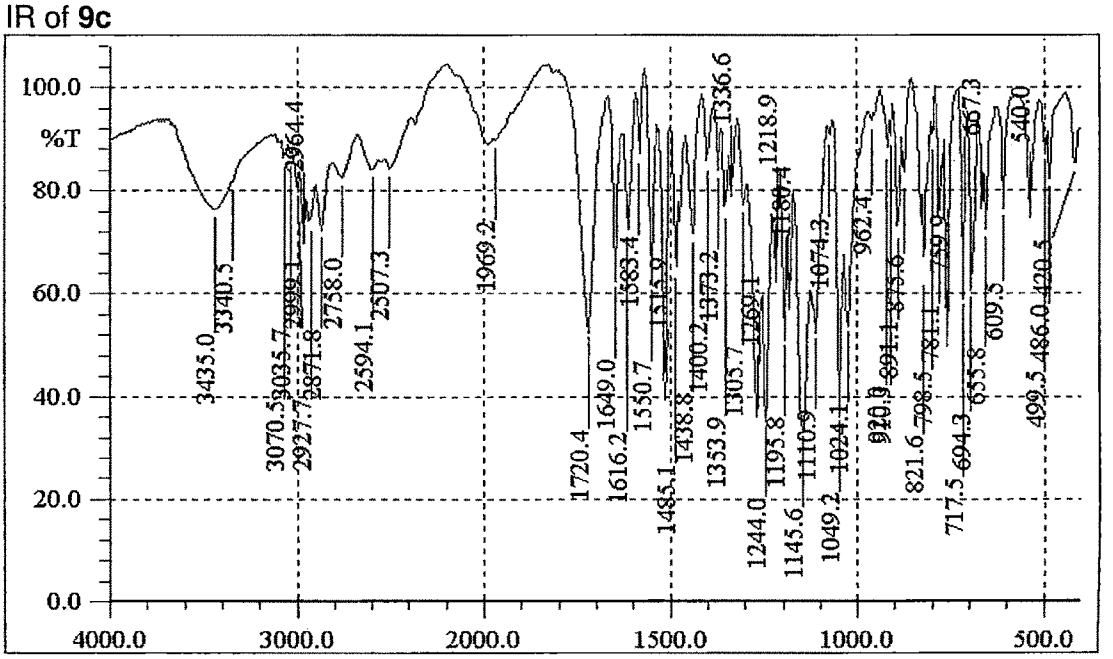
IR of **9b**



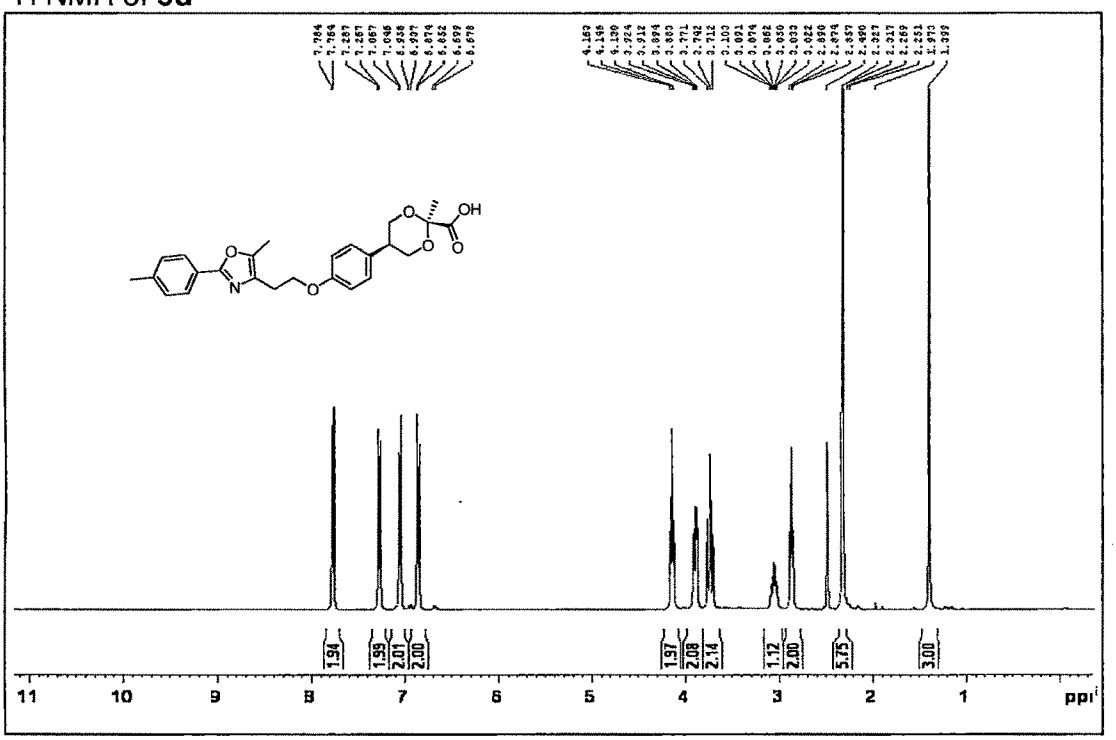
1H NMR of **9c**



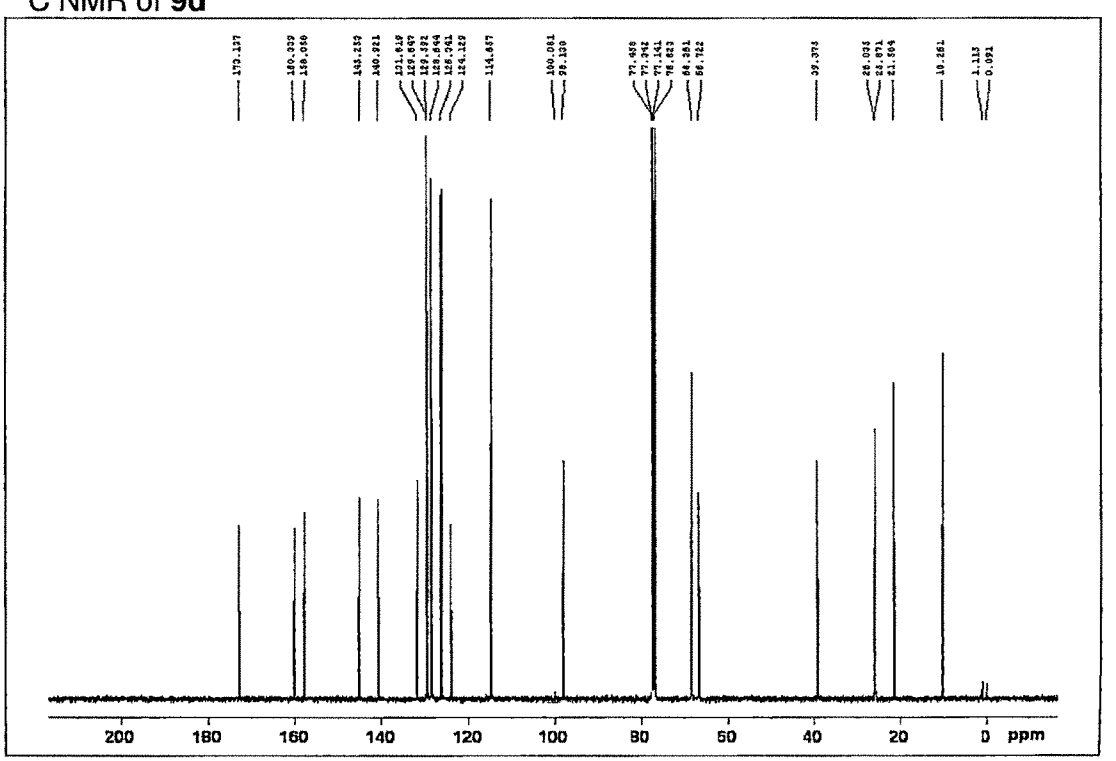
IR of **9c**



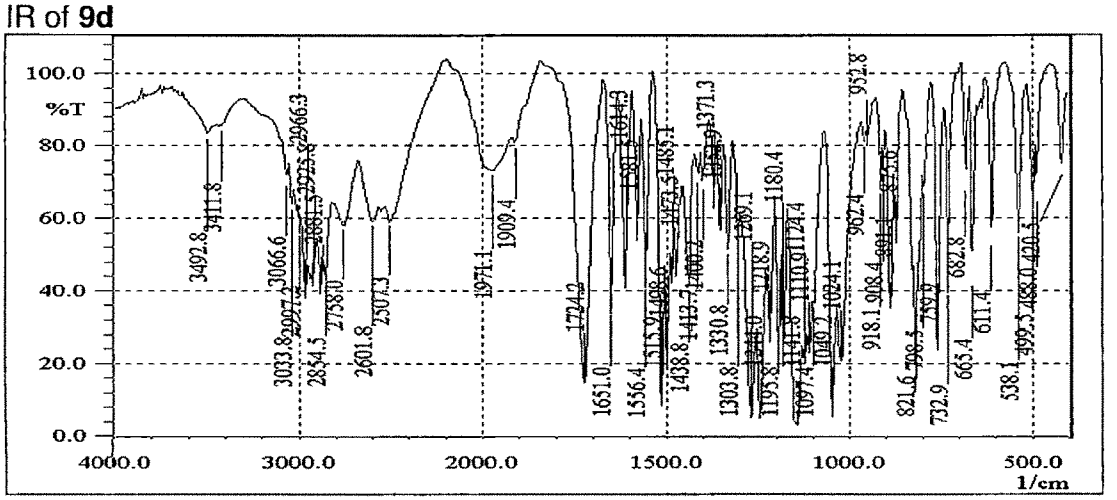
^{1}H NMR of **9d**



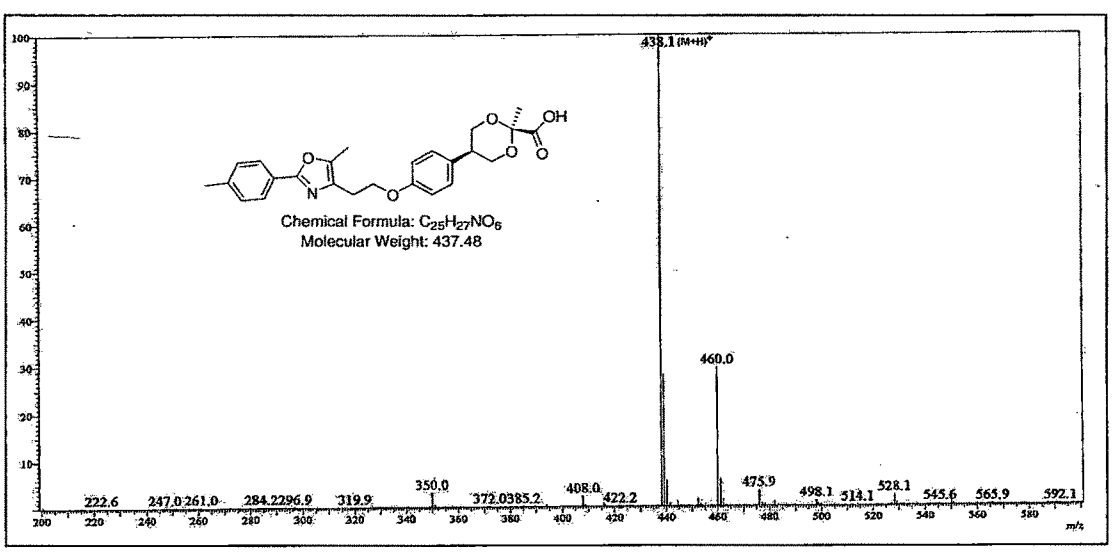
^{13}C NMR of **9d**



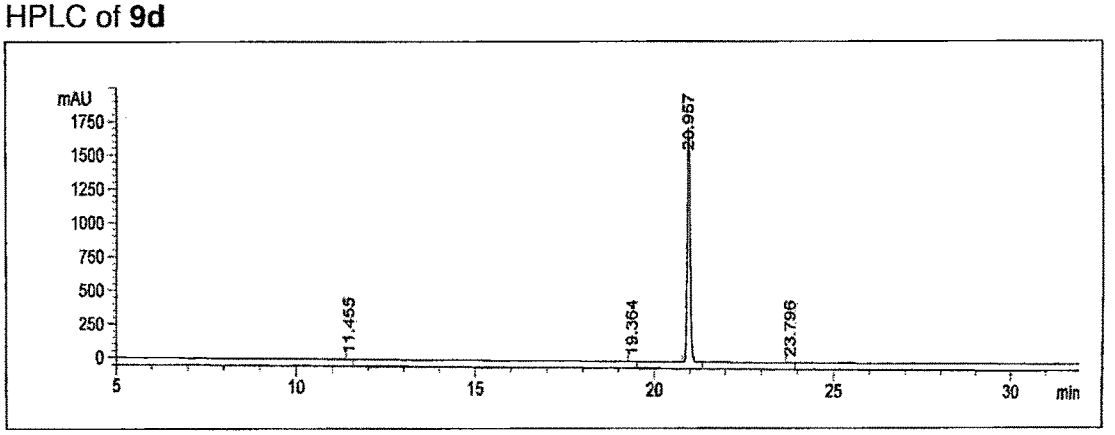
IR of **9d**



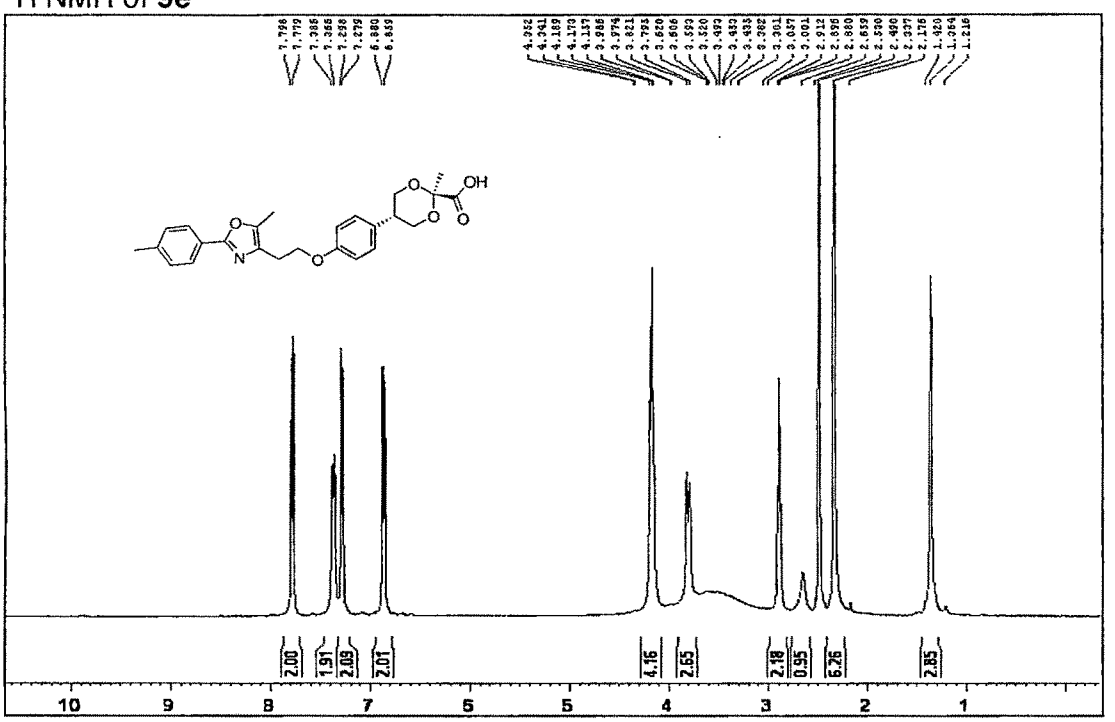
ESI-MS of **9d**



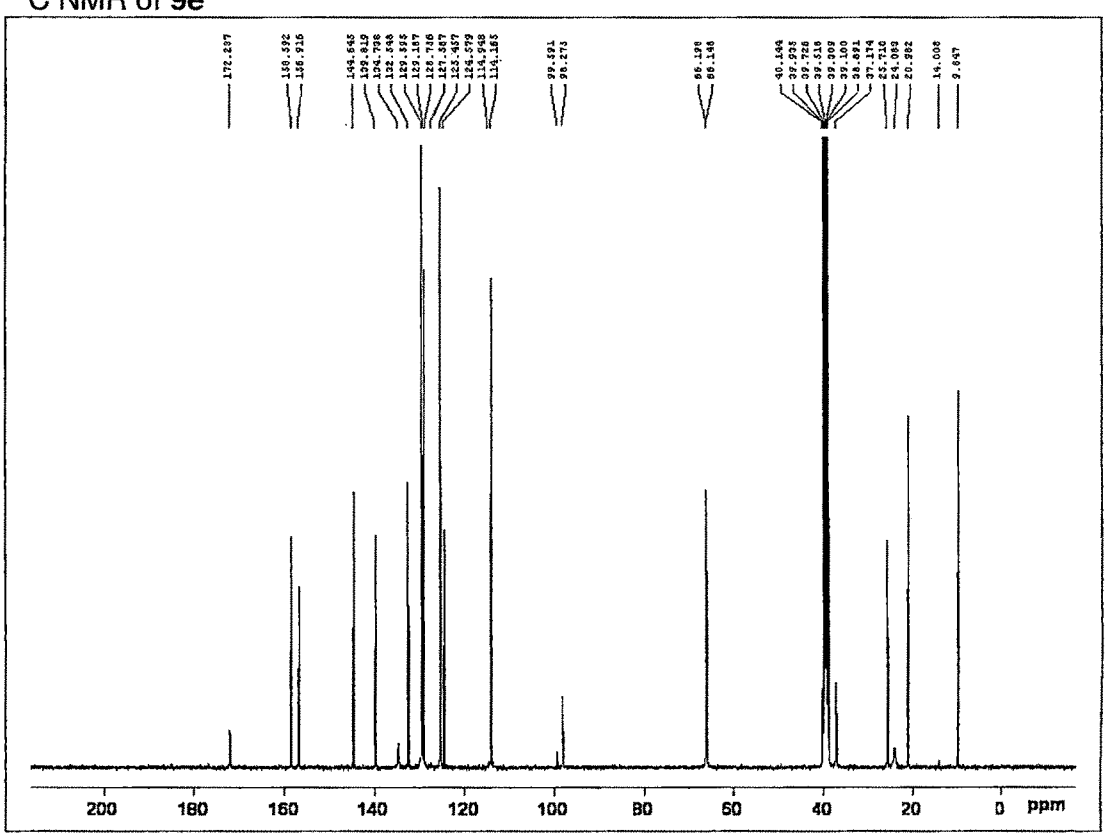
HPLC of **9d**



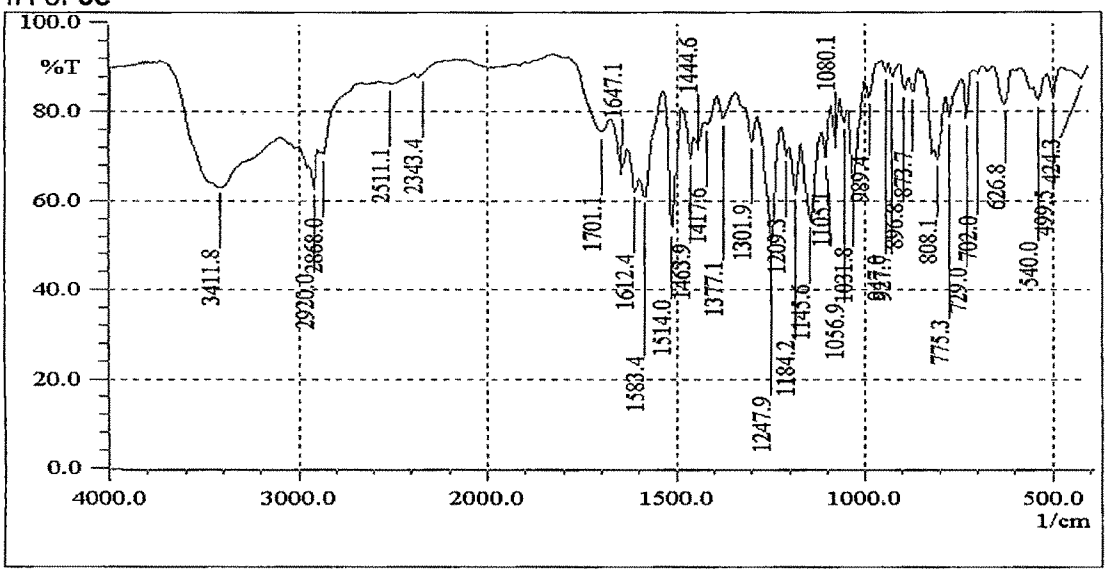
^{1}H NMR of **9e**



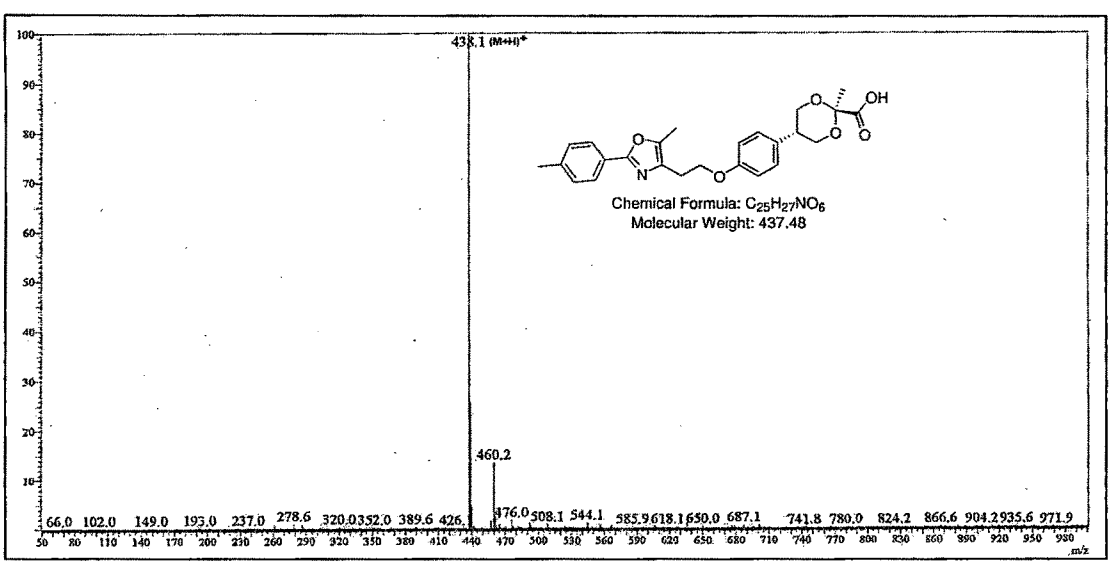
^{13}C NMR of **9e**



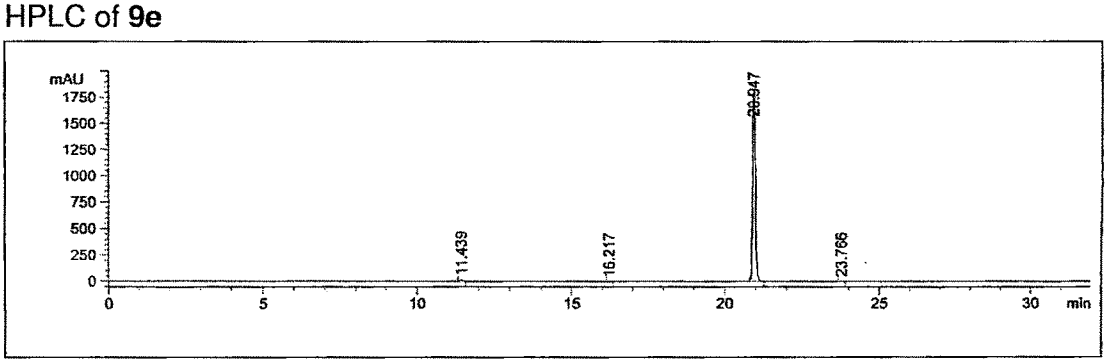
IR of **9e**



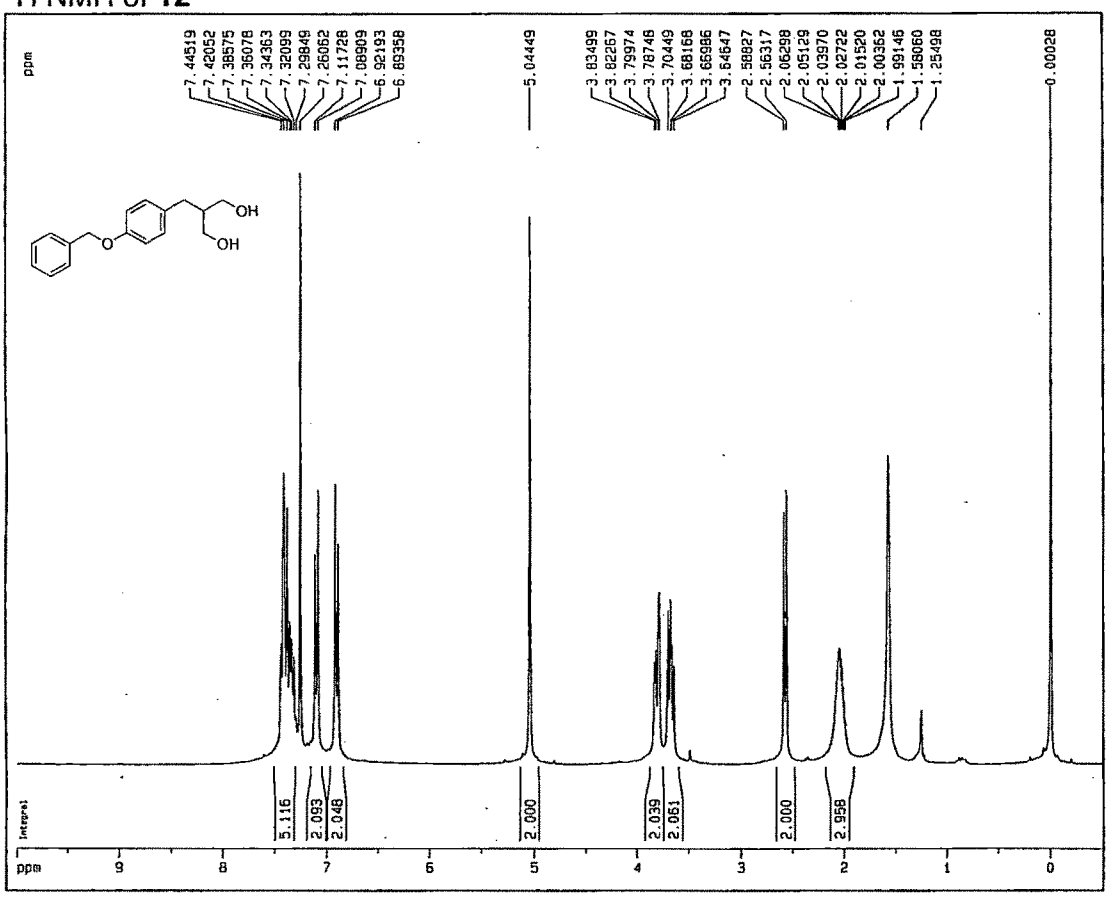
ESI-MS of **9e**



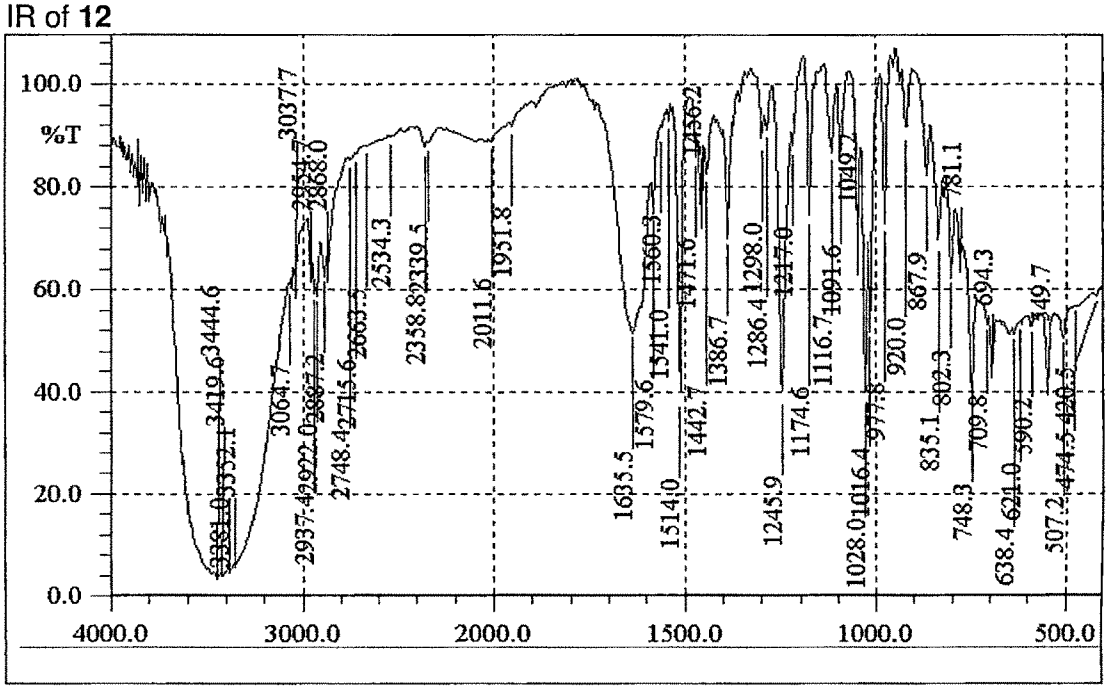
HPLC of **9e**



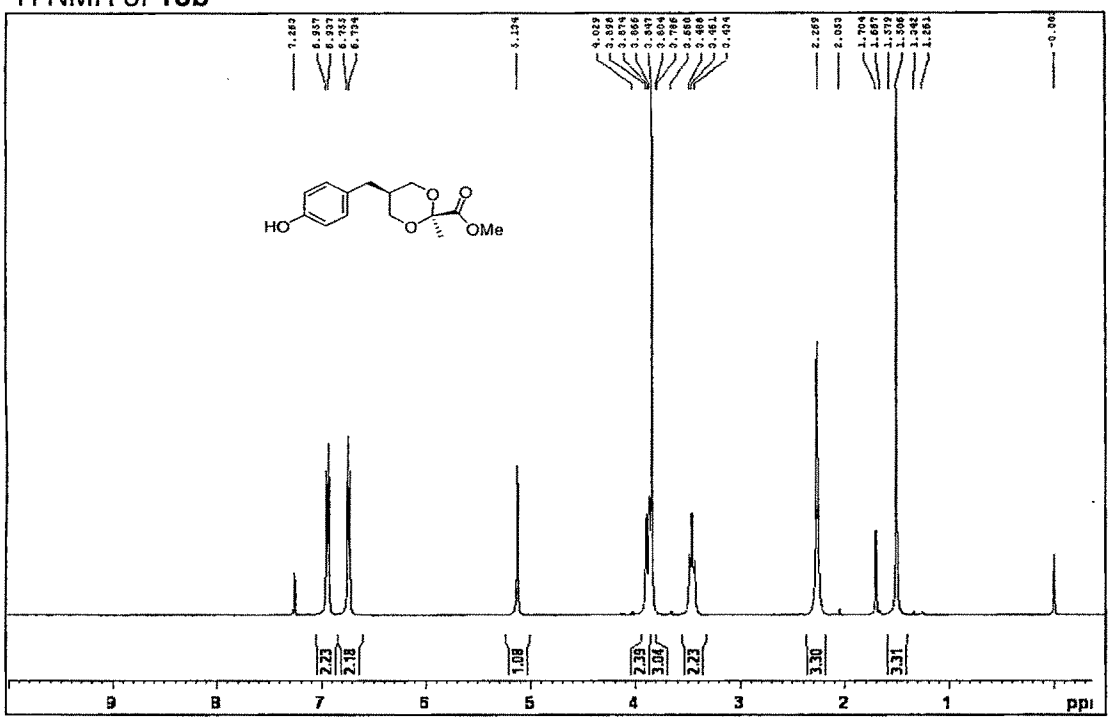
^{1}H NMR of **12**



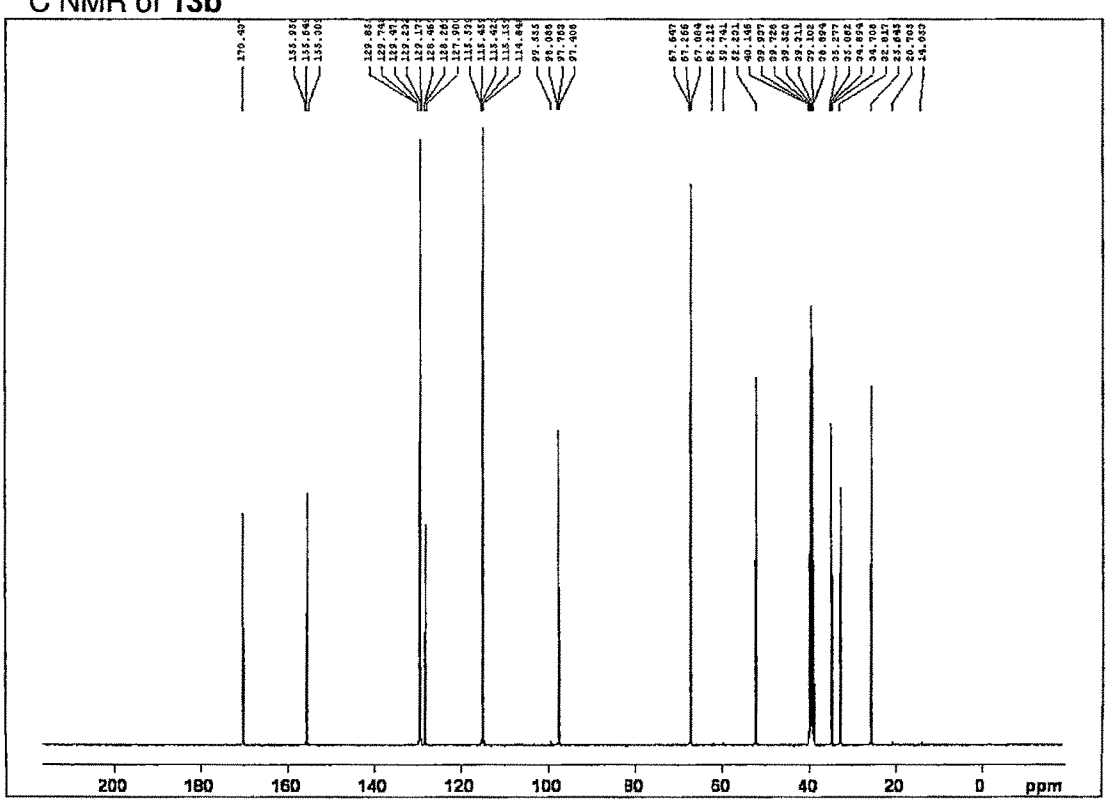
IR of **12**



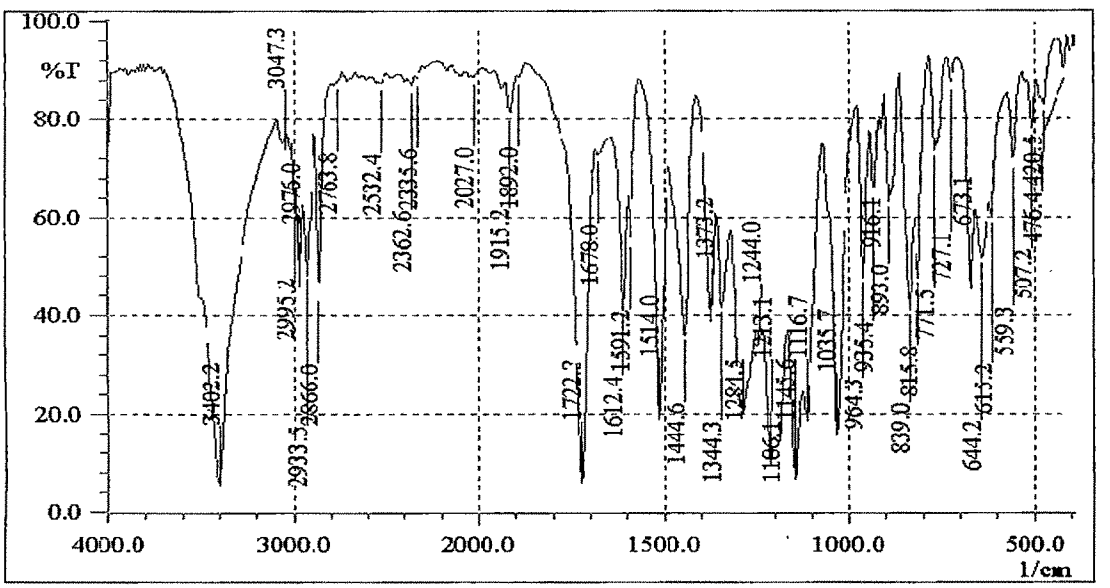
^{1}H NMR of **13b**



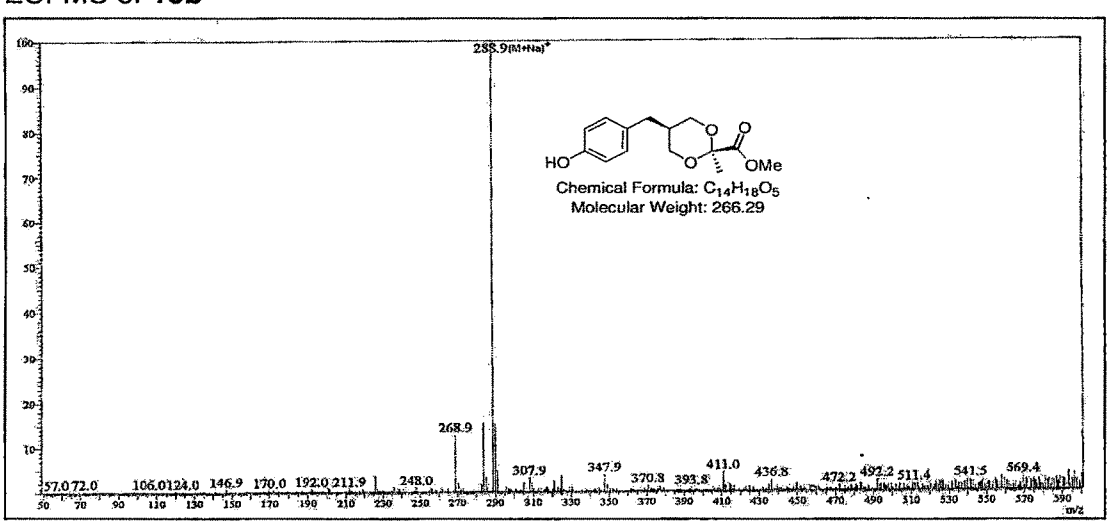
^{13}C NMR of **13b**



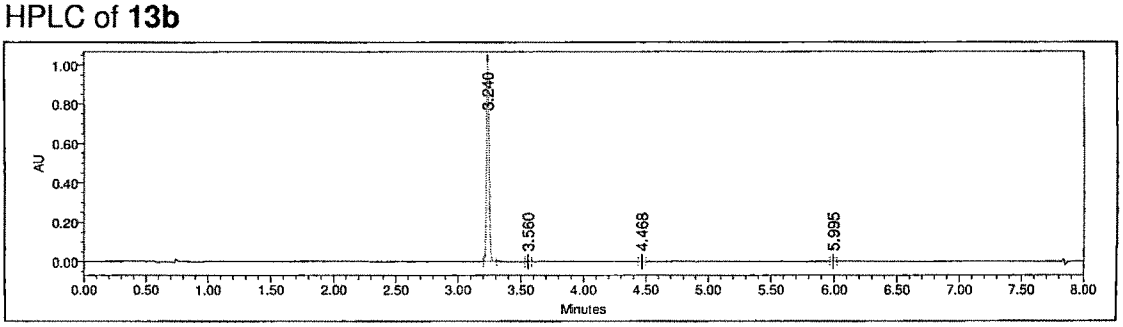
IR of **13b**



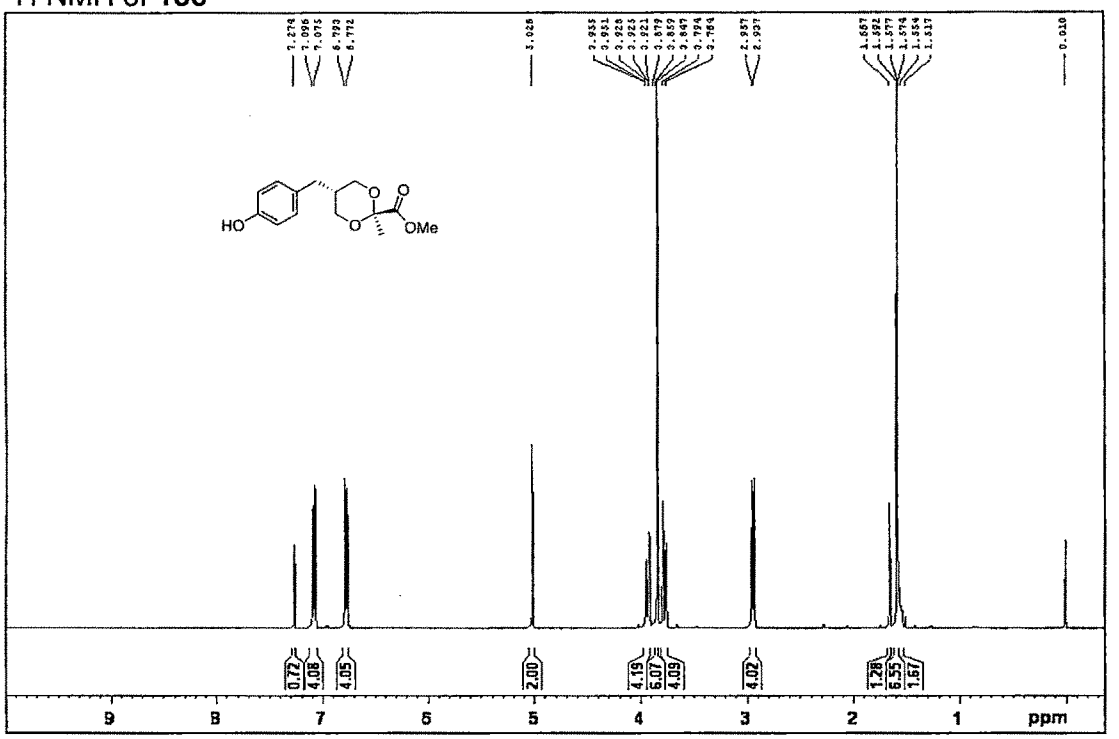
ESI-MS of **13b**



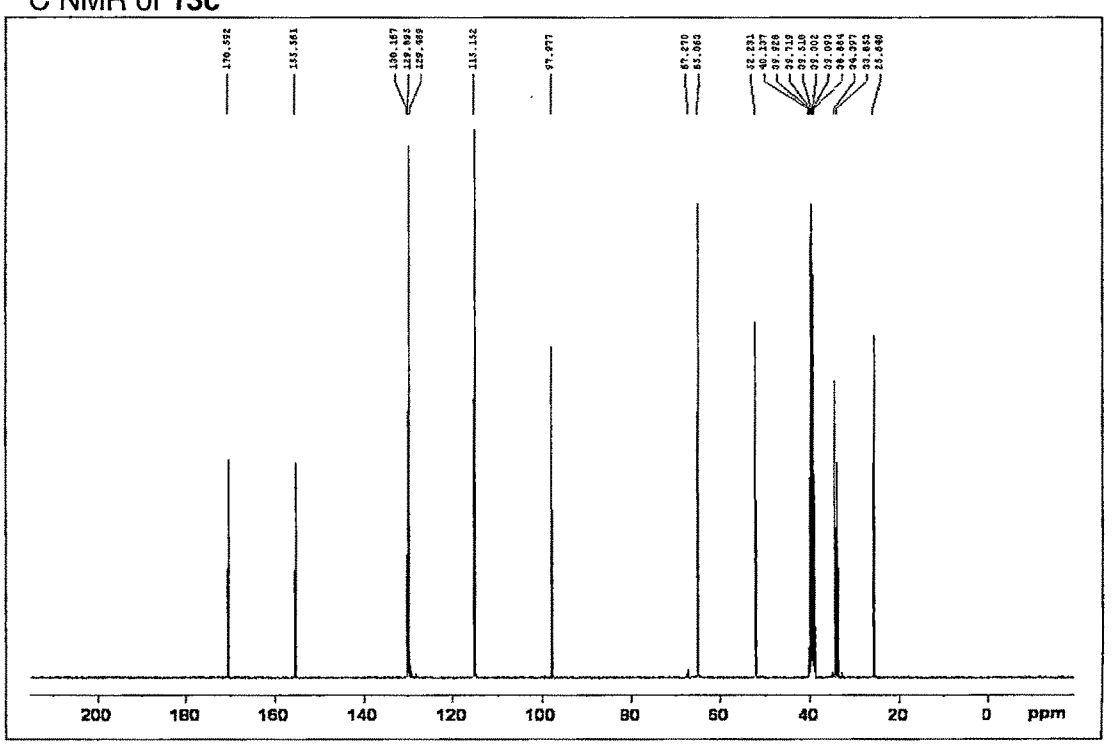
HPLC of **13b**



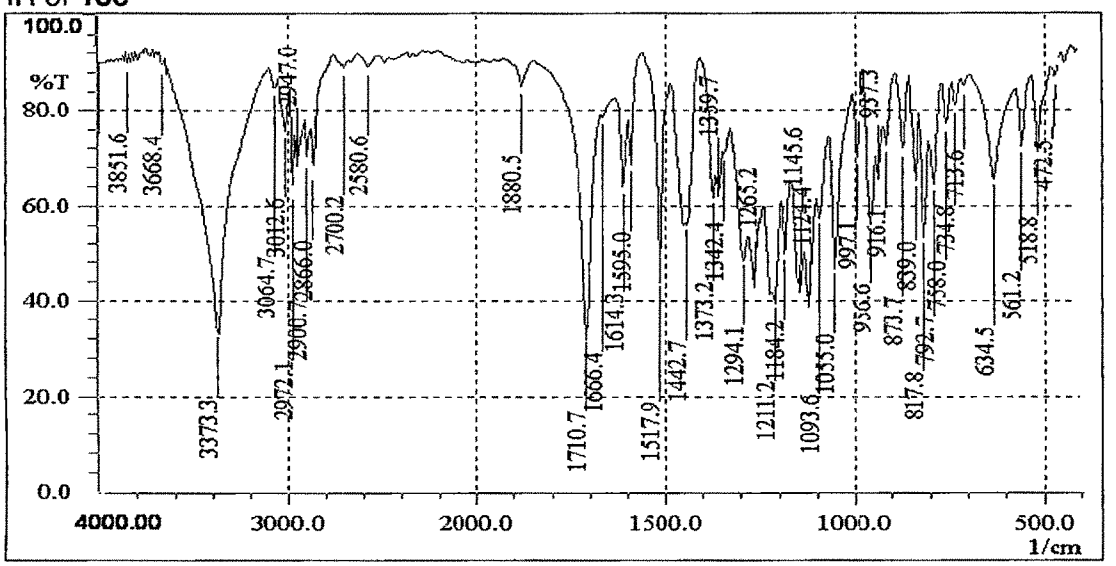
^{1}H NMR of **13c**



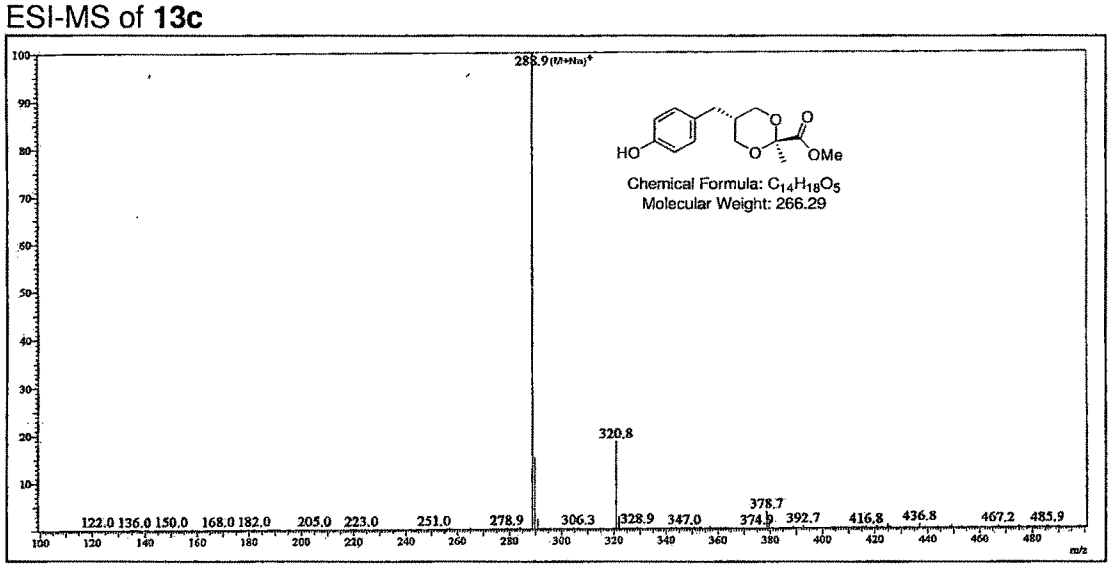
^{13}C NMR of **13c**



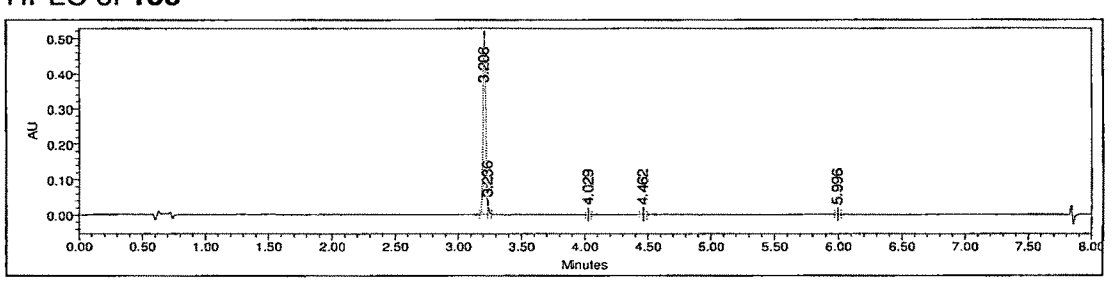
IR of **13c**



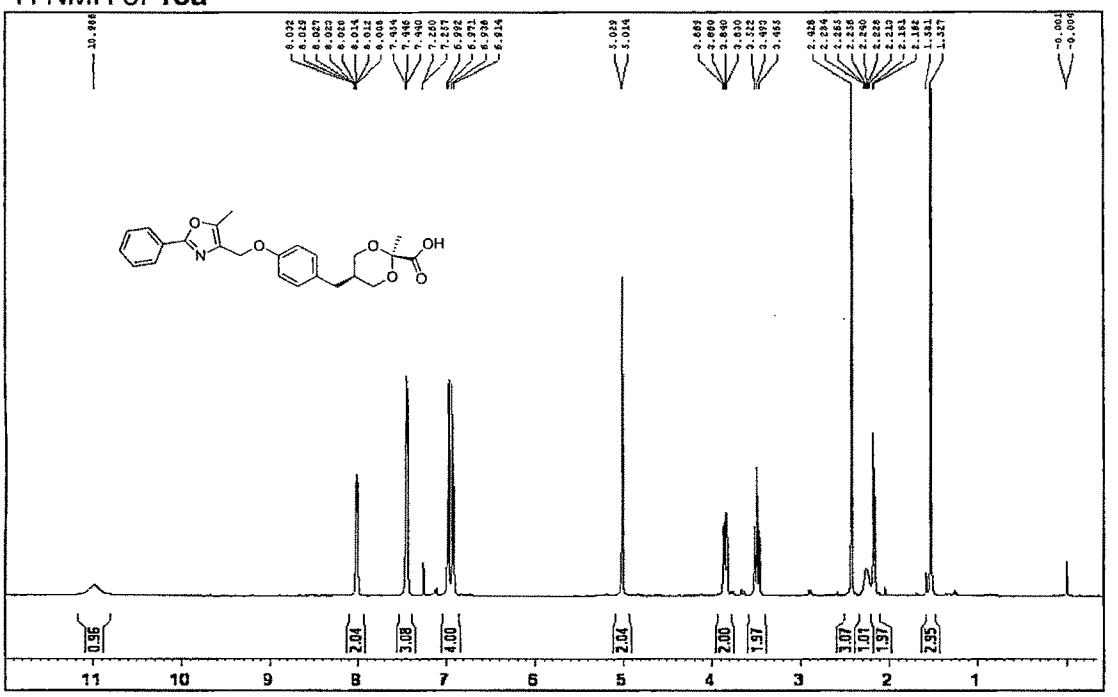
ESI-MS of **13c**



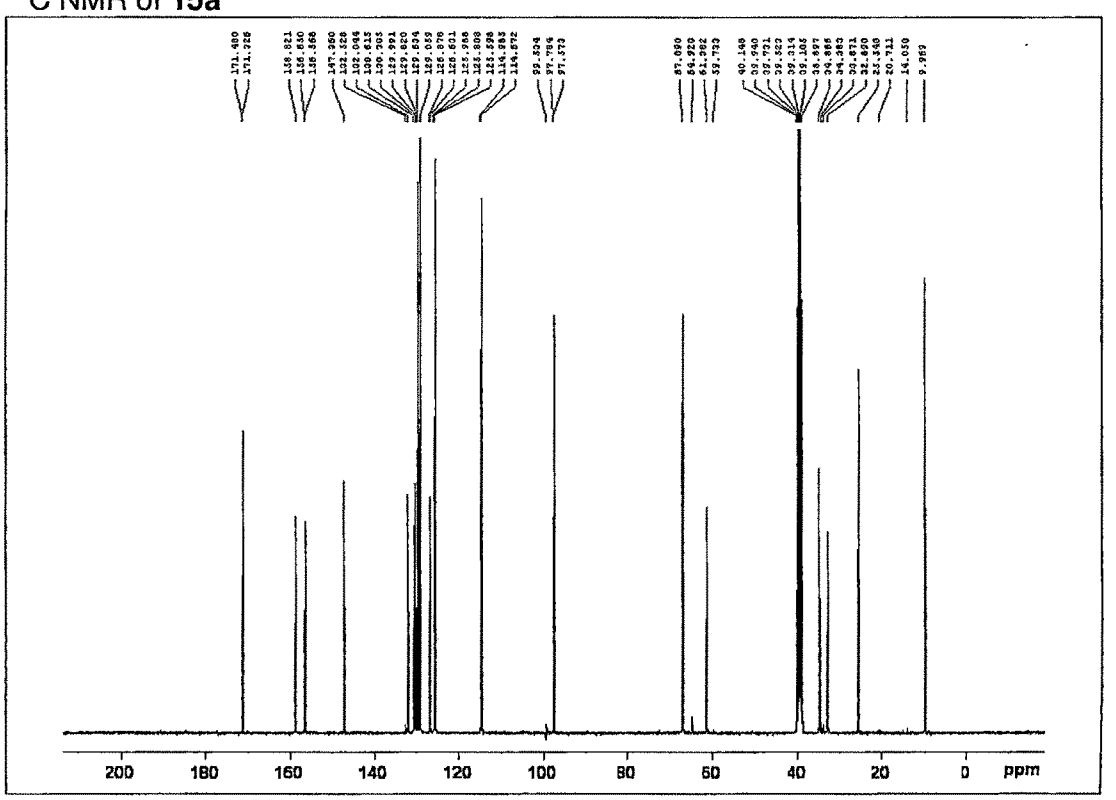
HPLC of **13c**



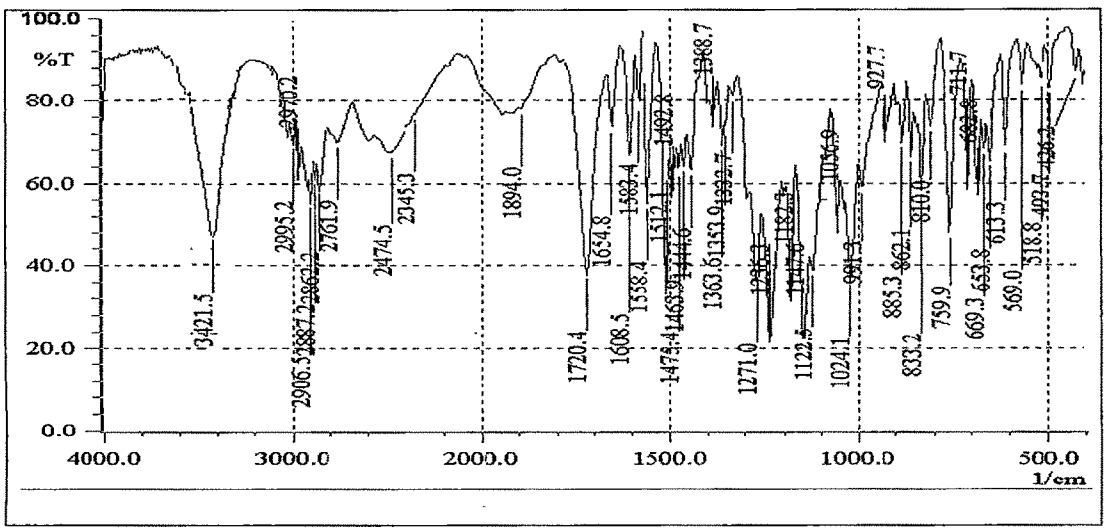
^{1}H NMR of **15a**



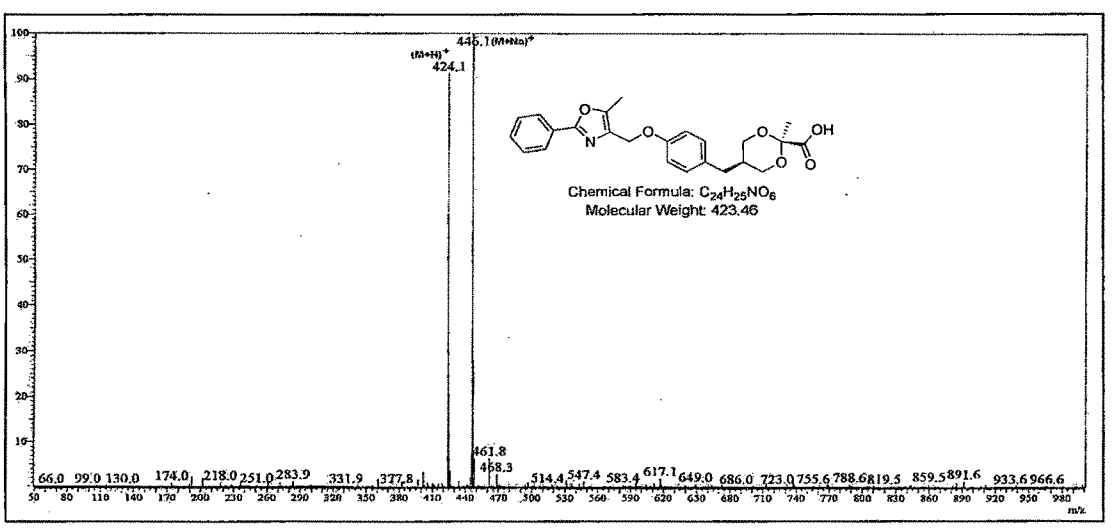
^{13}C NMR of **15a**



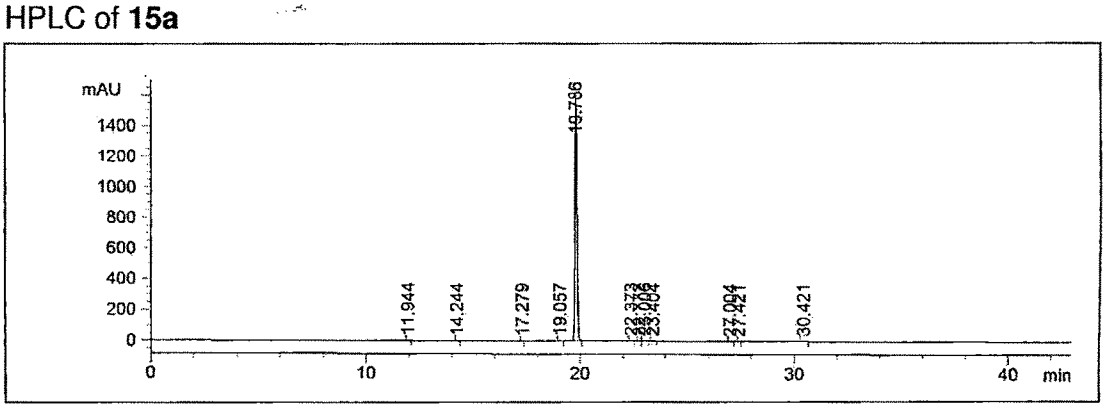
IR of **15a**



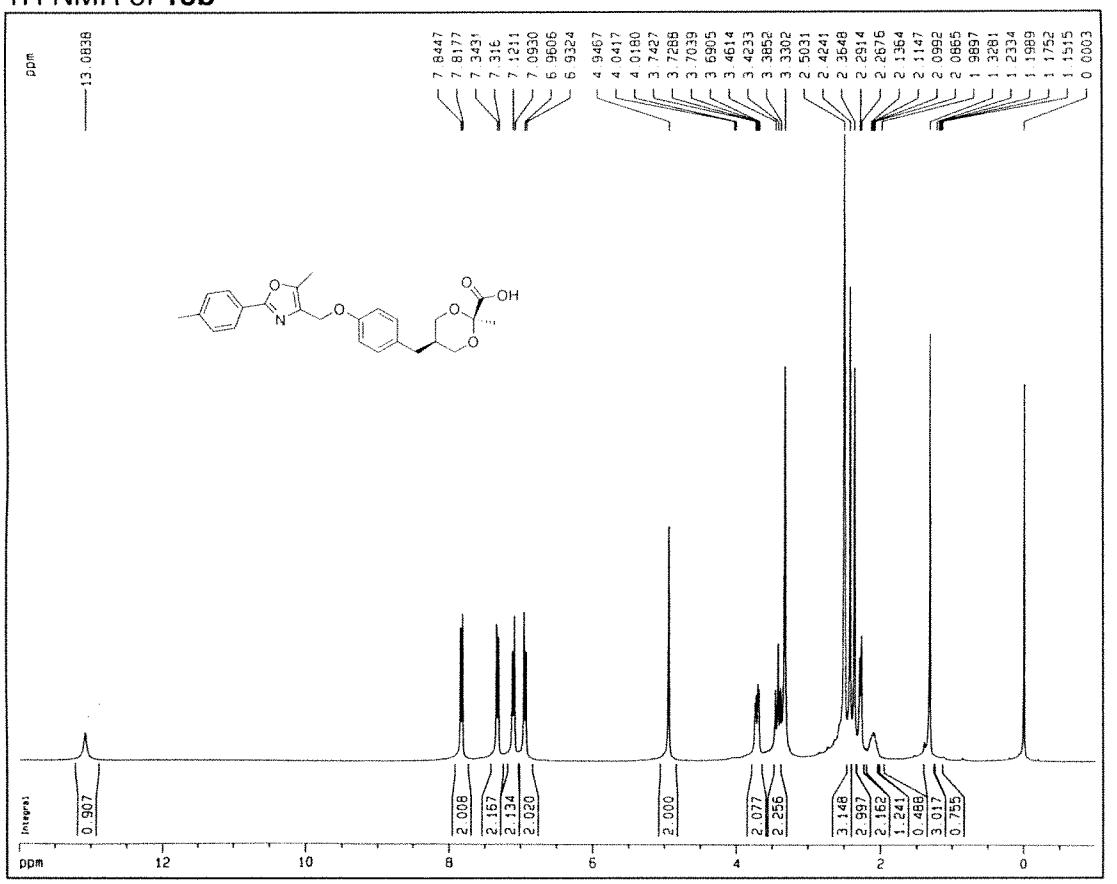
ESI-MS of **15a**



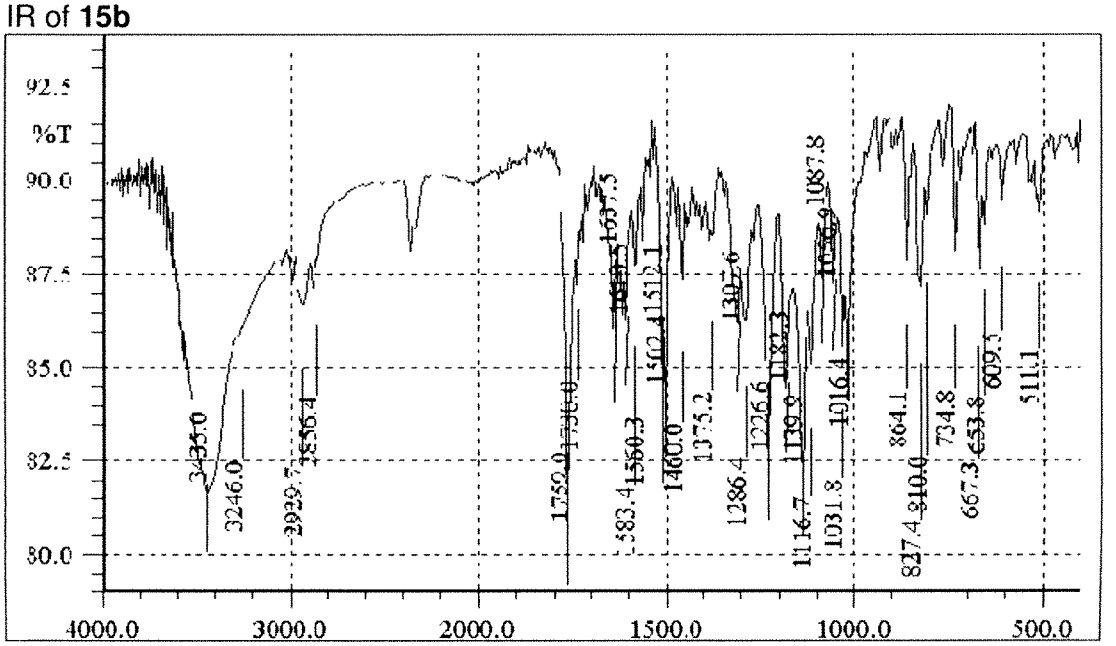
HPLC of **15a**



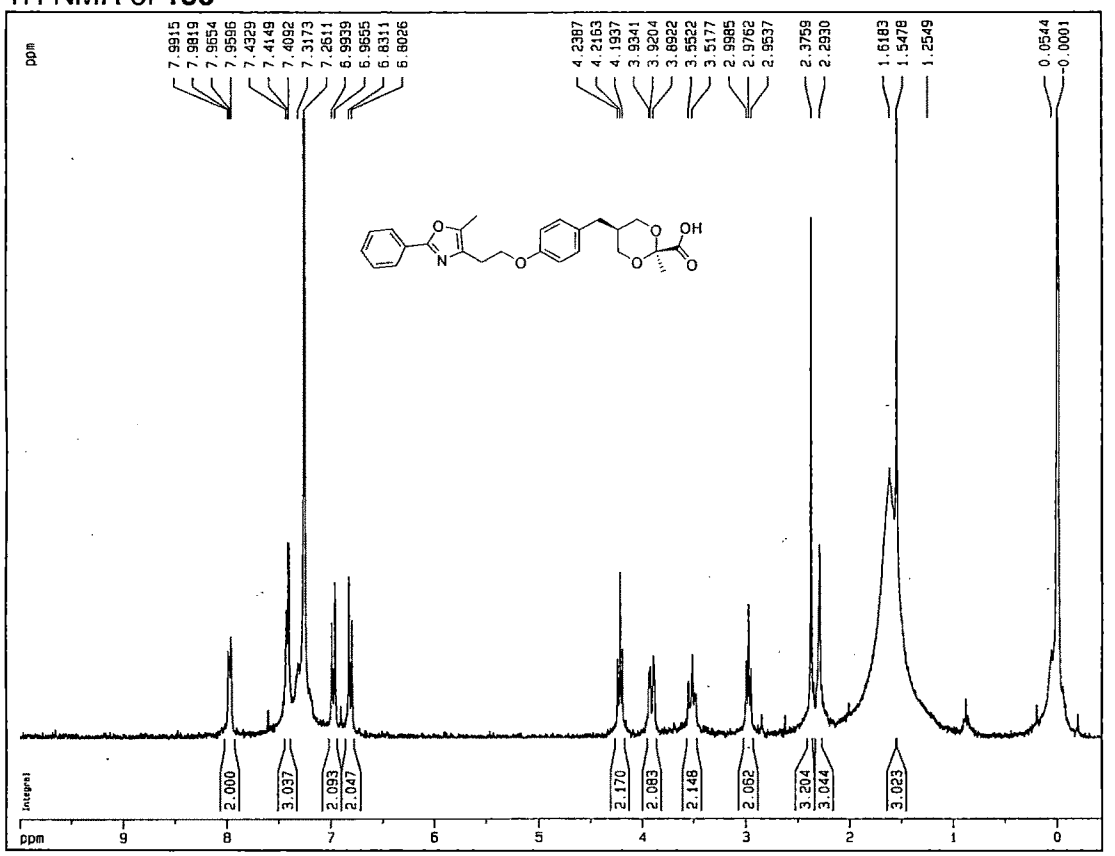
1H NMR of **15b**



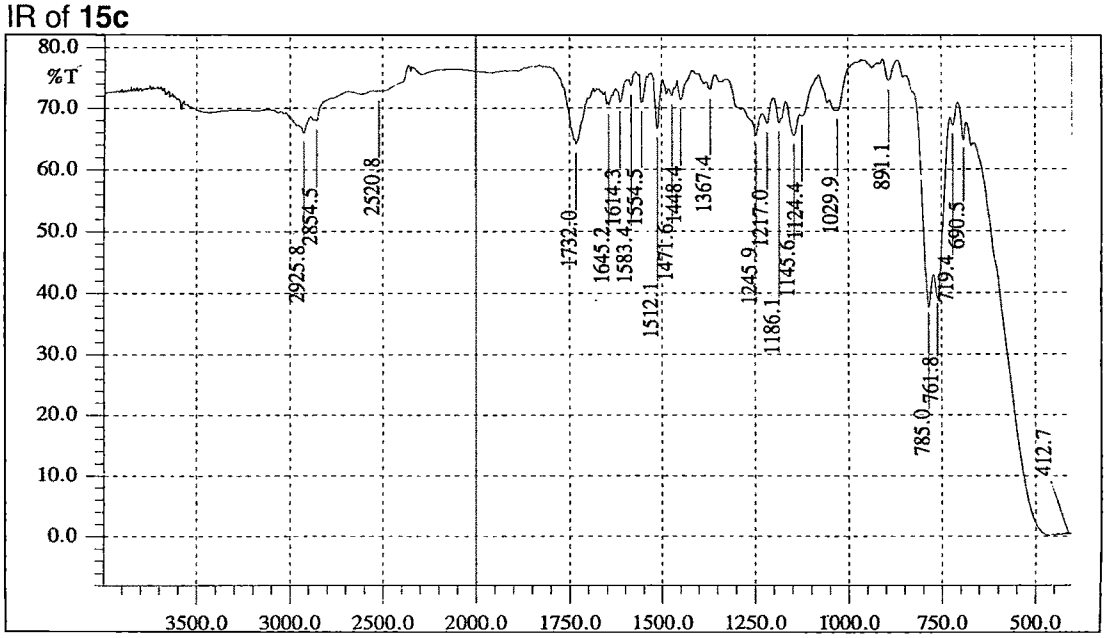
IR of **15b**



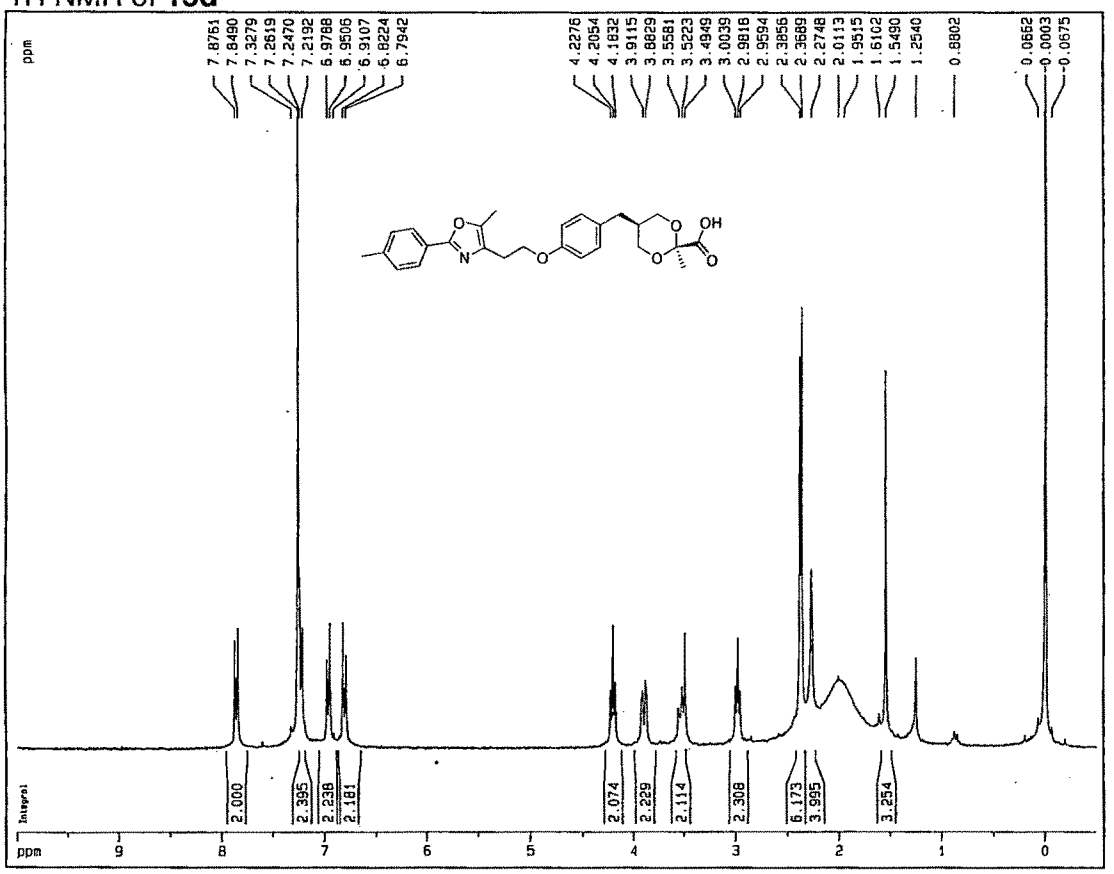
1H NMR of **15c**



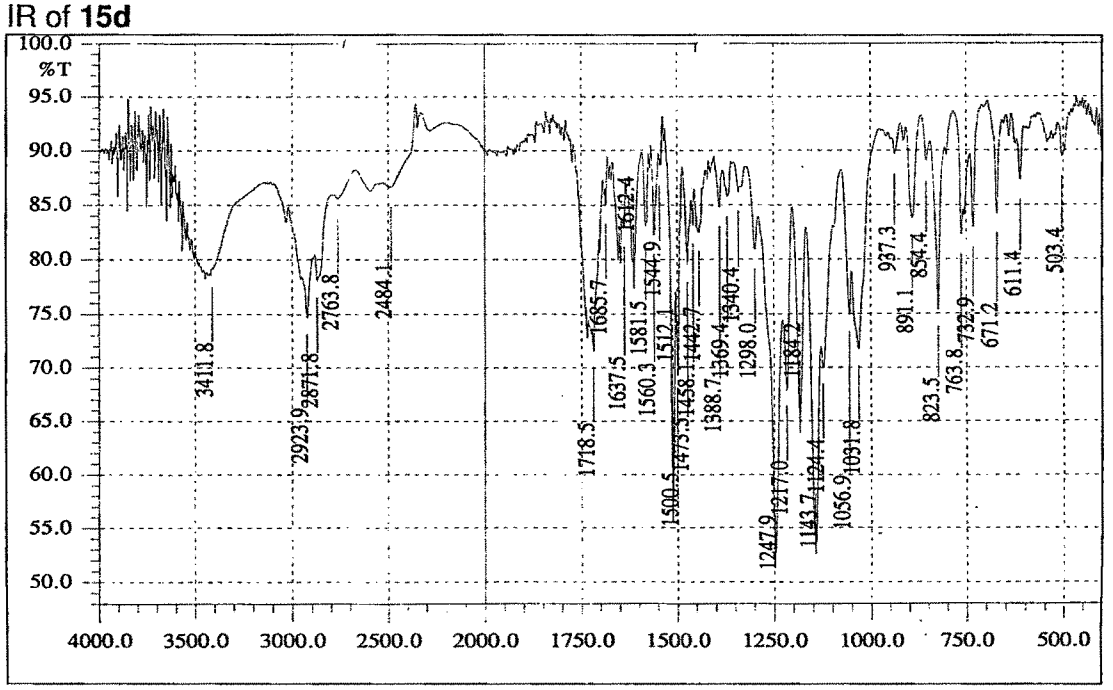
IR of **15c**



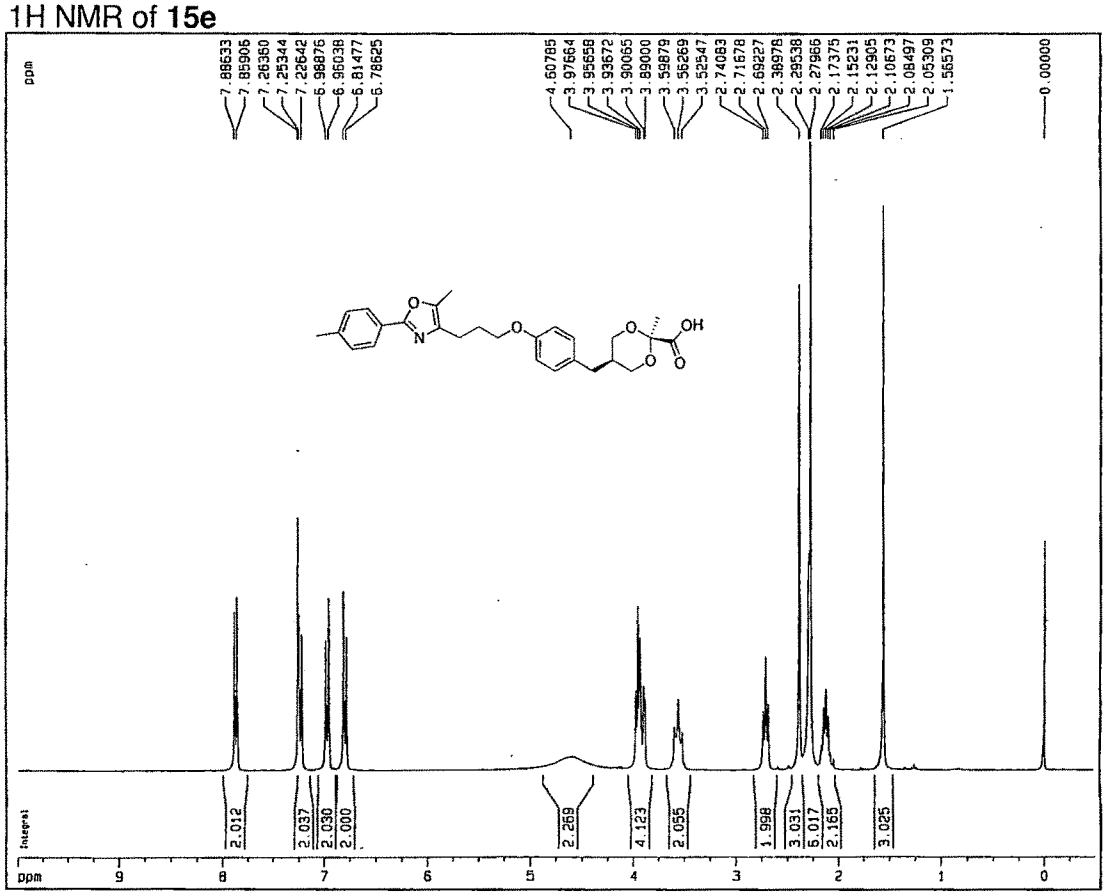
1H NMR of **15d**



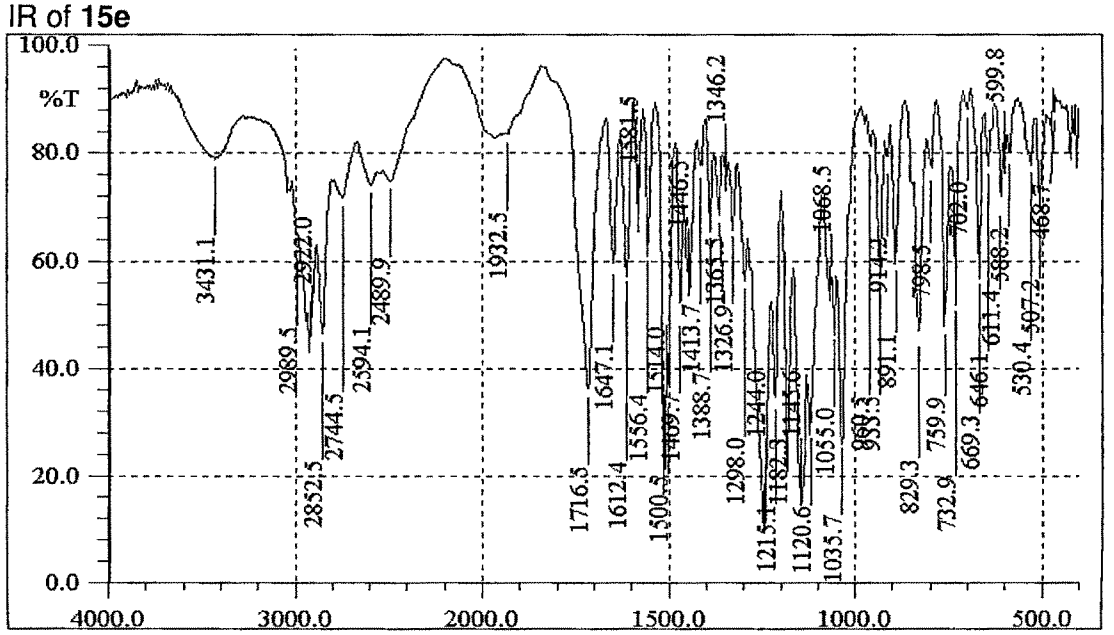
IR of **15d**



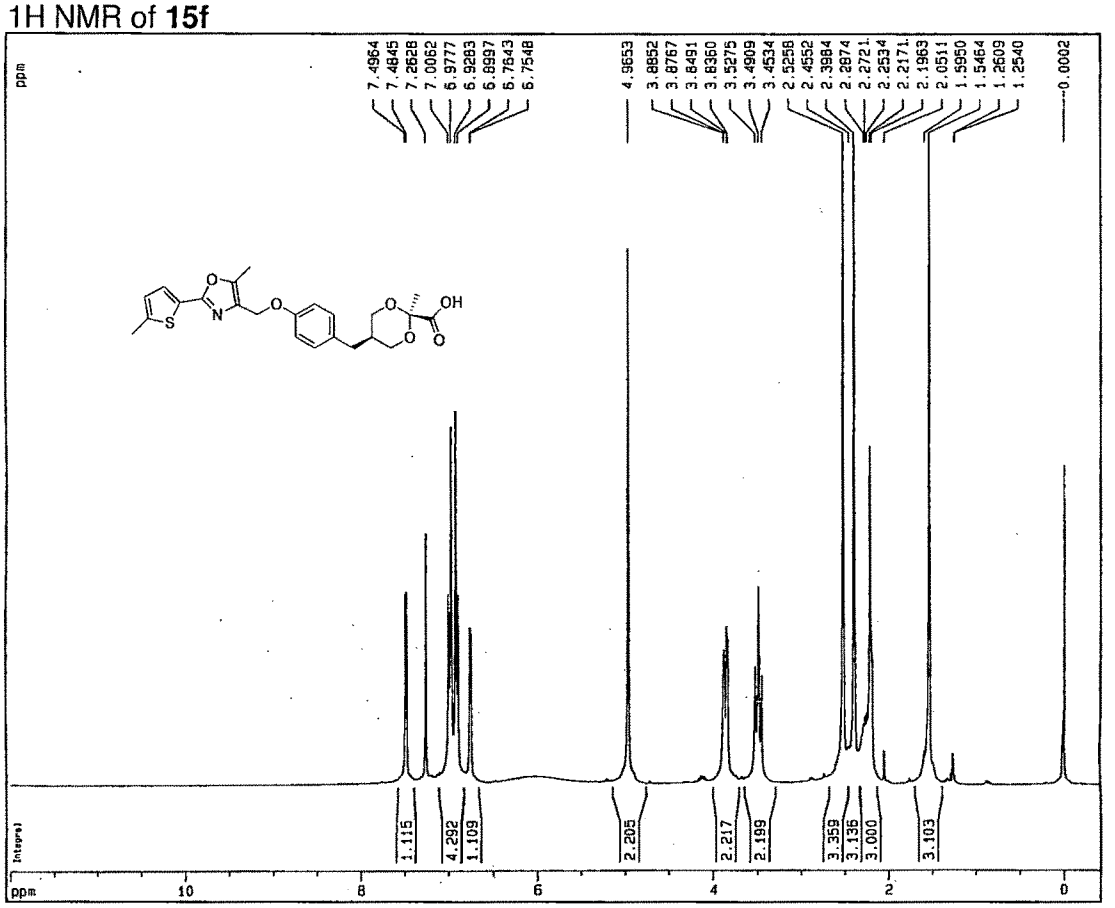
1H NMR of **15e**



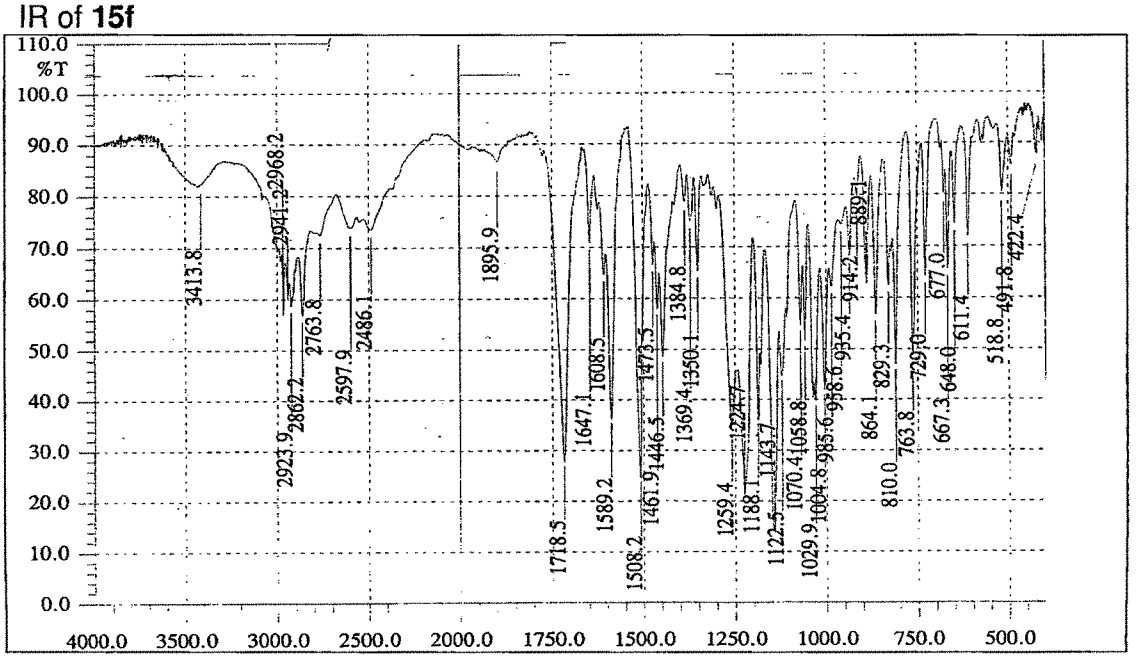
IR of **15e**



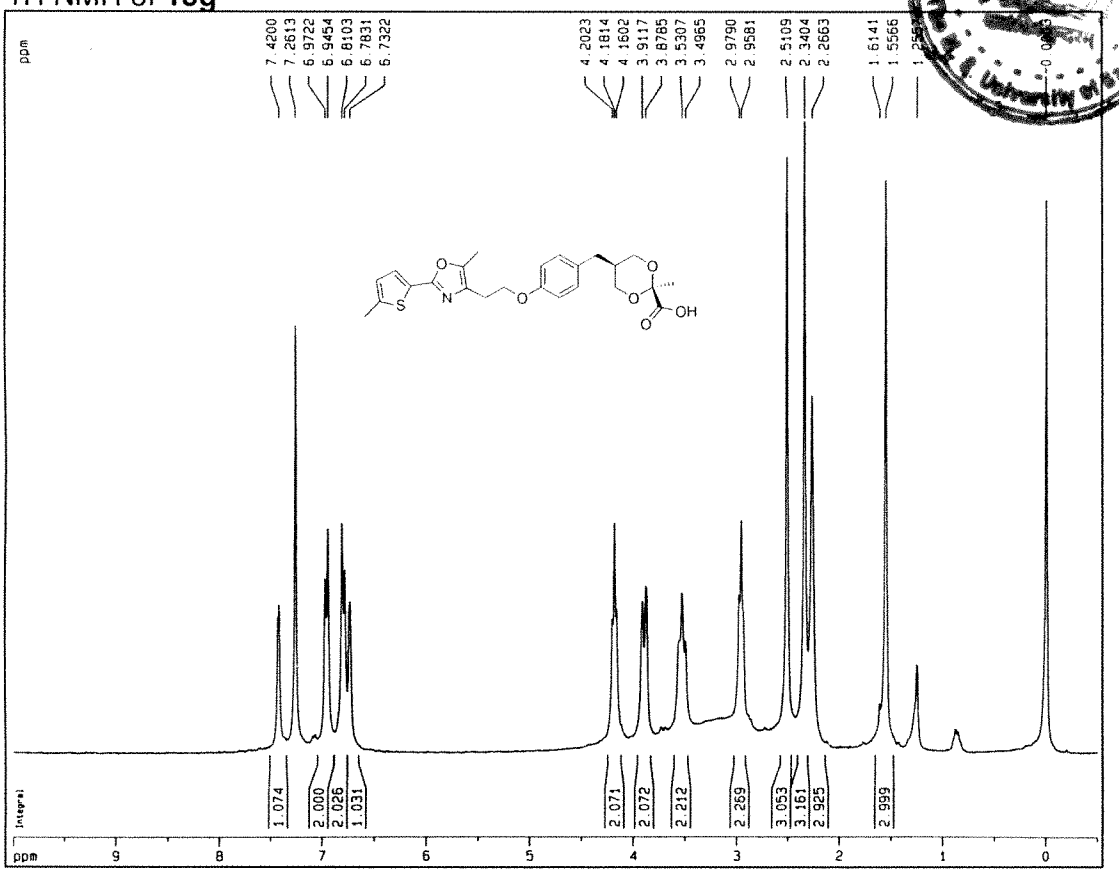
1H NMR of **15f**



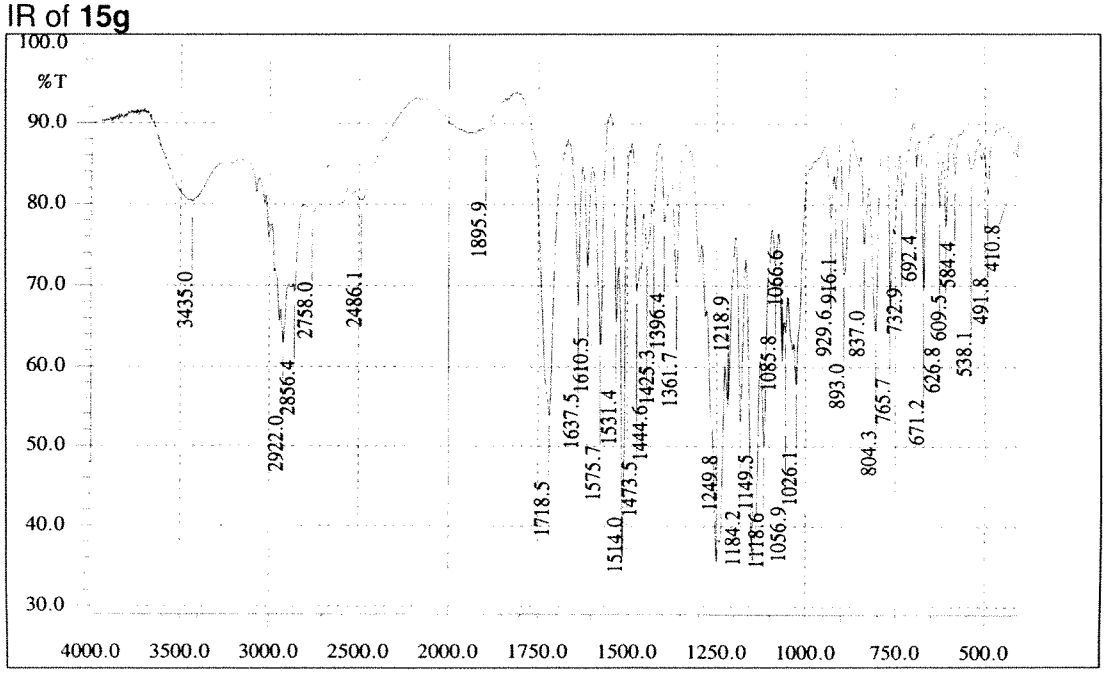
IR of **15f**



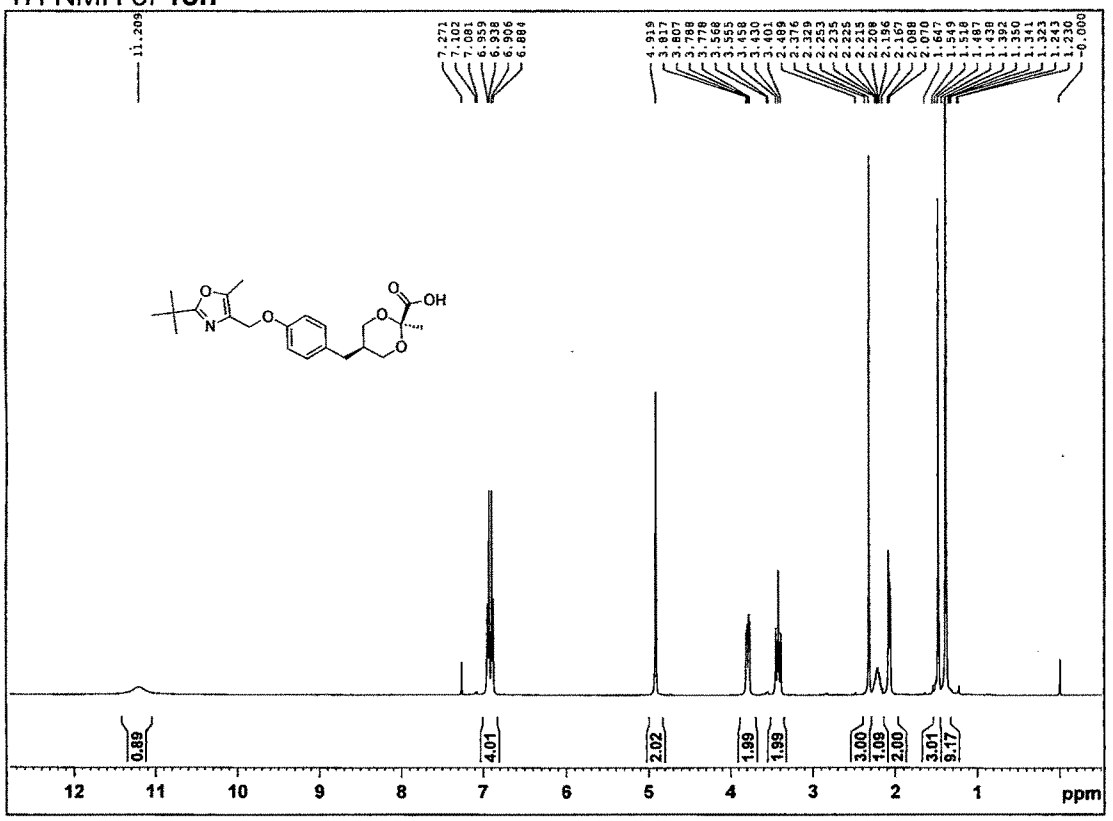
1H NMR of **15g**



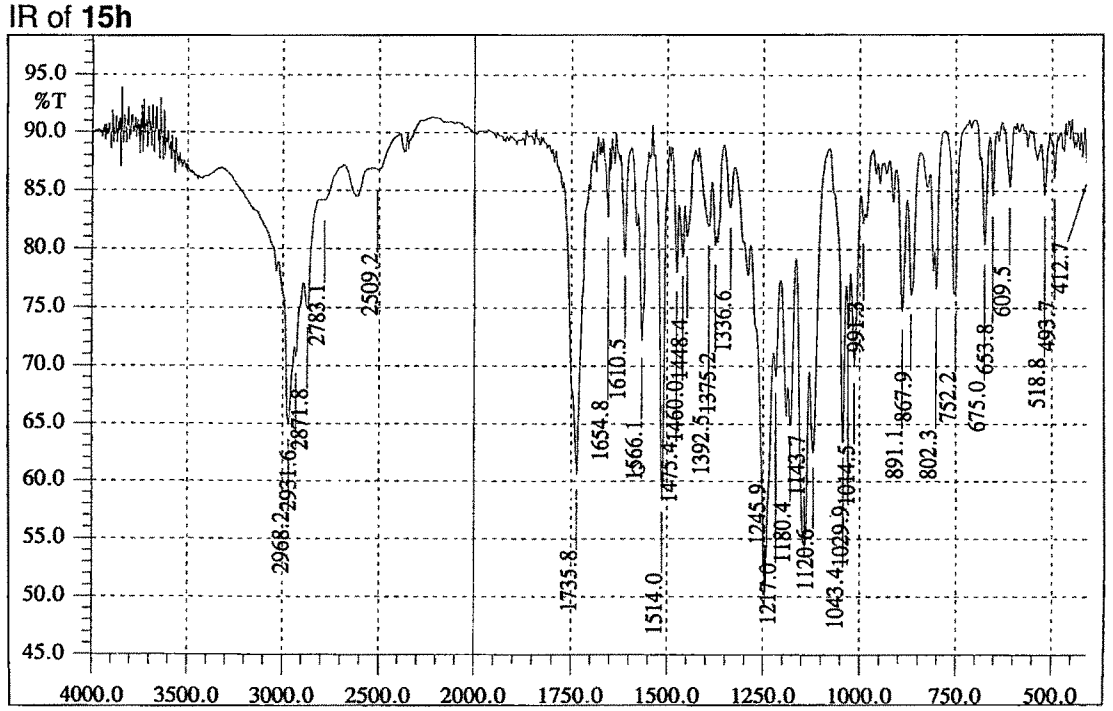
IR of **15g**



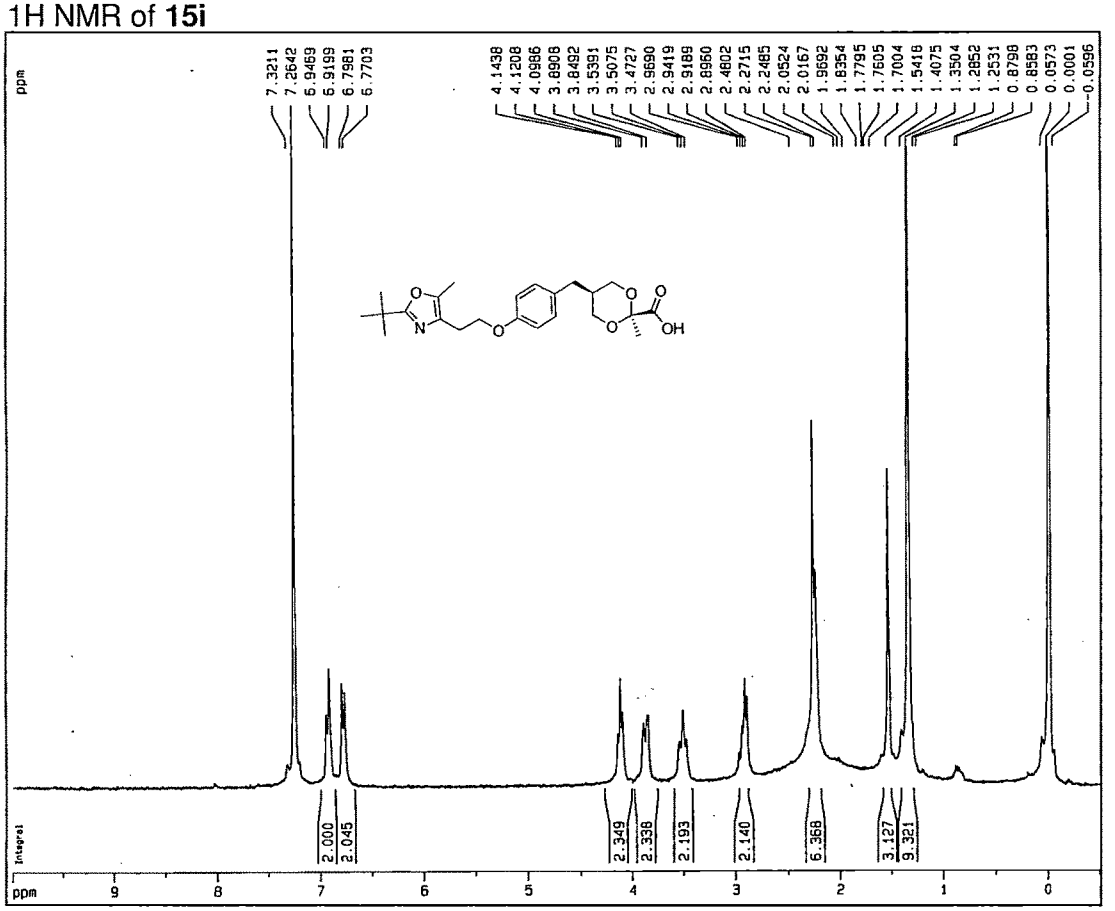
1H NMR of **15h**



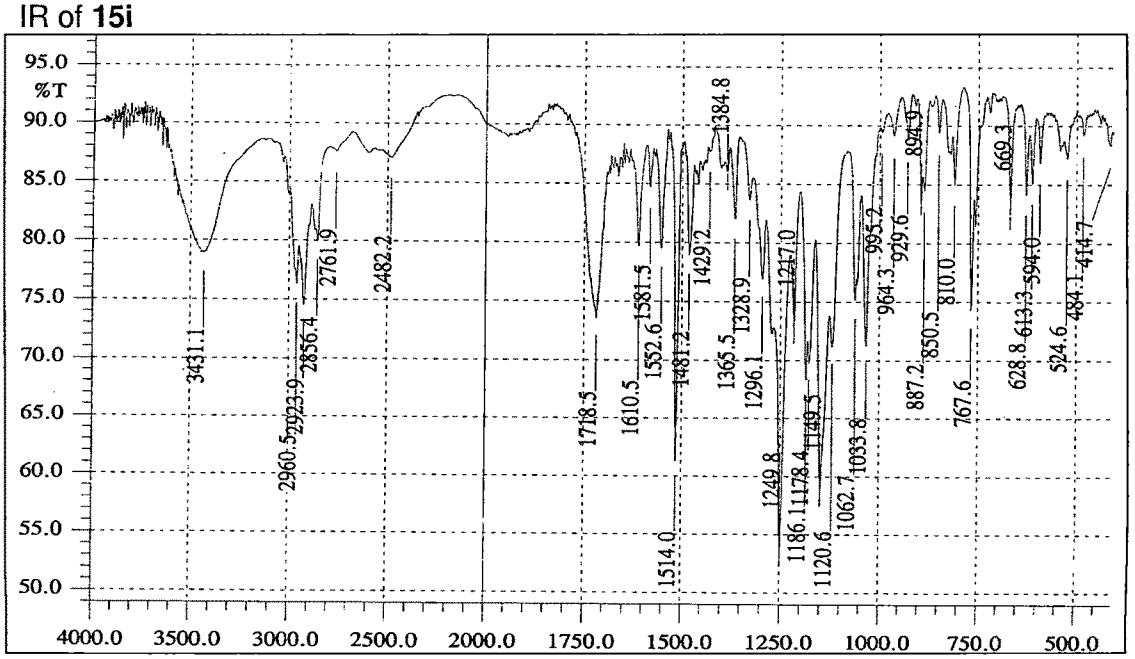
IR of **15h**



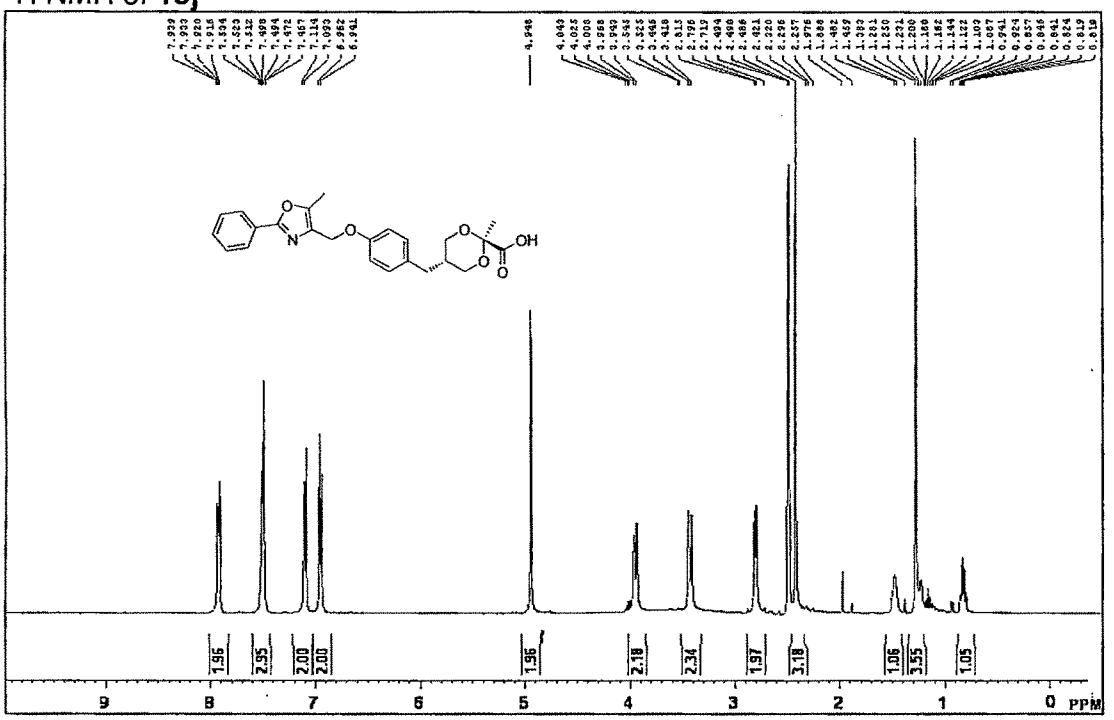
1H NMR of **15i**



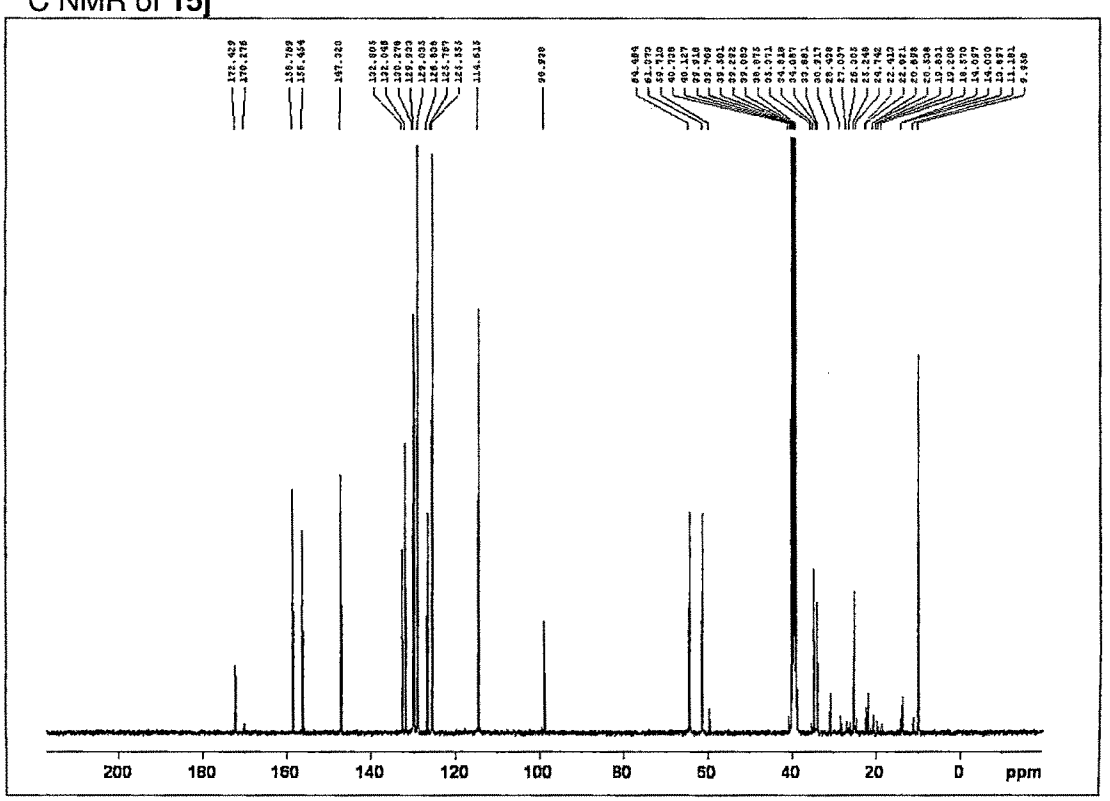
IR of **15i**



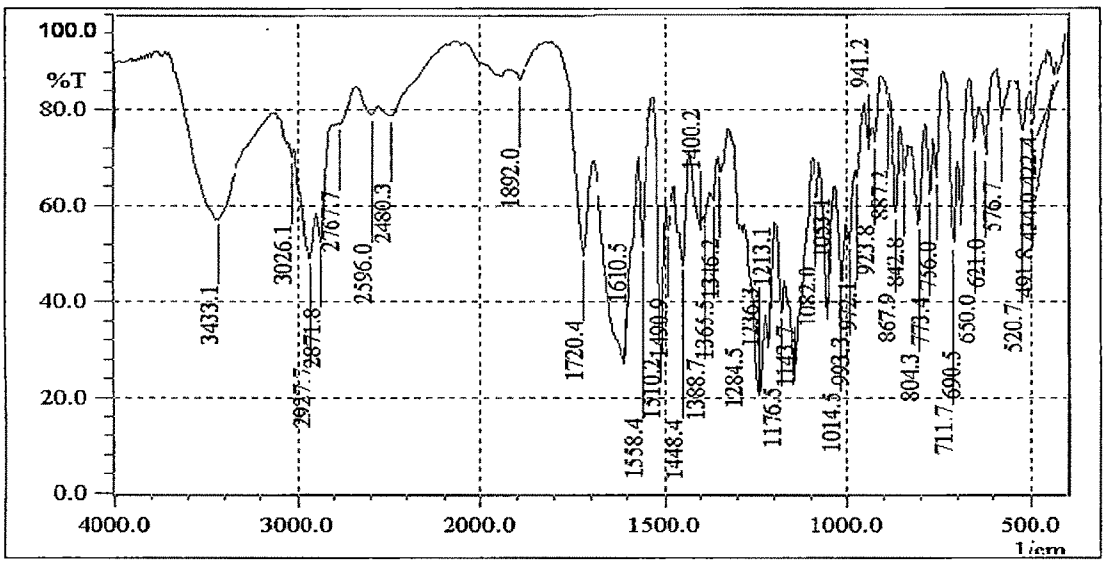
^{1}H NMR of **15j**



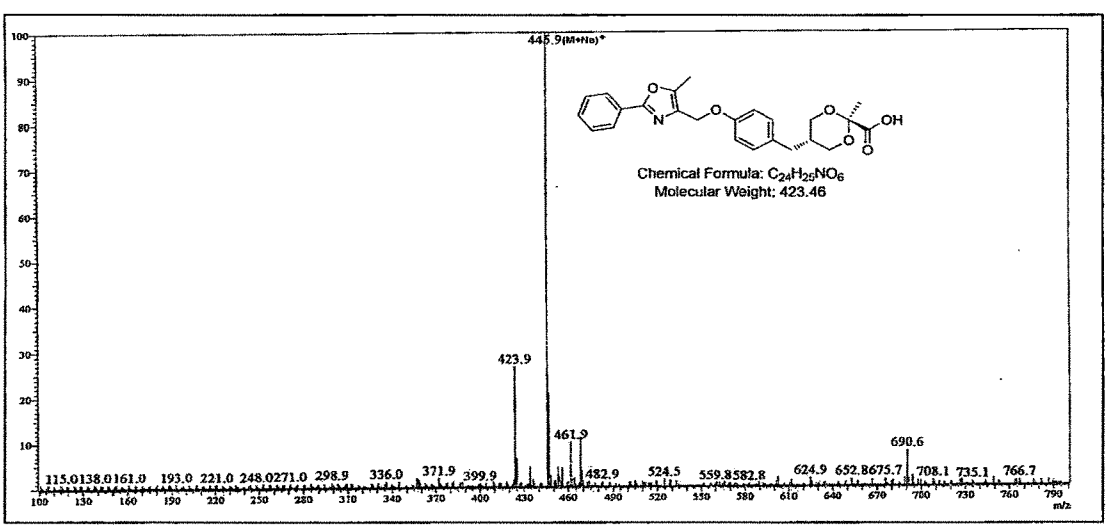
^{13}C NMR of **15j**



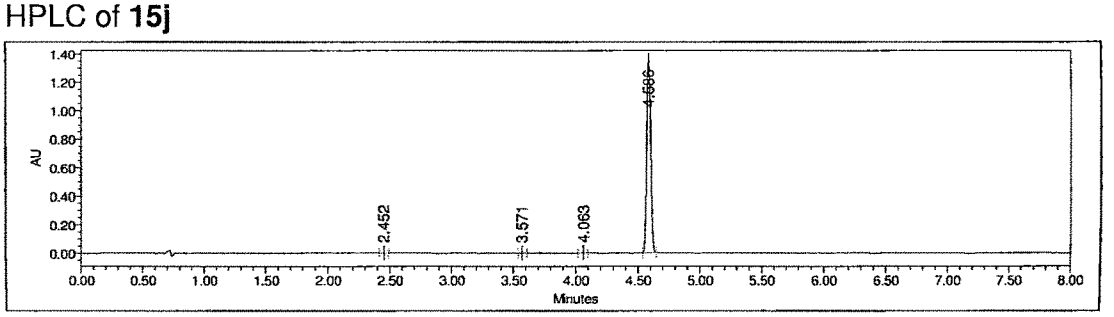
IR of **15j**



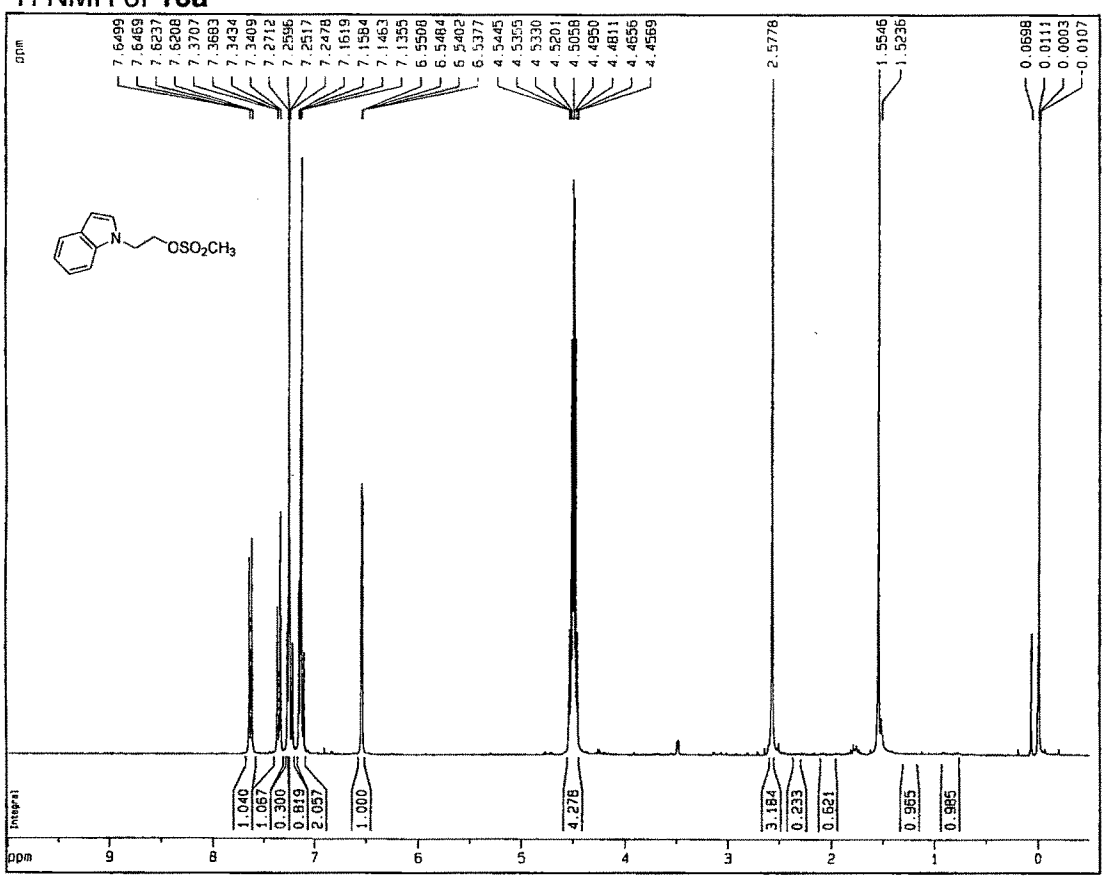
ESI-MS of **15j**



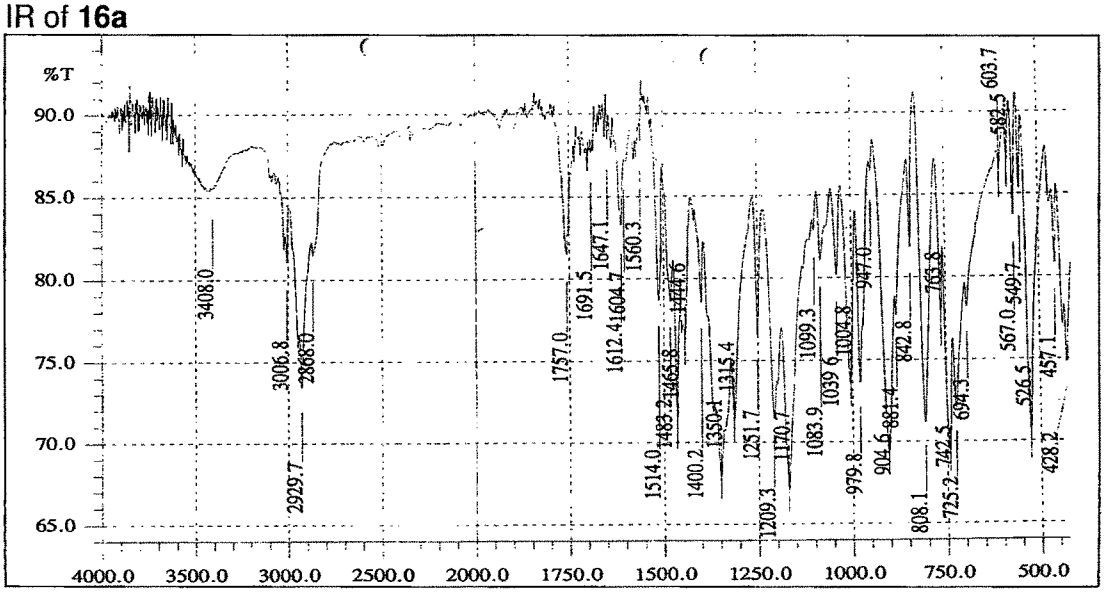
HPLC of **15j**



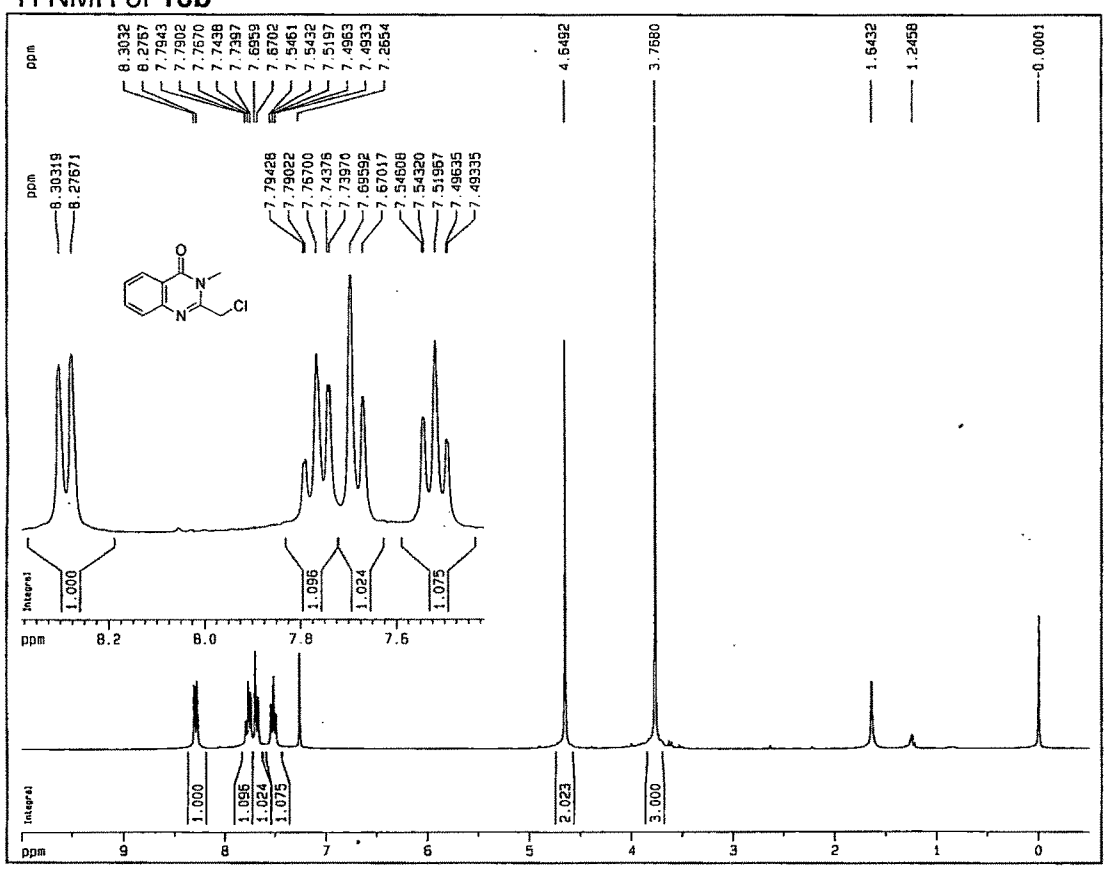
^{1}H NMR of **16a**



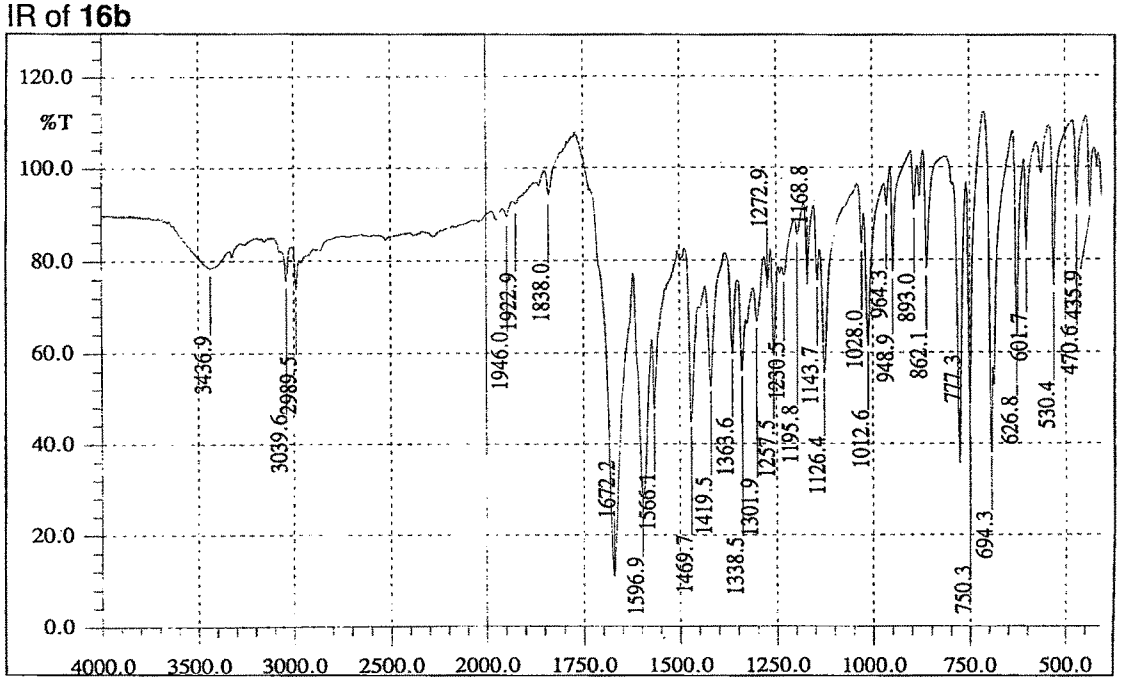
IR of **16a**



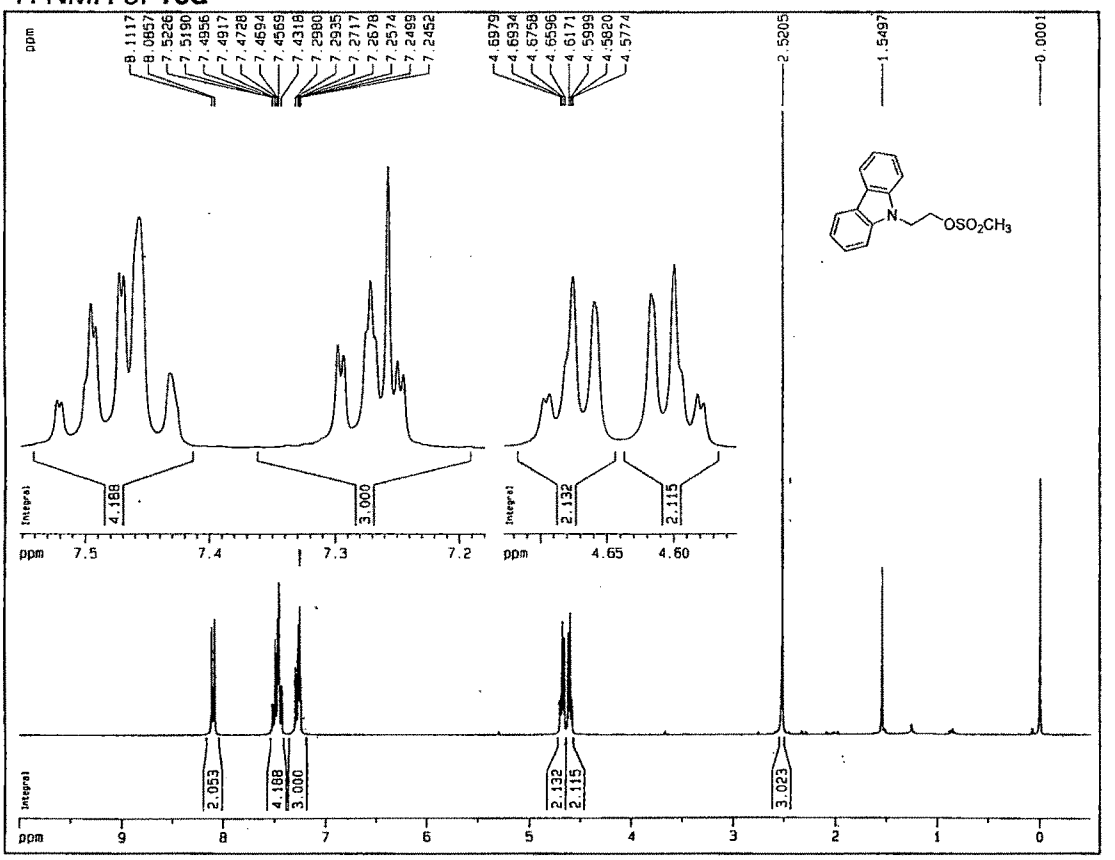
^{1}H NMR of **16b**



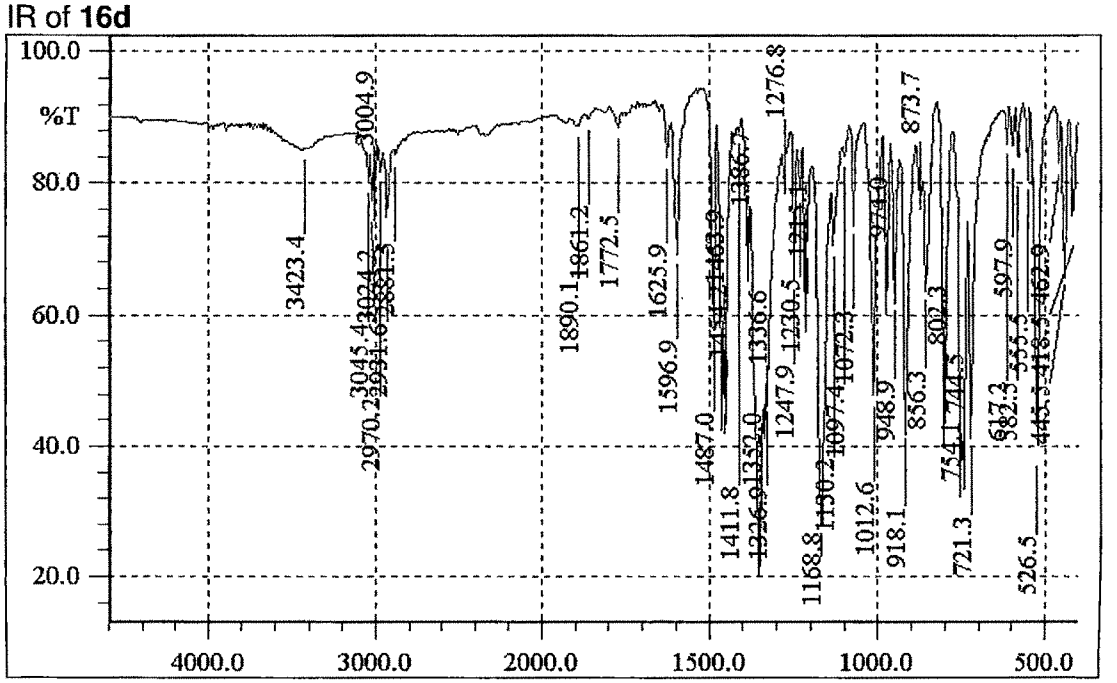
IR of **16b**



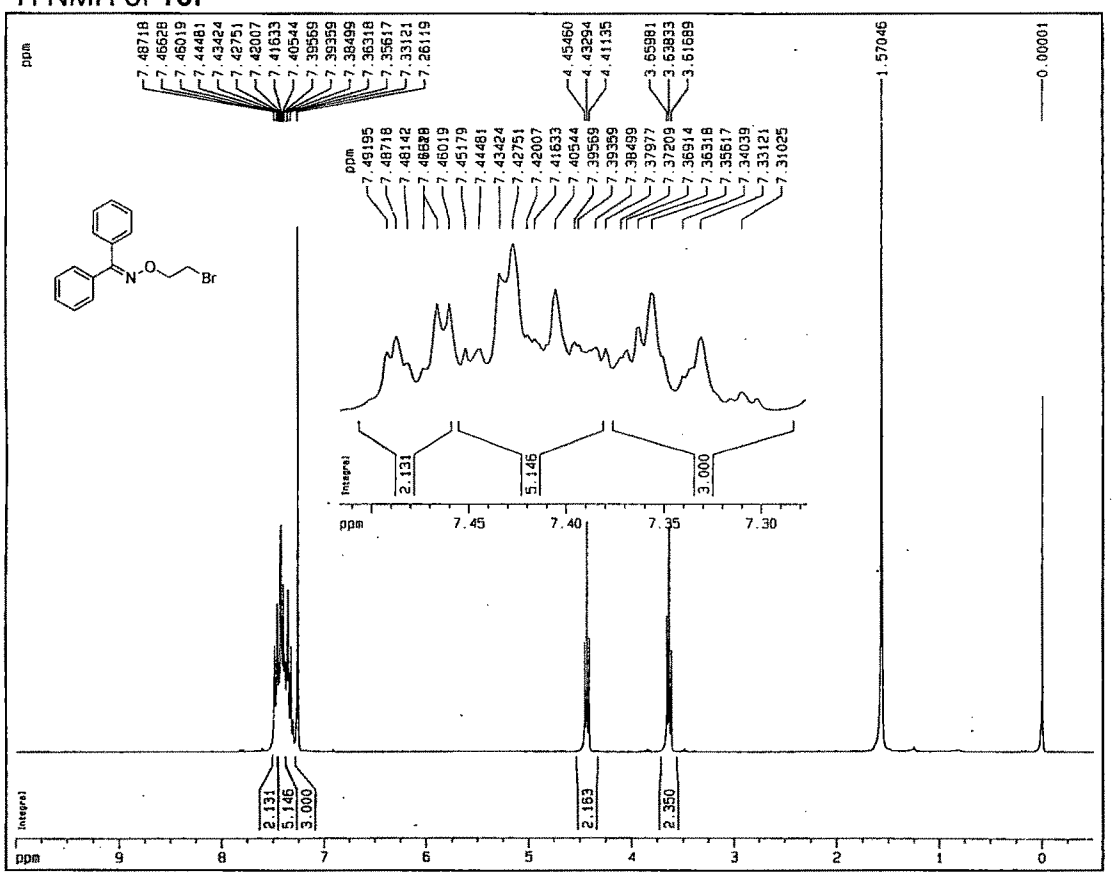
^{1}H NMR of **16d**



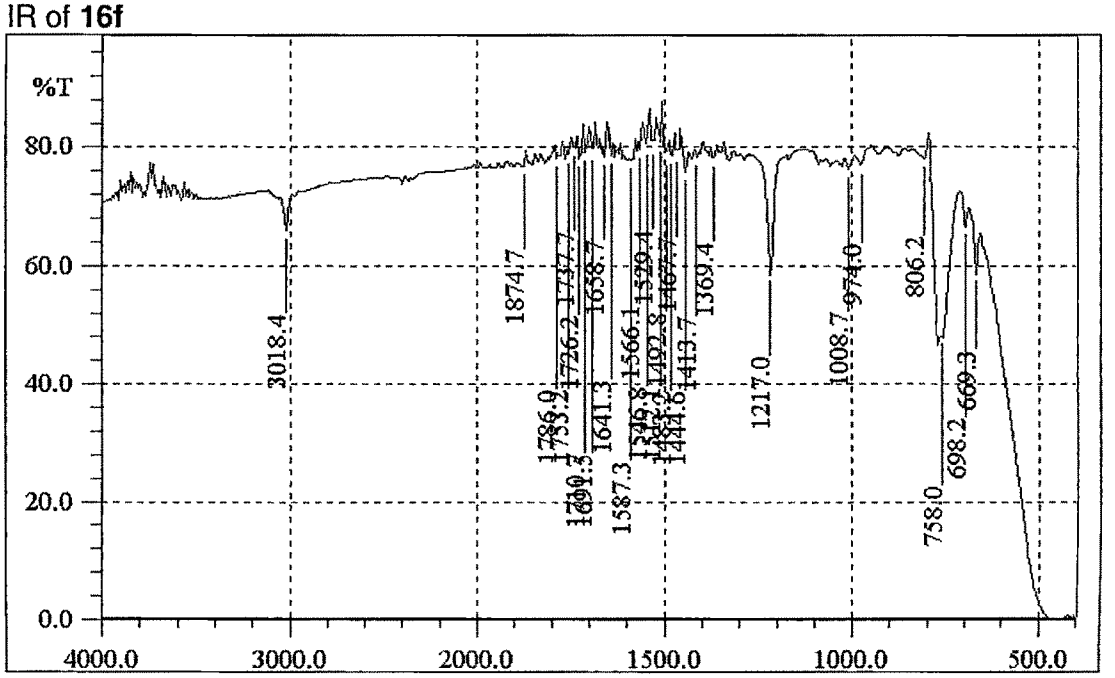
IR of **16d**



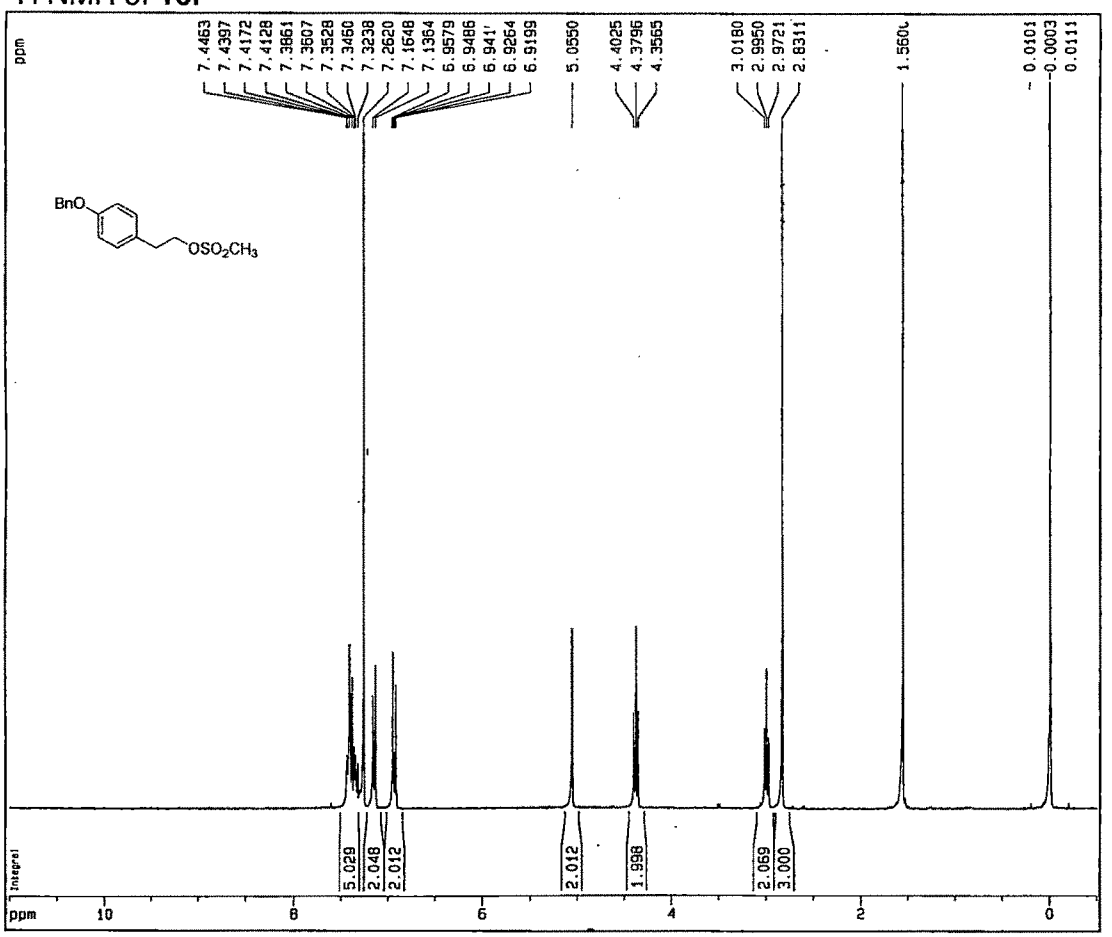
^{1}H NMR of **16f**



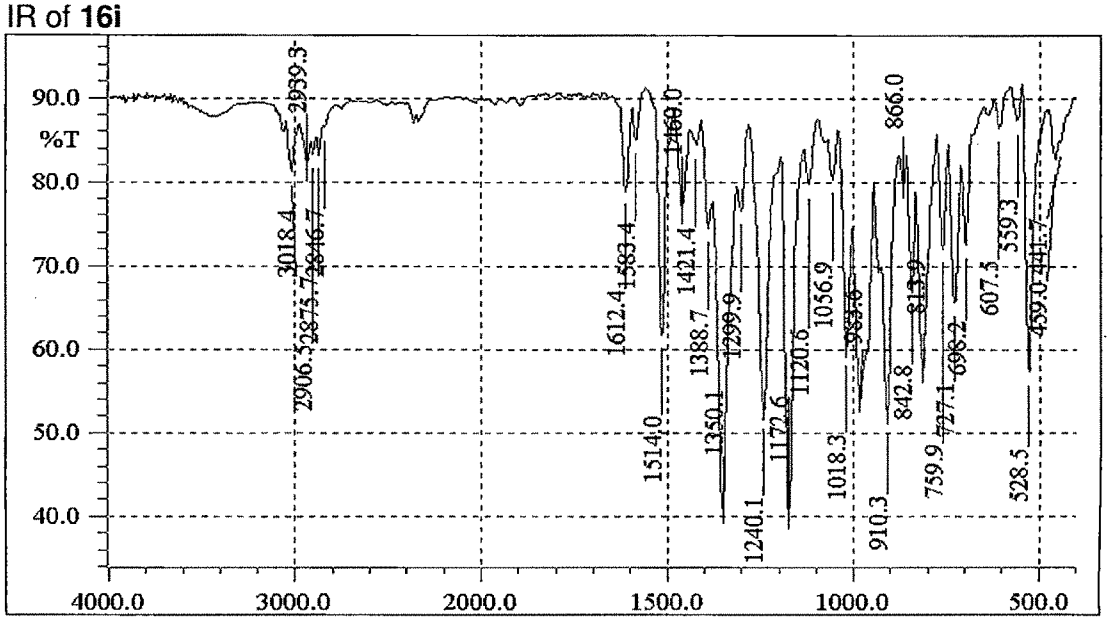
IR of **16f**



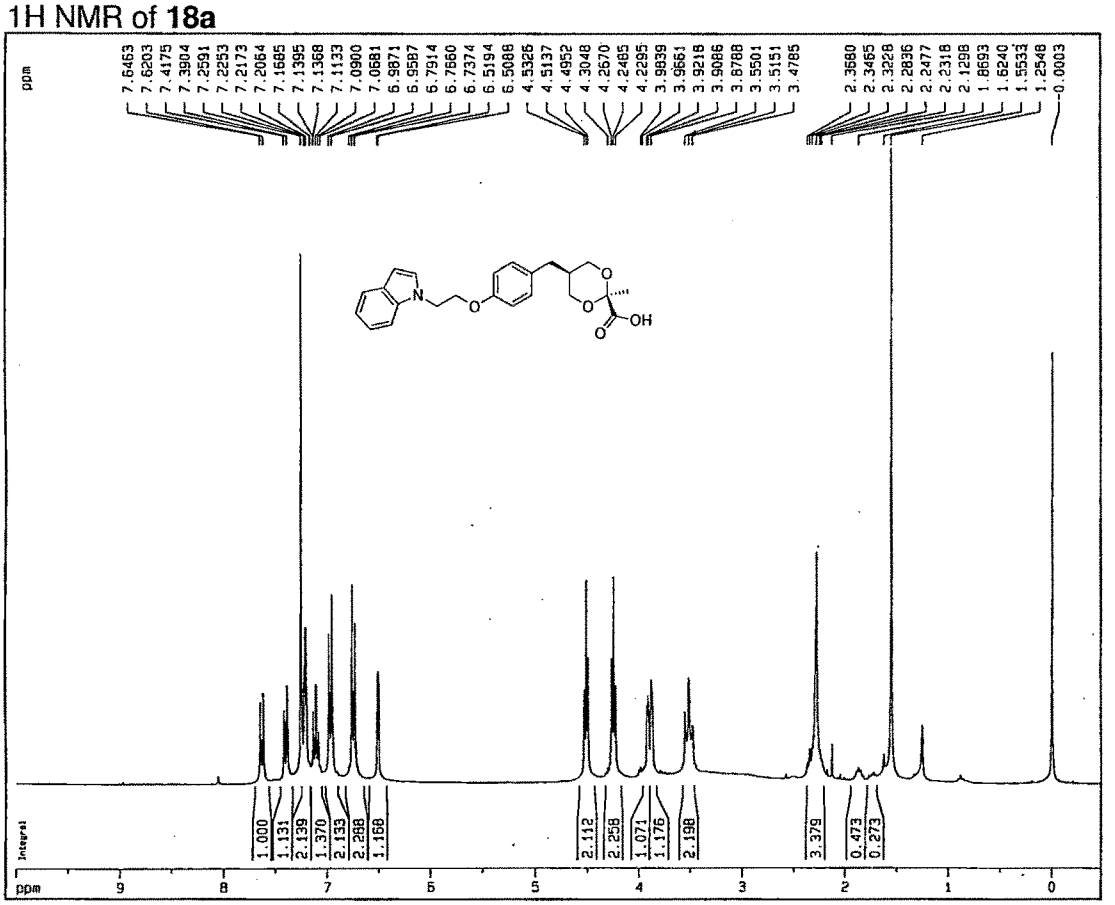
^{1}H NMR of **16i**



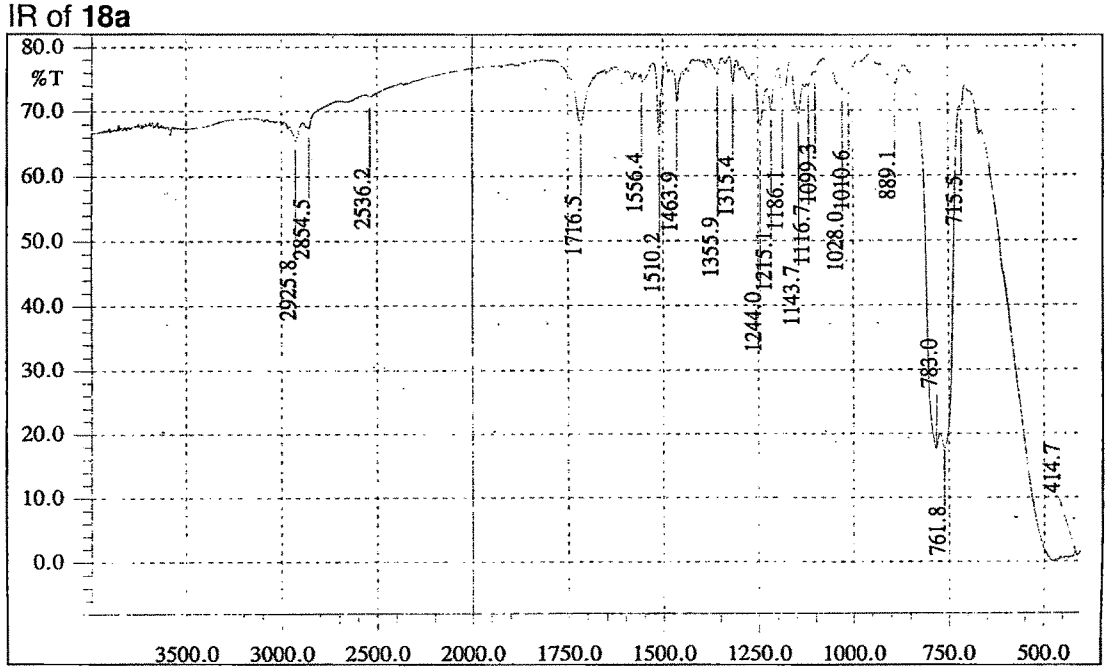
IR of **16i**



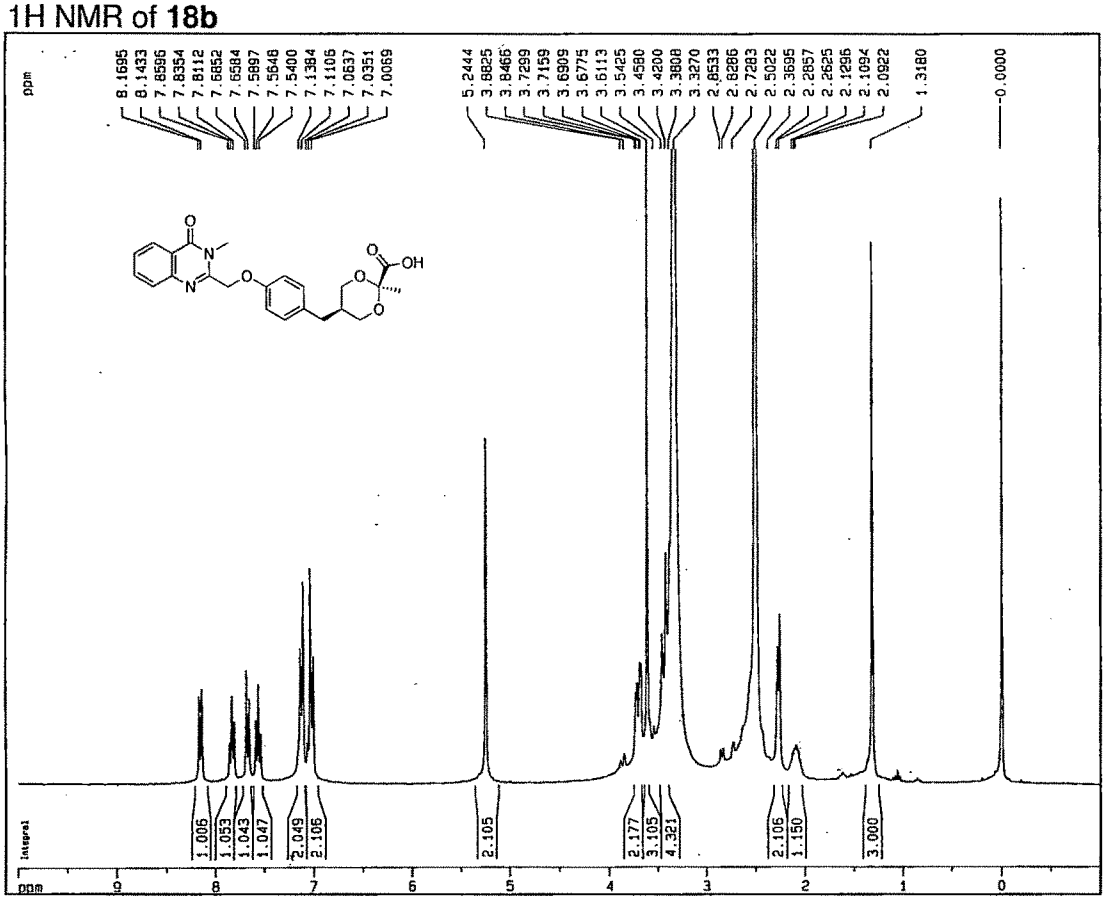
1H NMR of **18a**



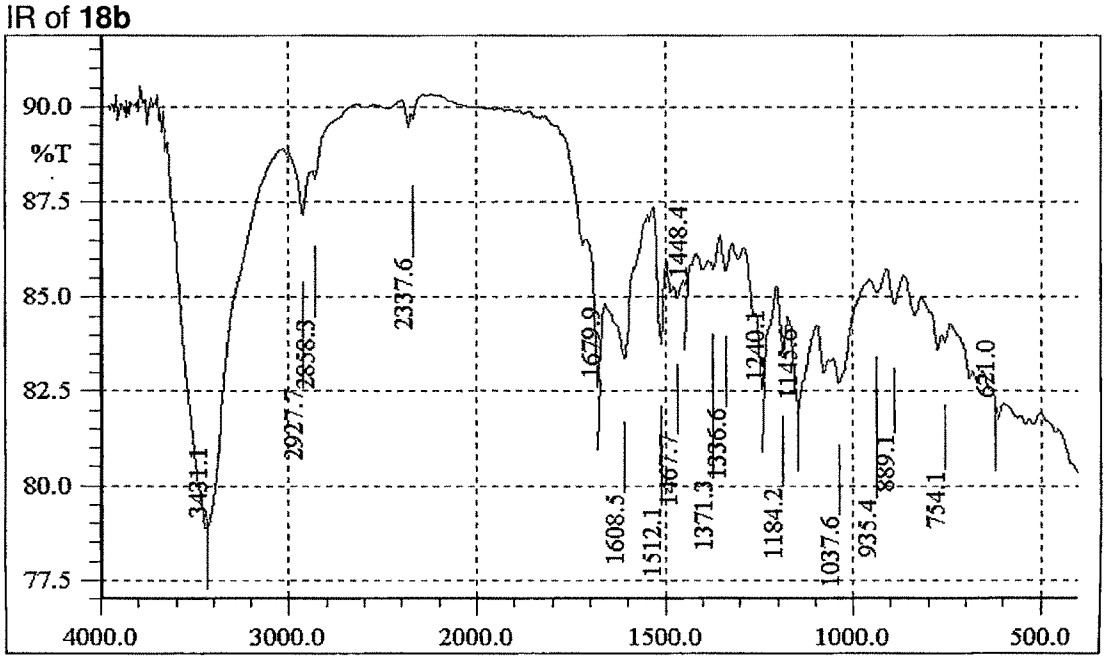
IR of **18a**



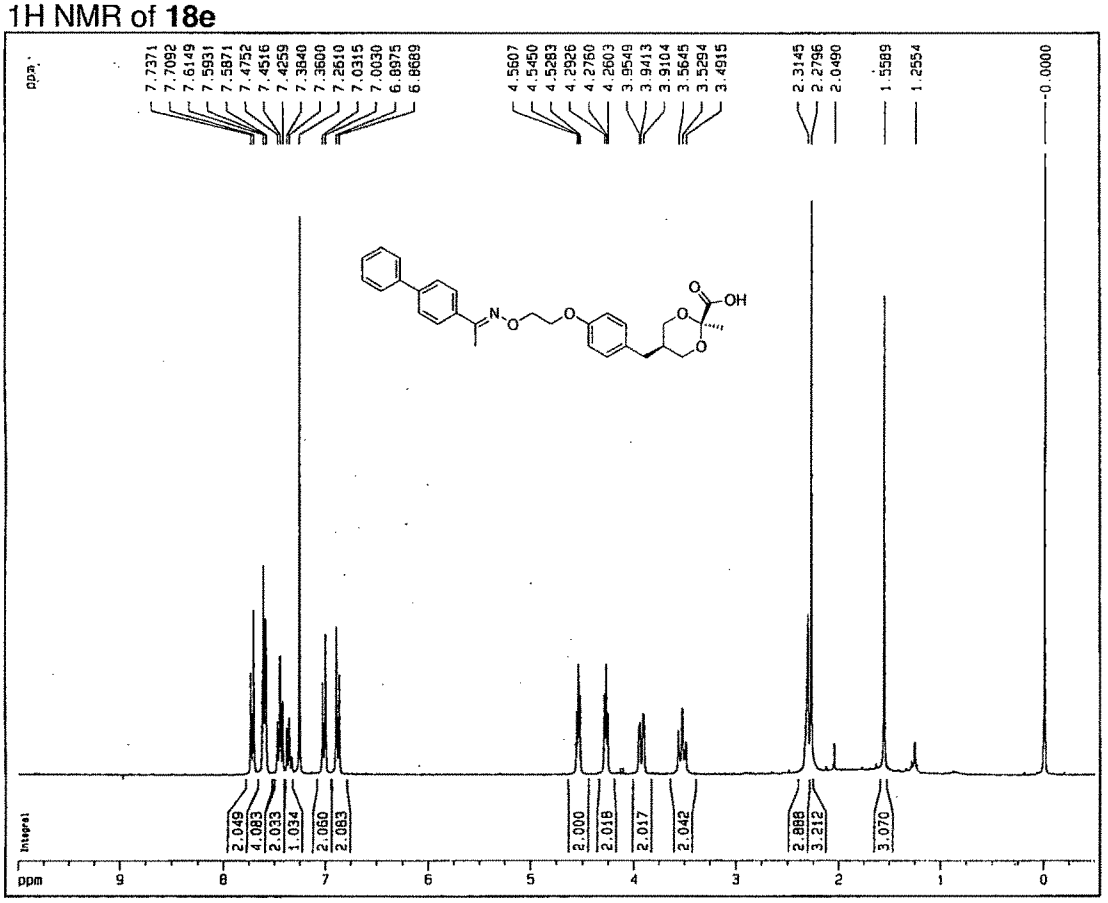
1H NMR of **18b**



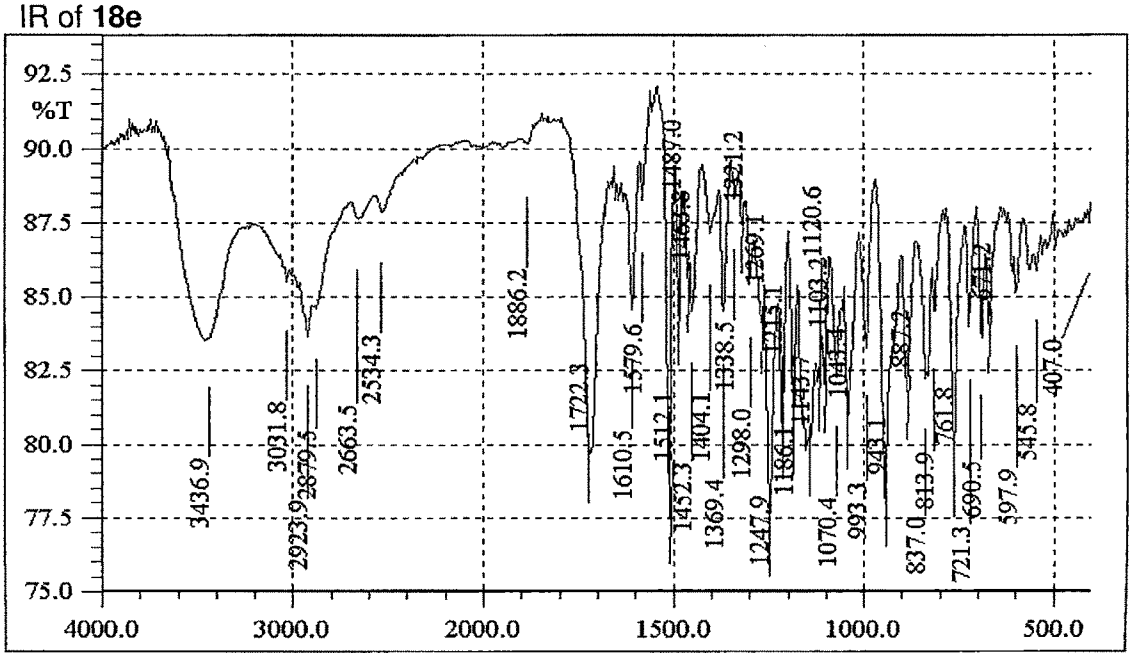
IR of **18b**



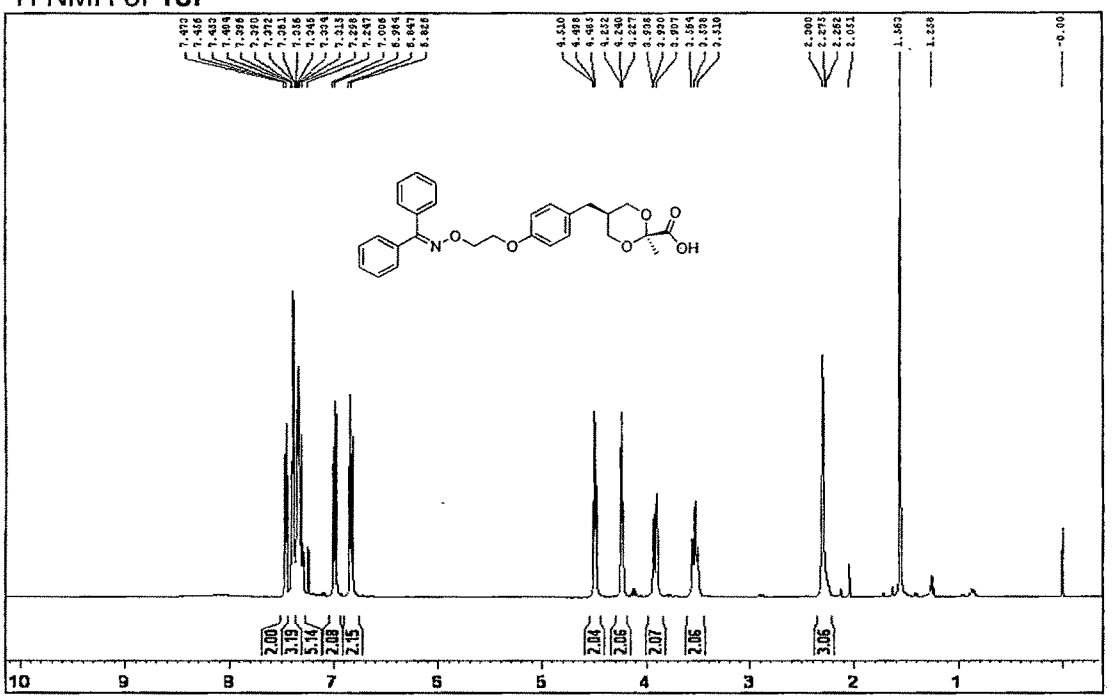
1H NMR of **18e**



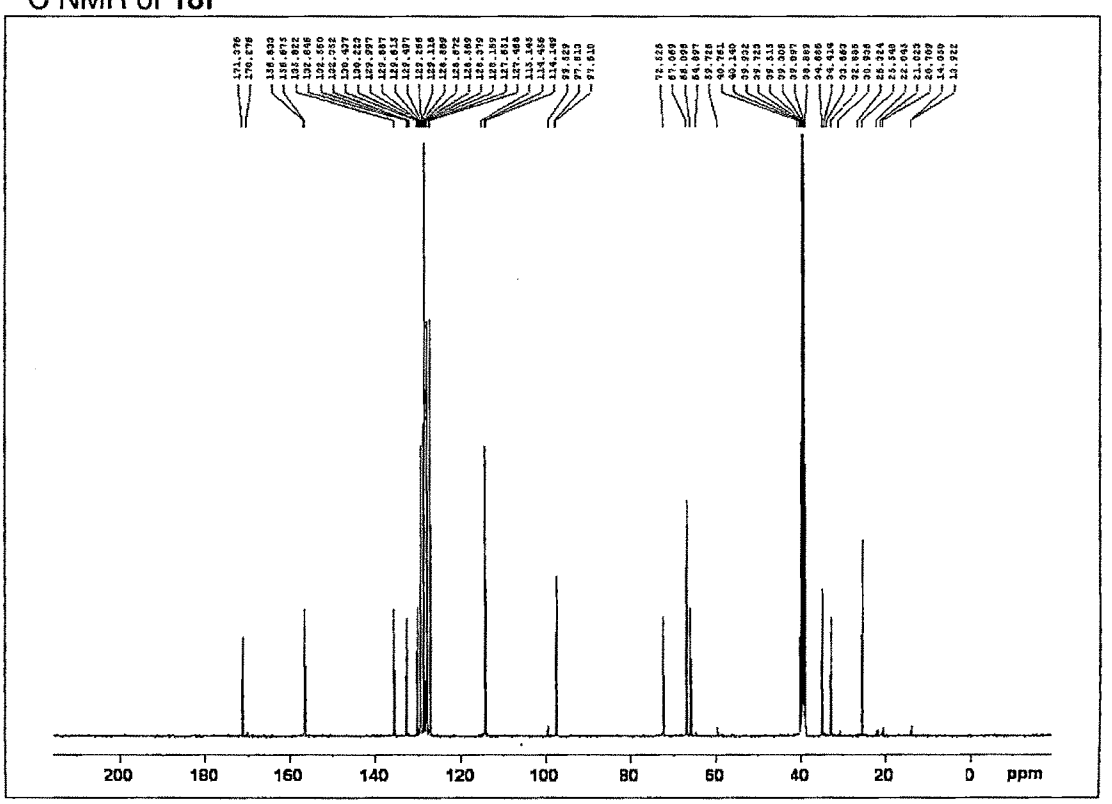
IR of **18e**



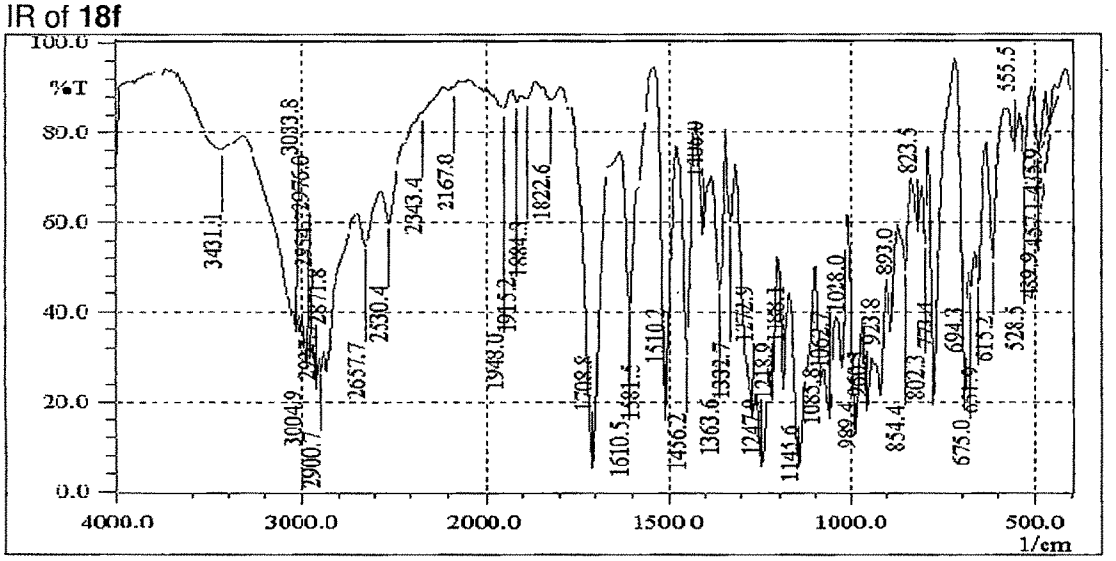
^{1}H NMR of **18f**



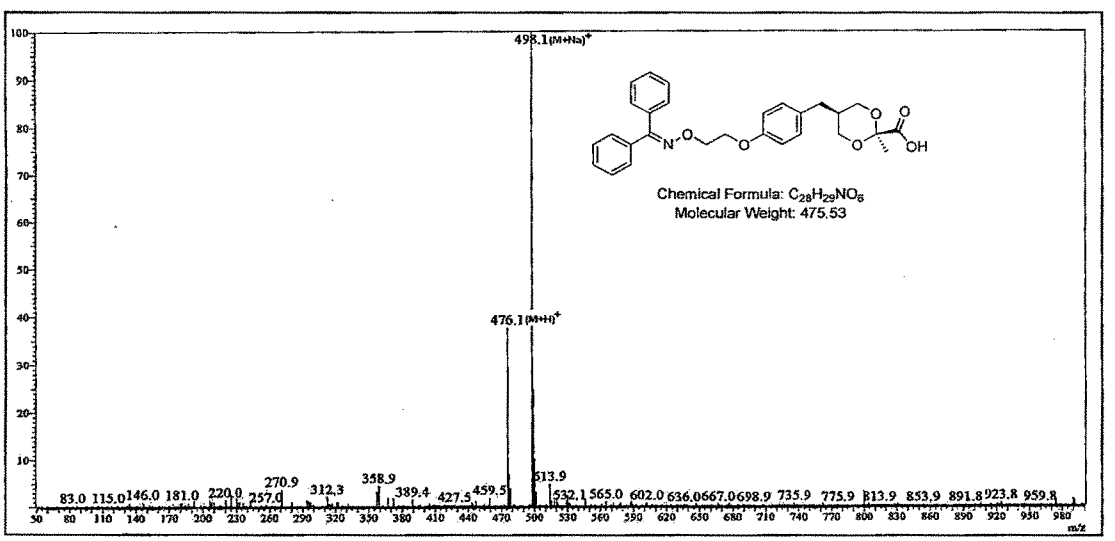
^{13}C NMR of **18f**



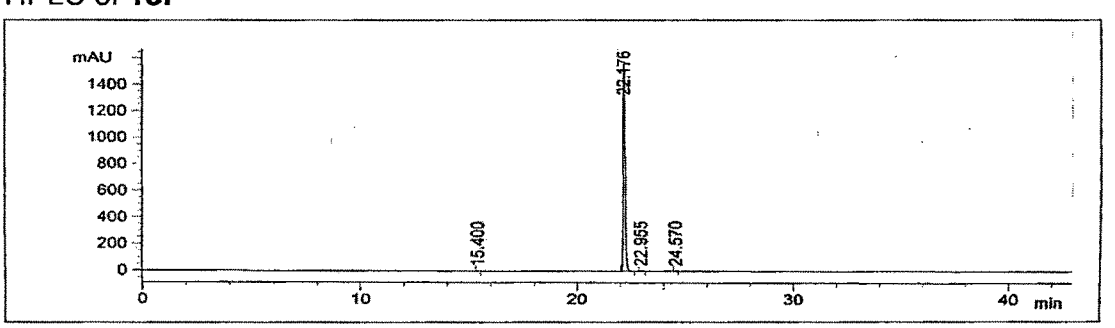
IR of **18f**



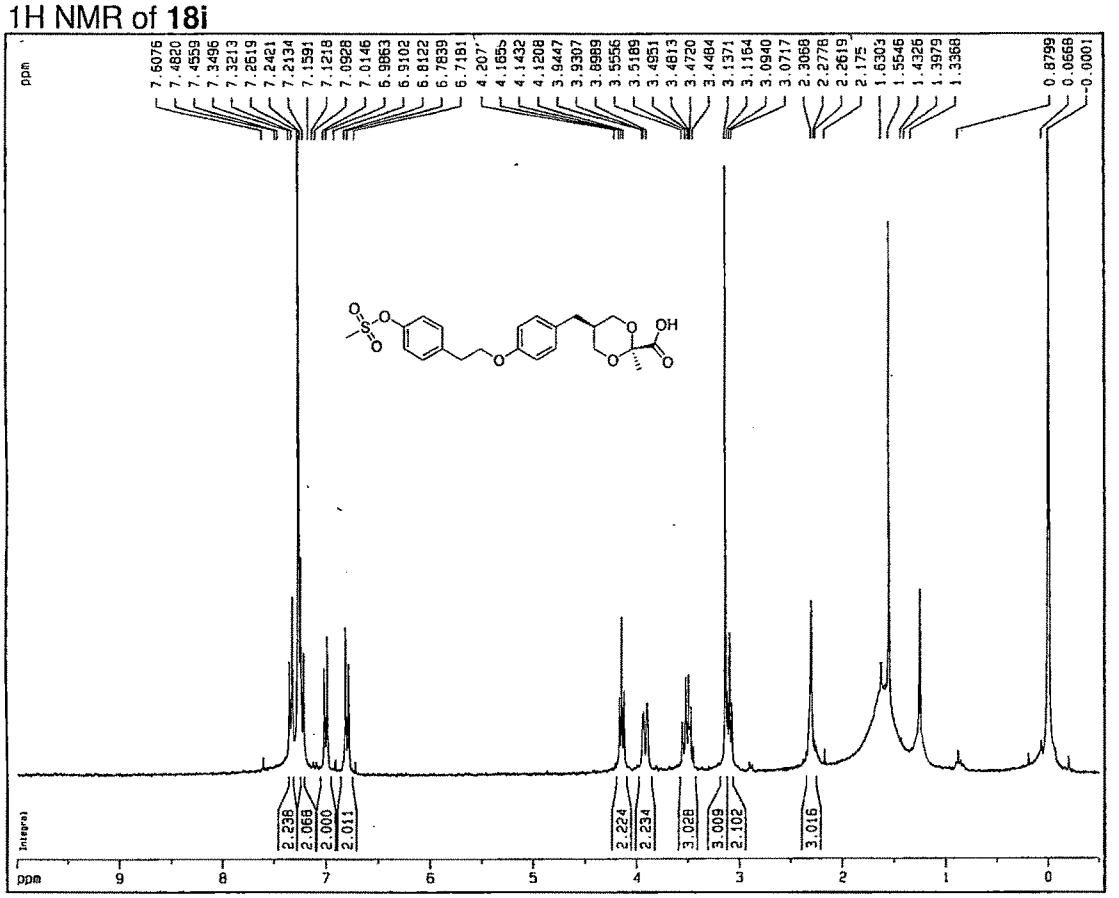
ESI-MS of **18f**



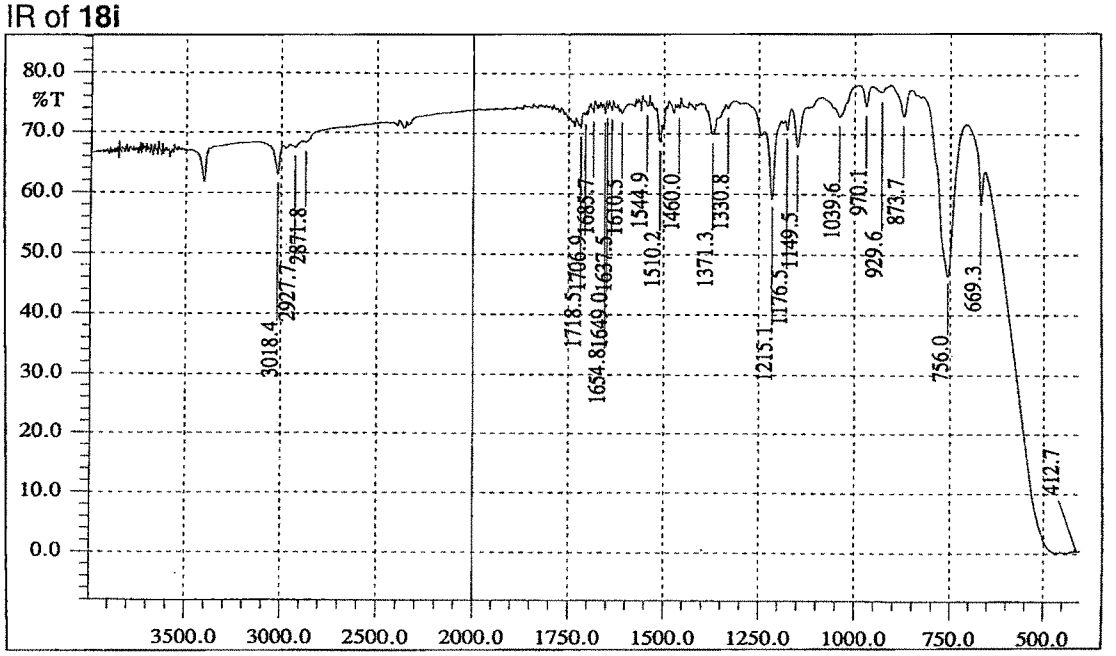
HPLC of **18f**



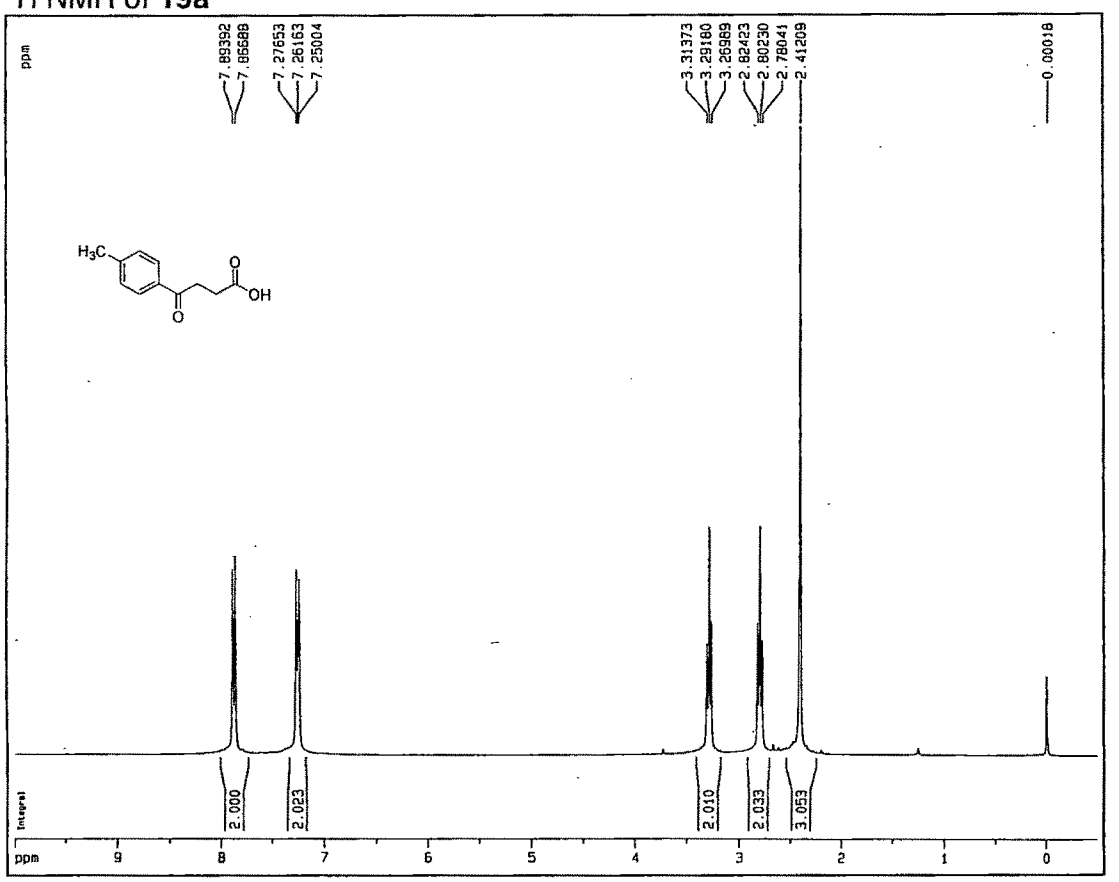
1H NMR of **18i**



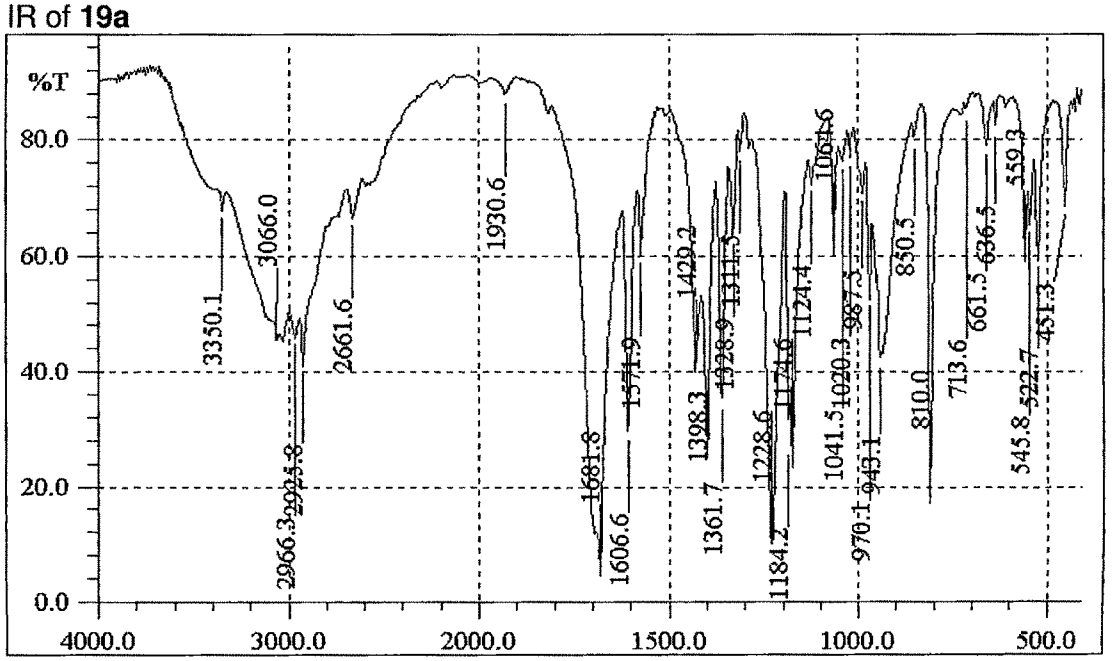
IR of **18i**



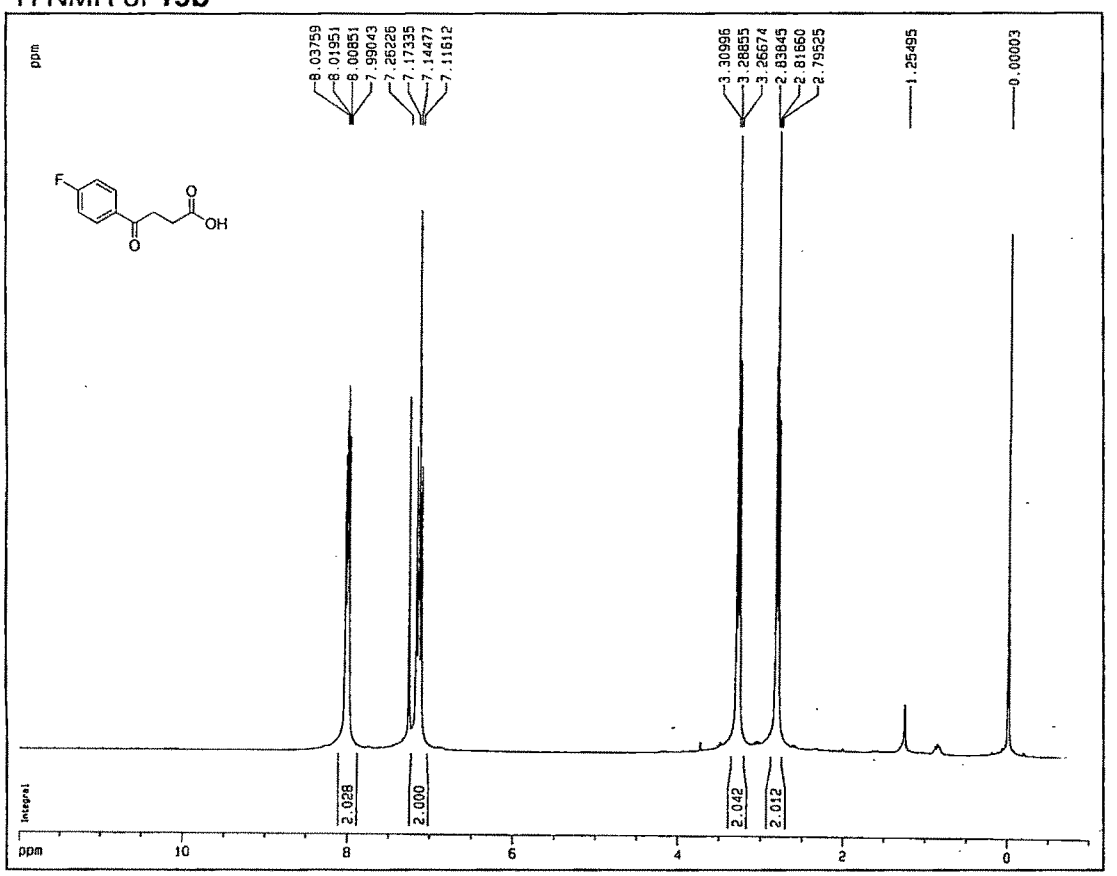
^{1}H NMR of **19a**



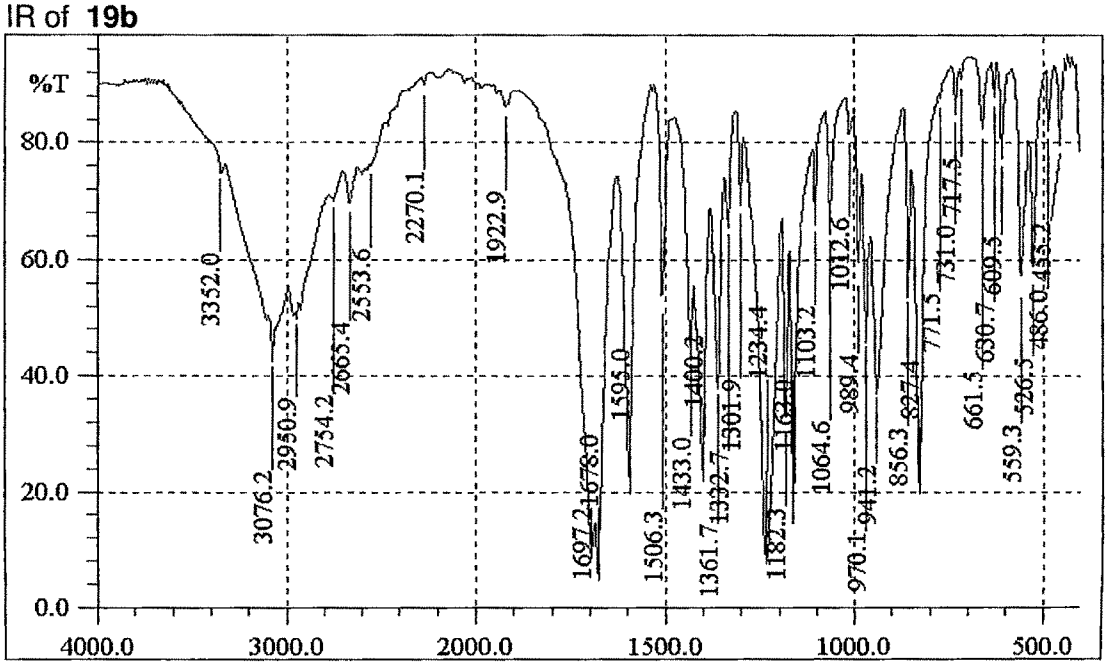
IR of **19a**



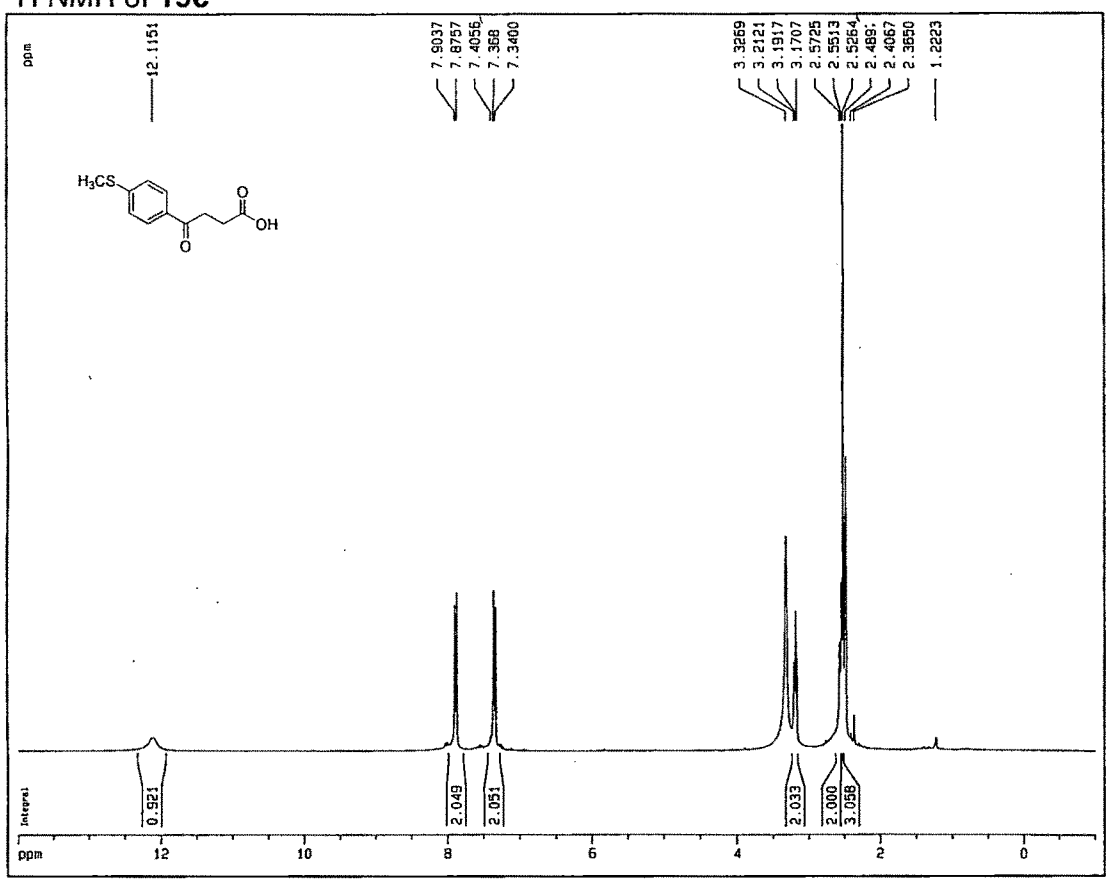
^{1}H NMR of **19b**



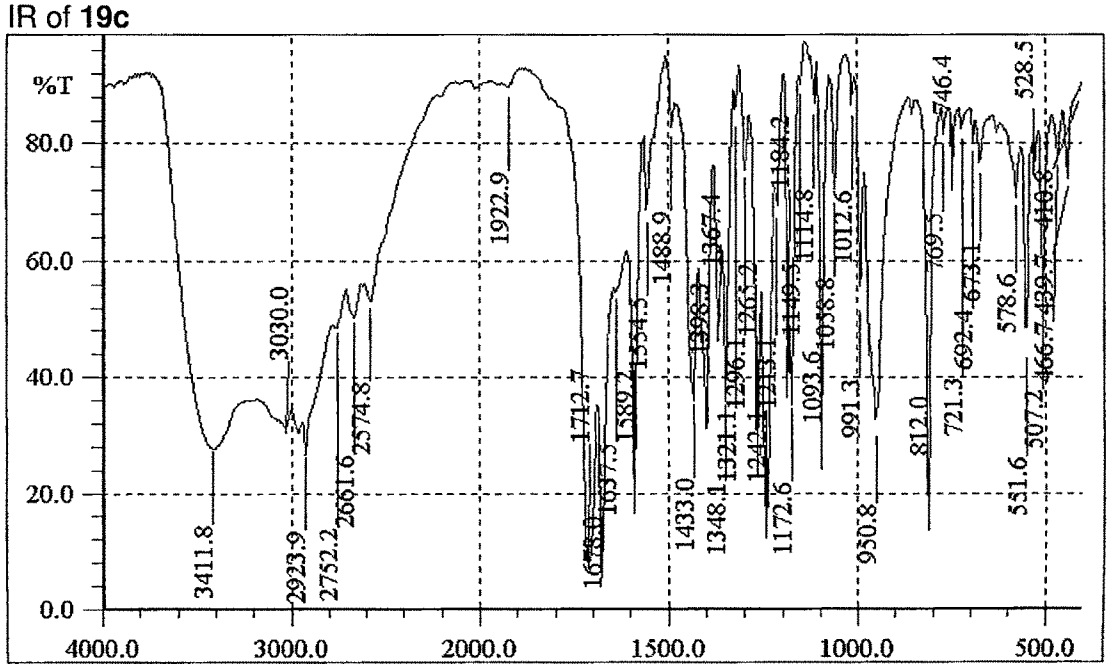
IR of **19b**



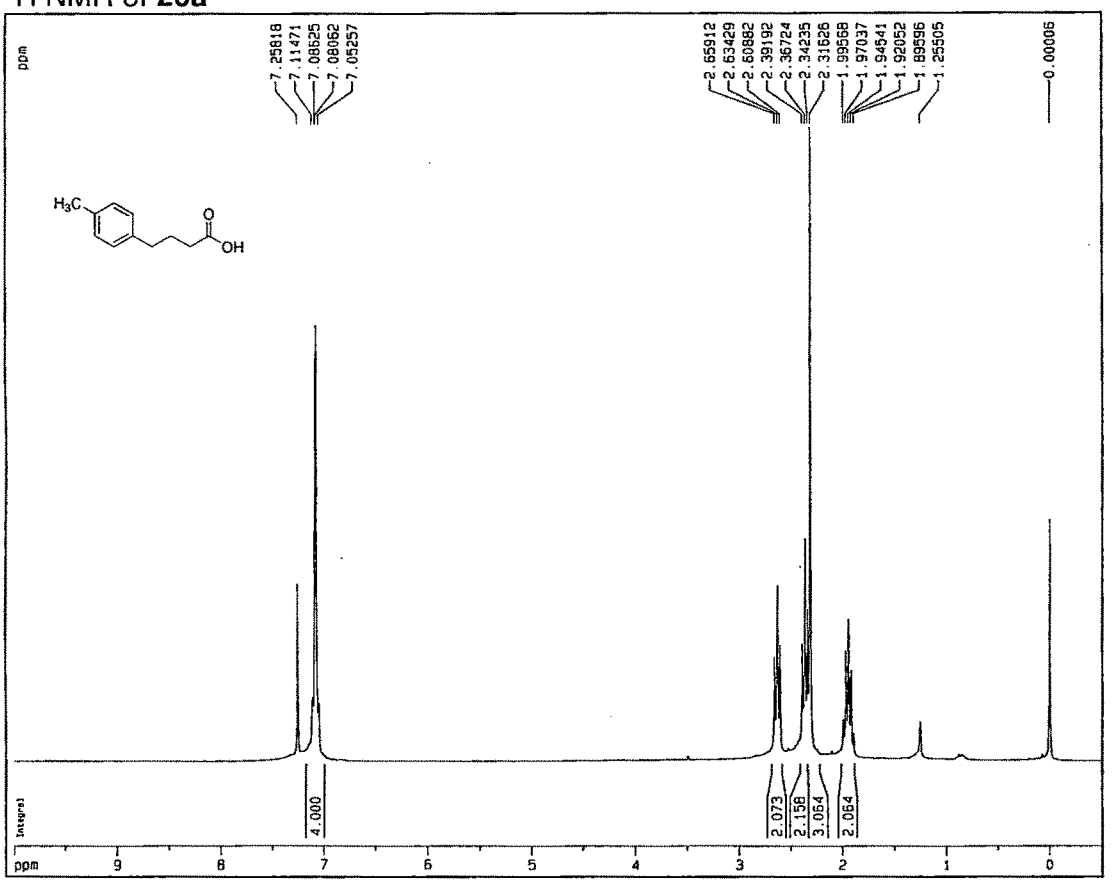
^{1}H NMR of **19c**



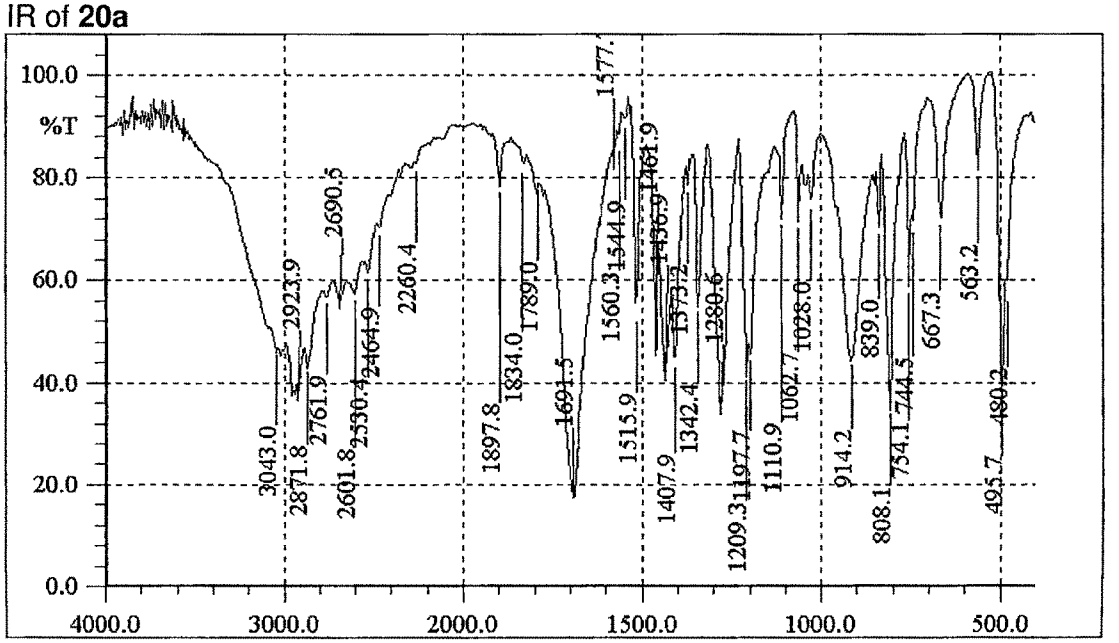
IR of **19c**



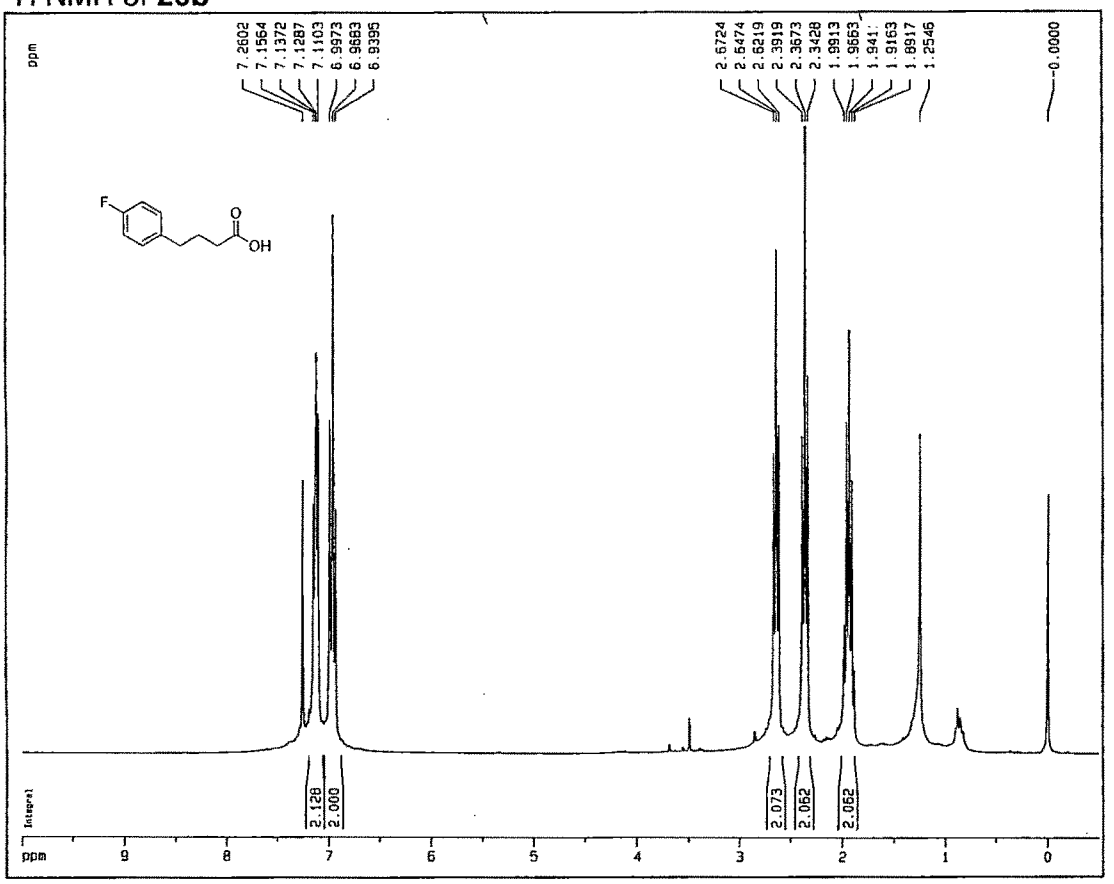
^{1}H NMR of **20a**



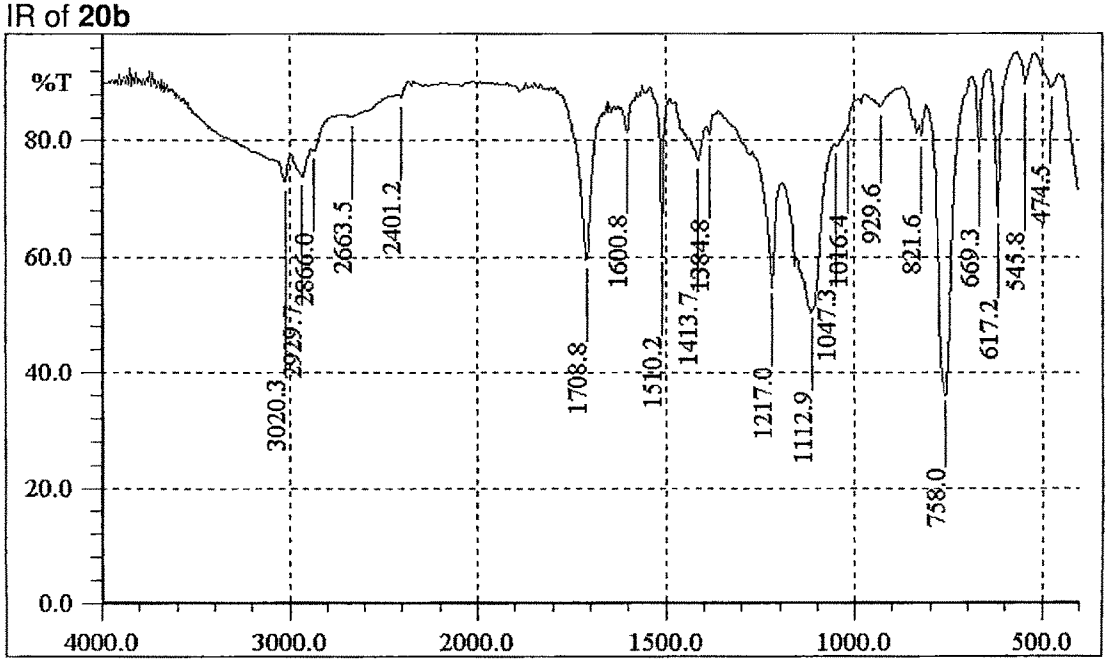
IR of **20a**



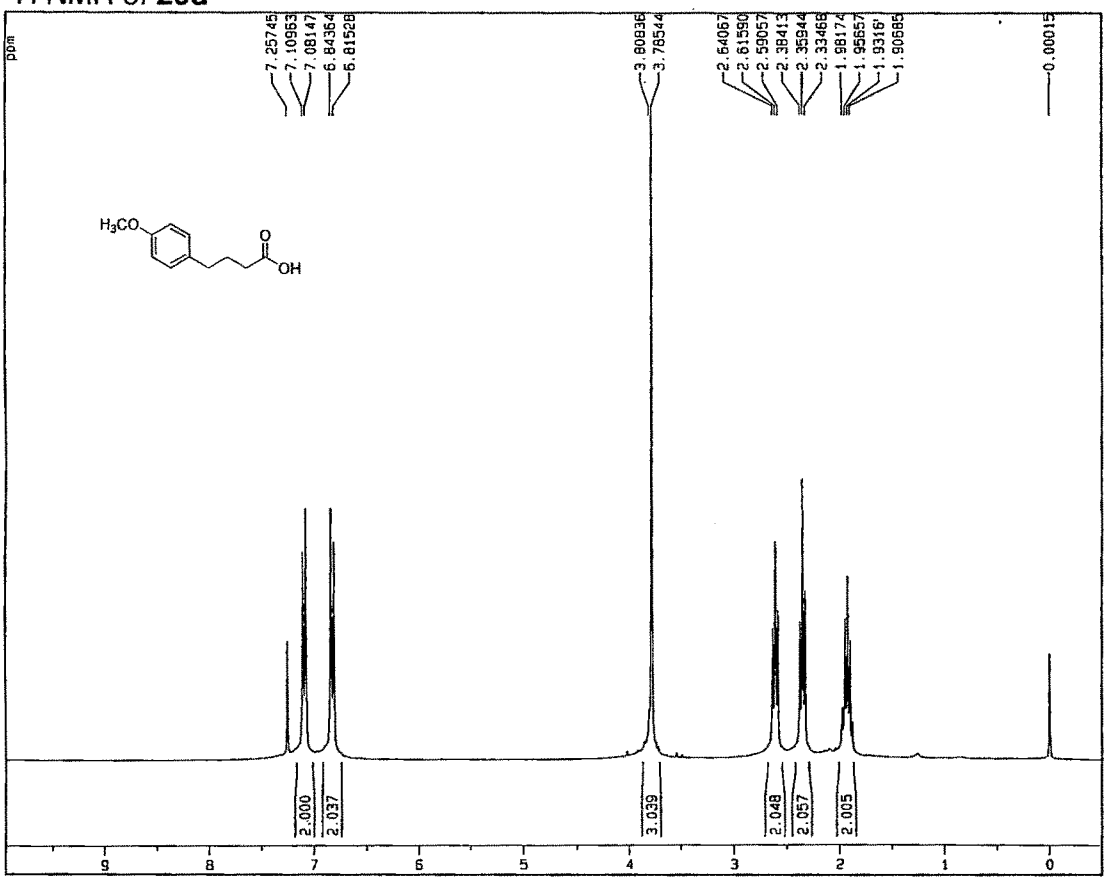
^{1}H NMR of **20b**



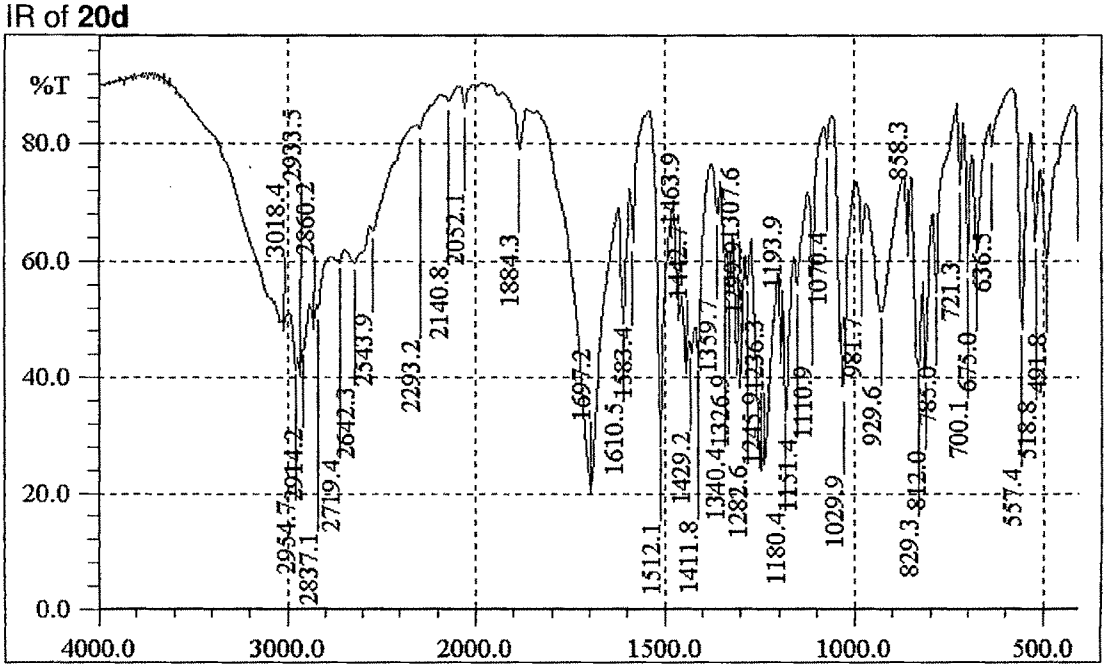
IR of **20b**



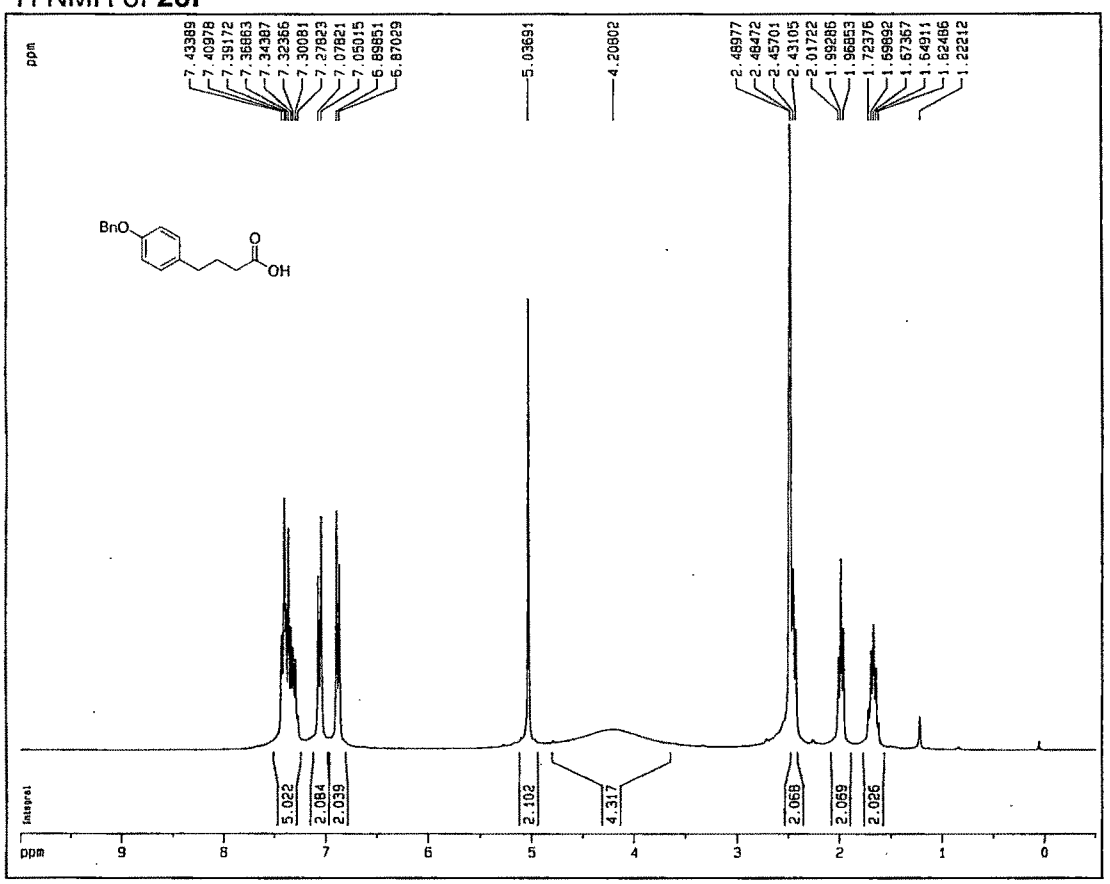
^{1}H NMR of **20d**



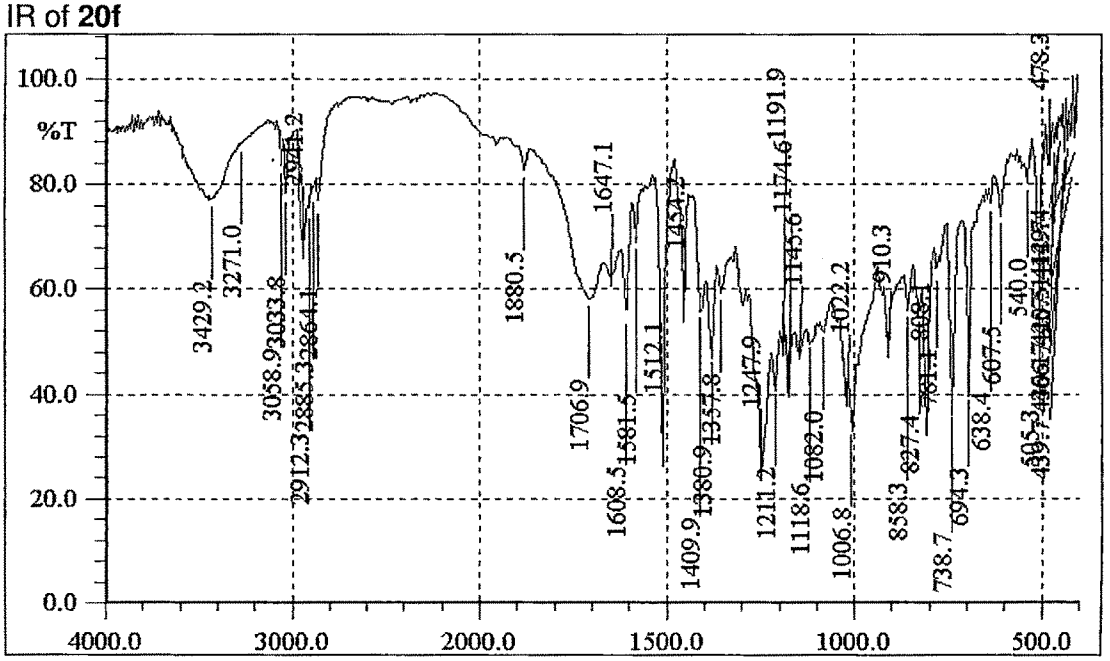
IR of **20d**



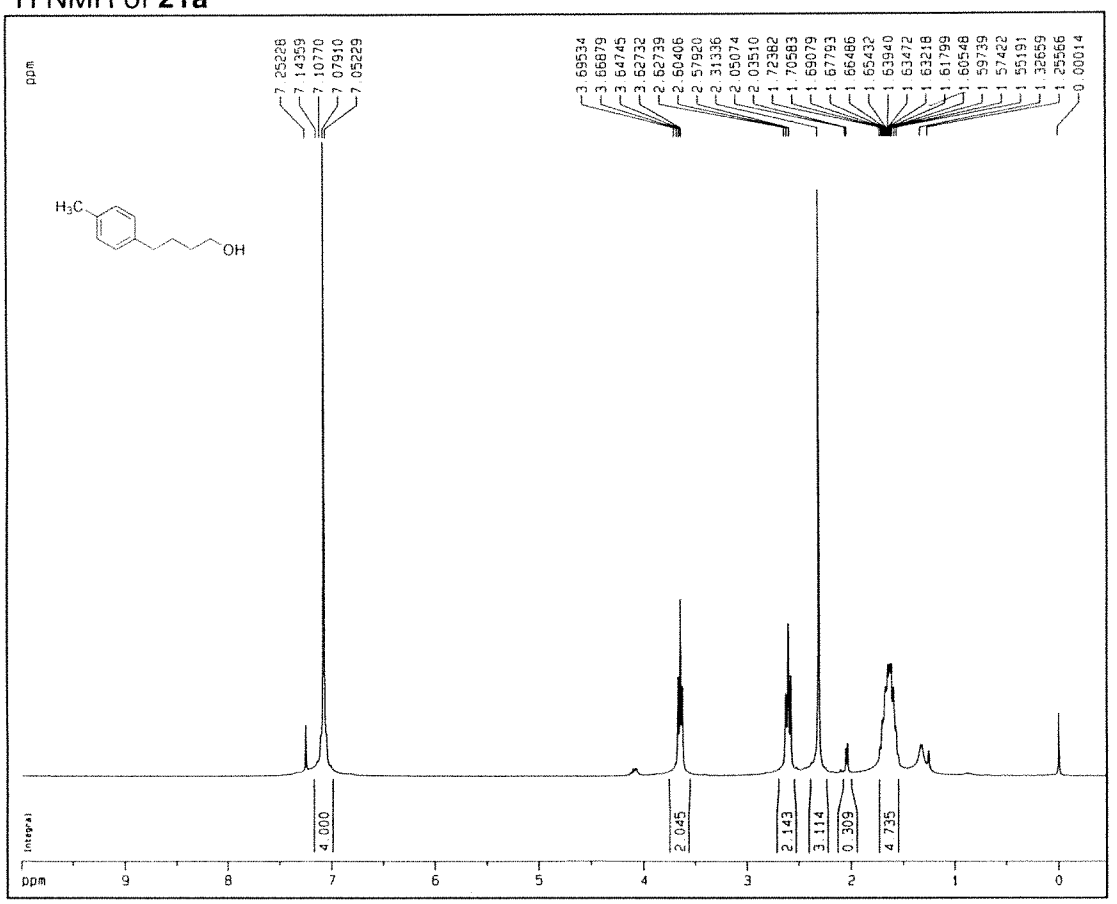
^{1}H NMR of **20f**



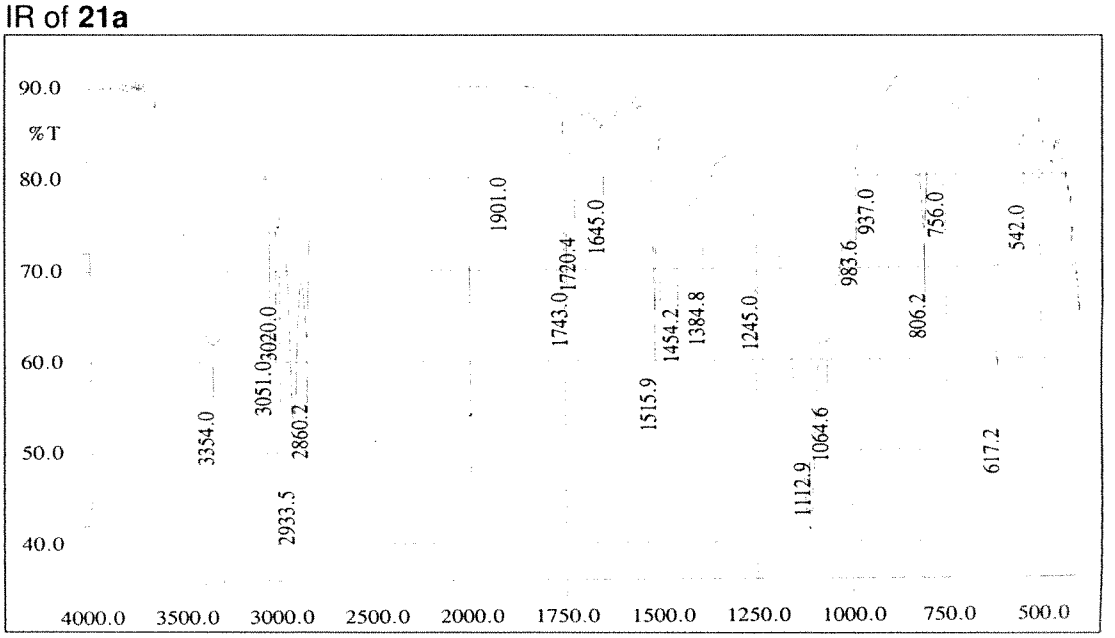
IR of **20f**



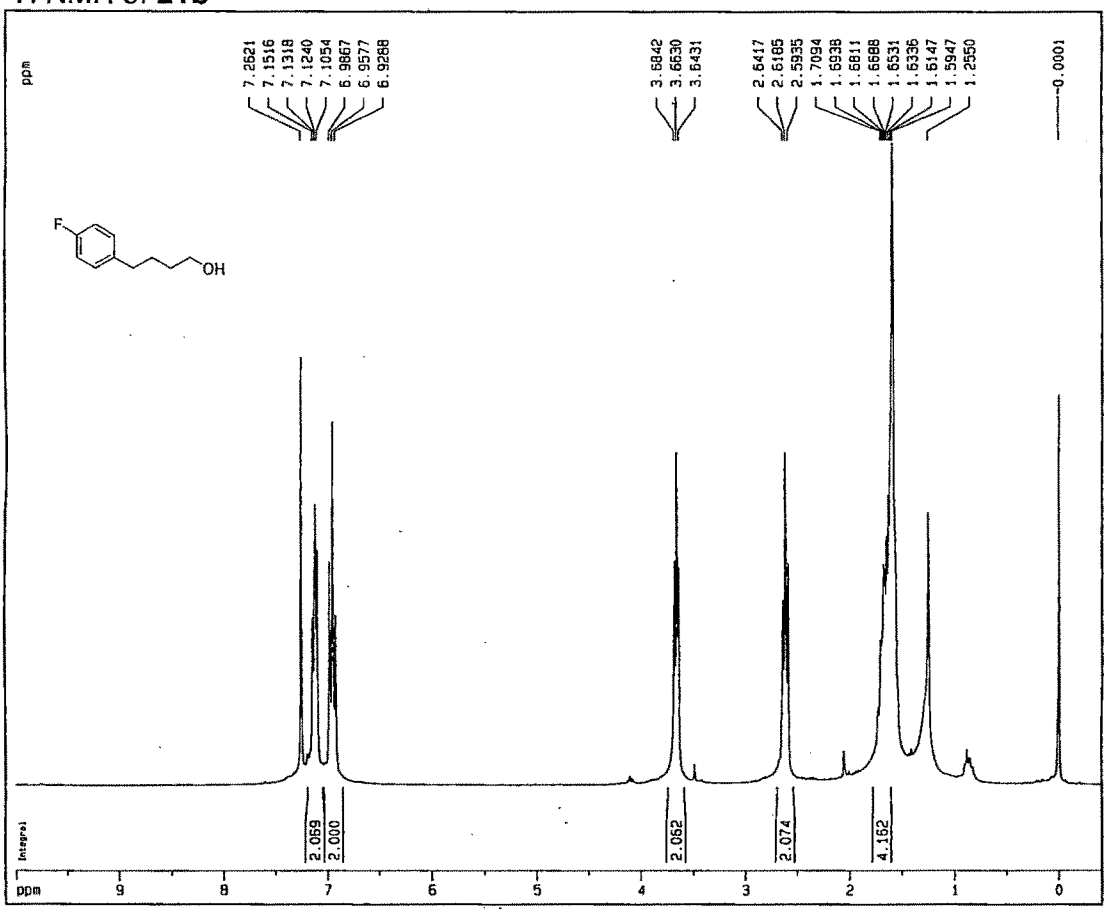
^{1}H NMR of **21a**



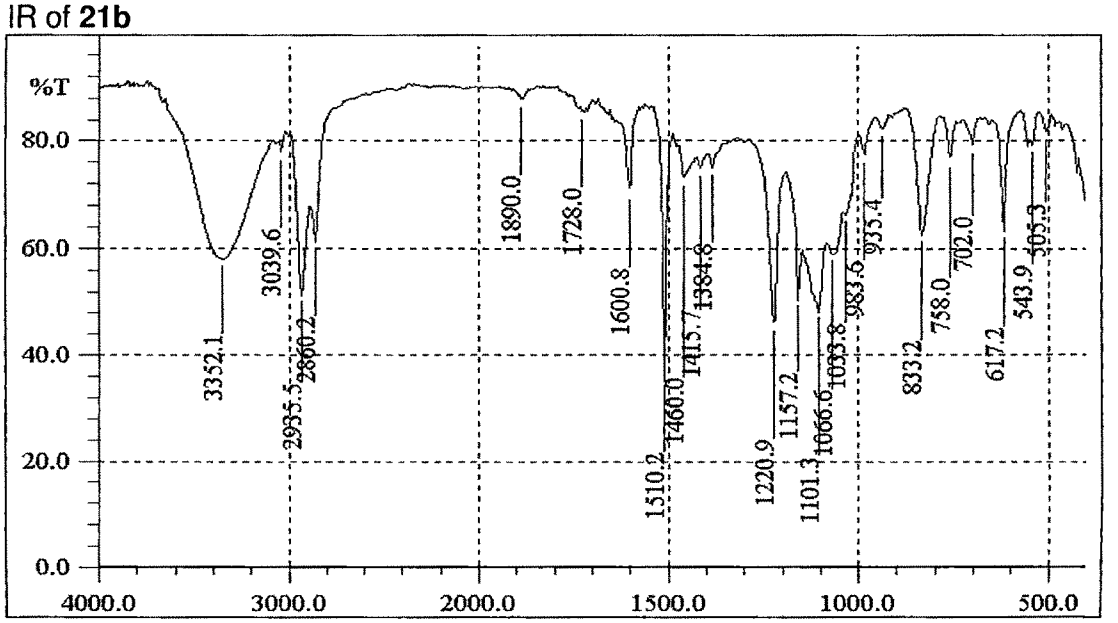
IR of **21a**



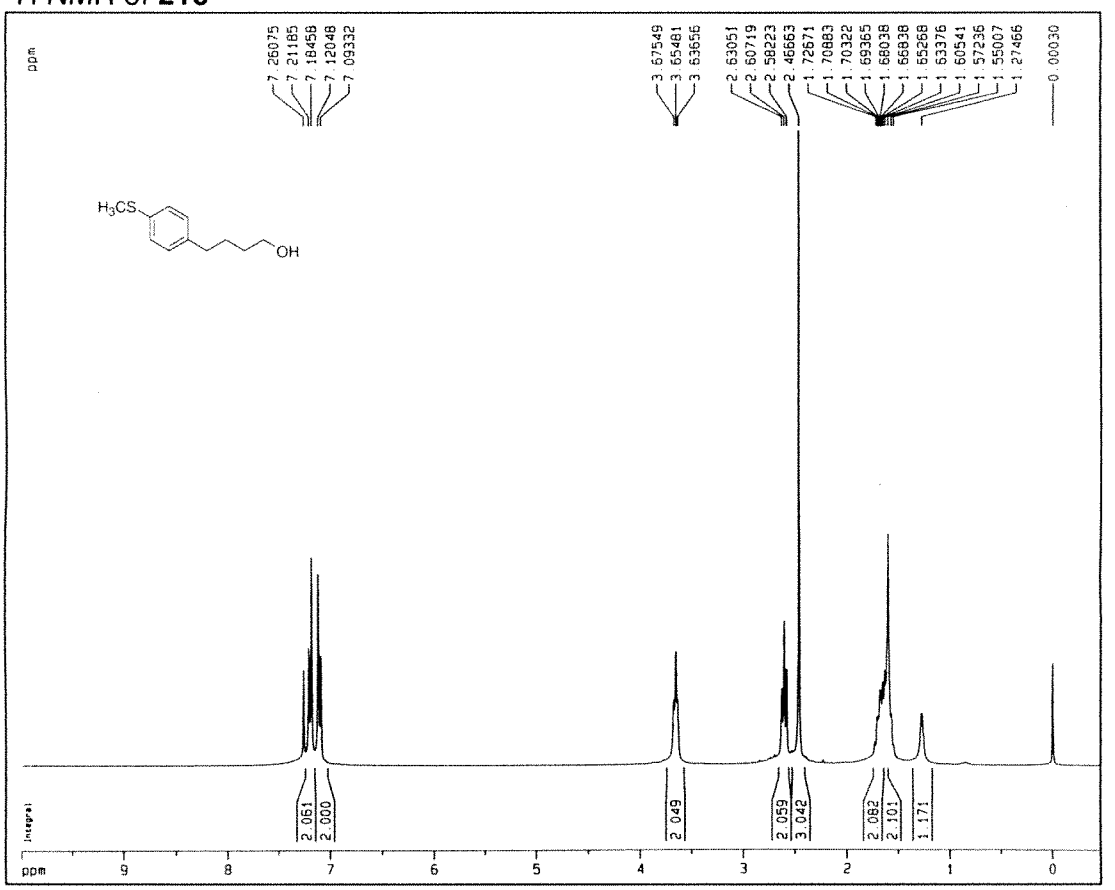
^{1}H NMR of **21b**



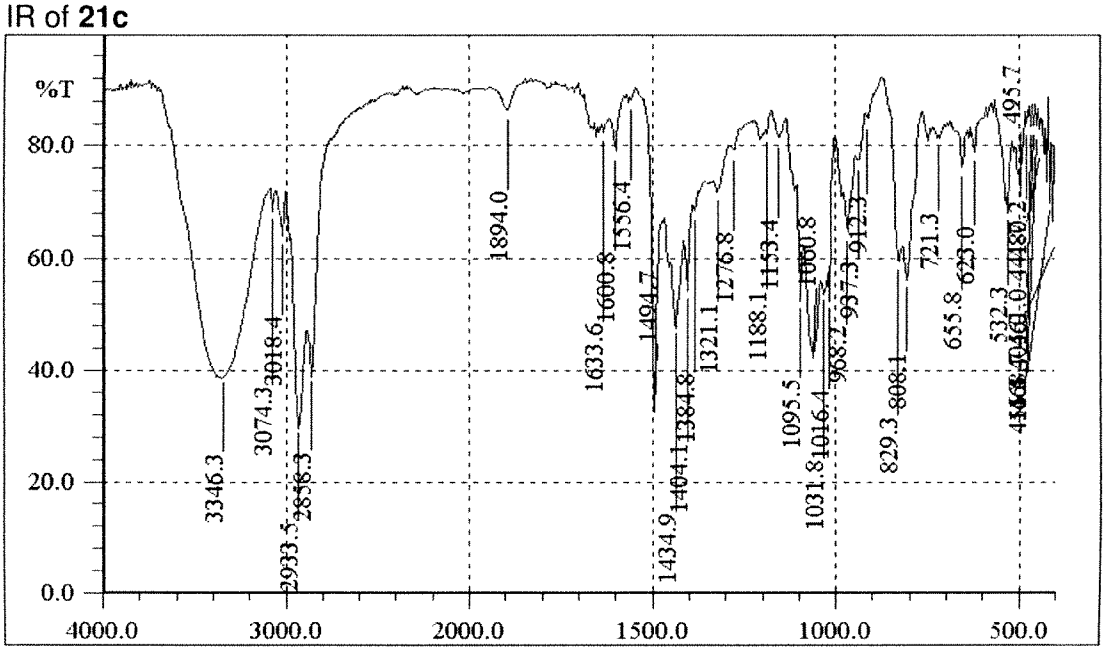
IR of **21b**



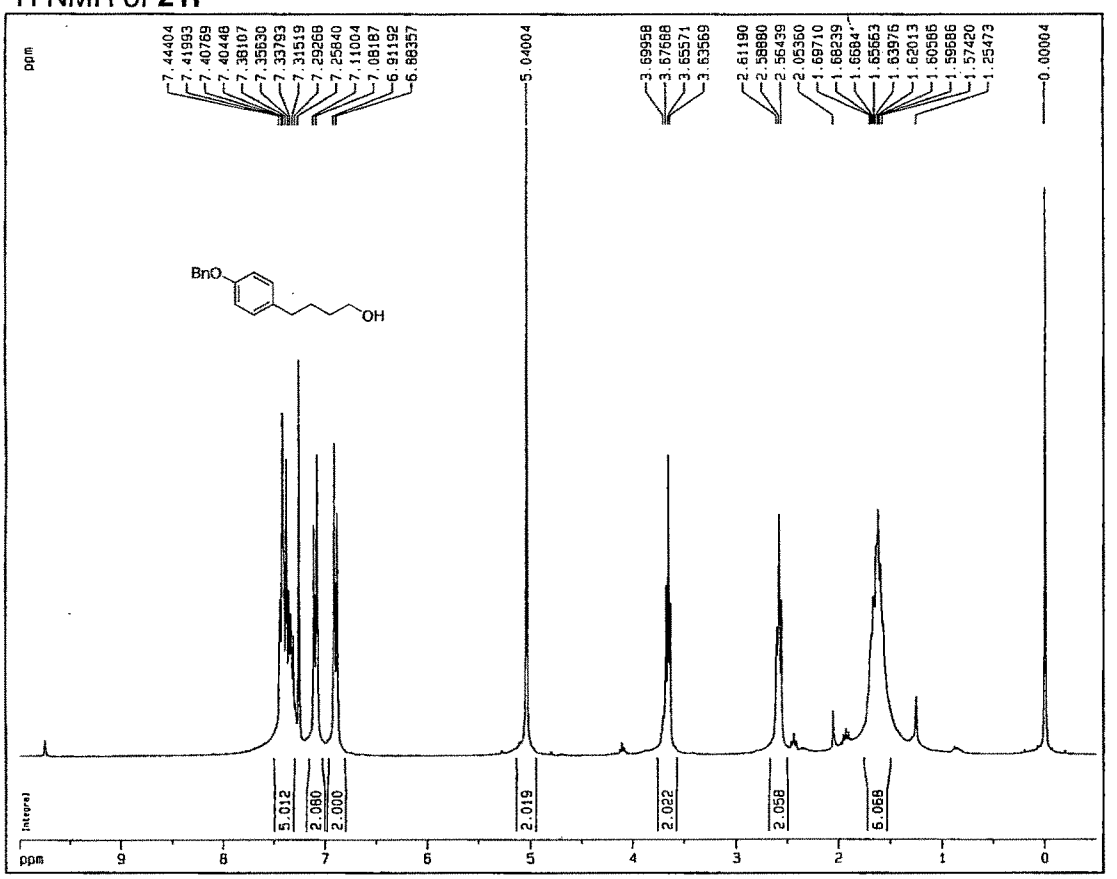
^{1}H NMR of **21c**



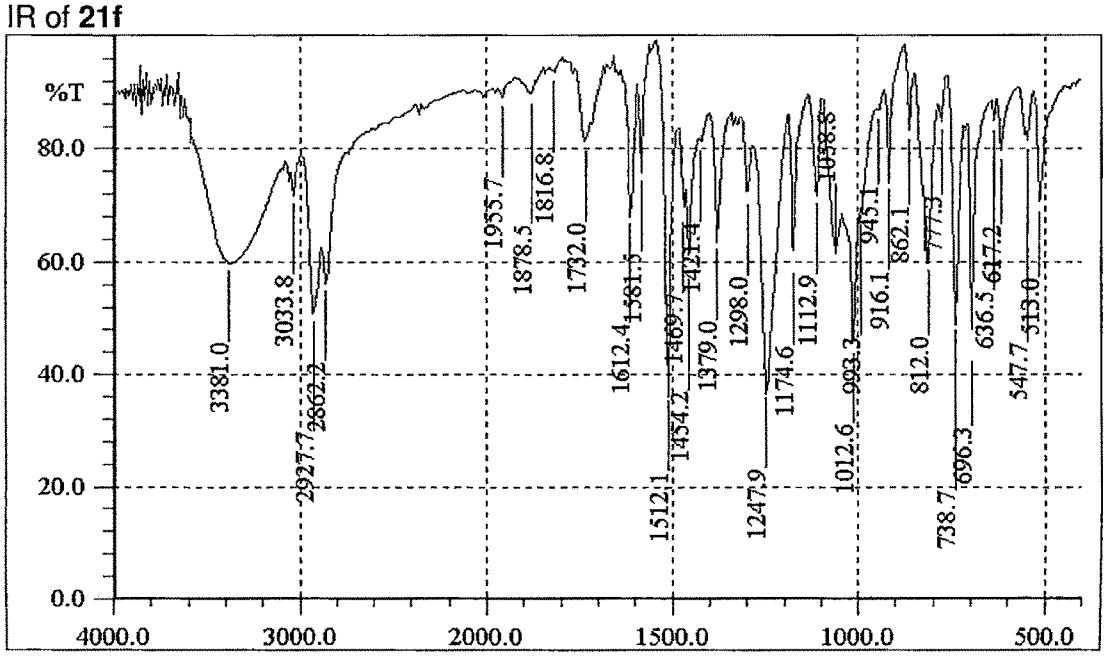
IR of **21c**



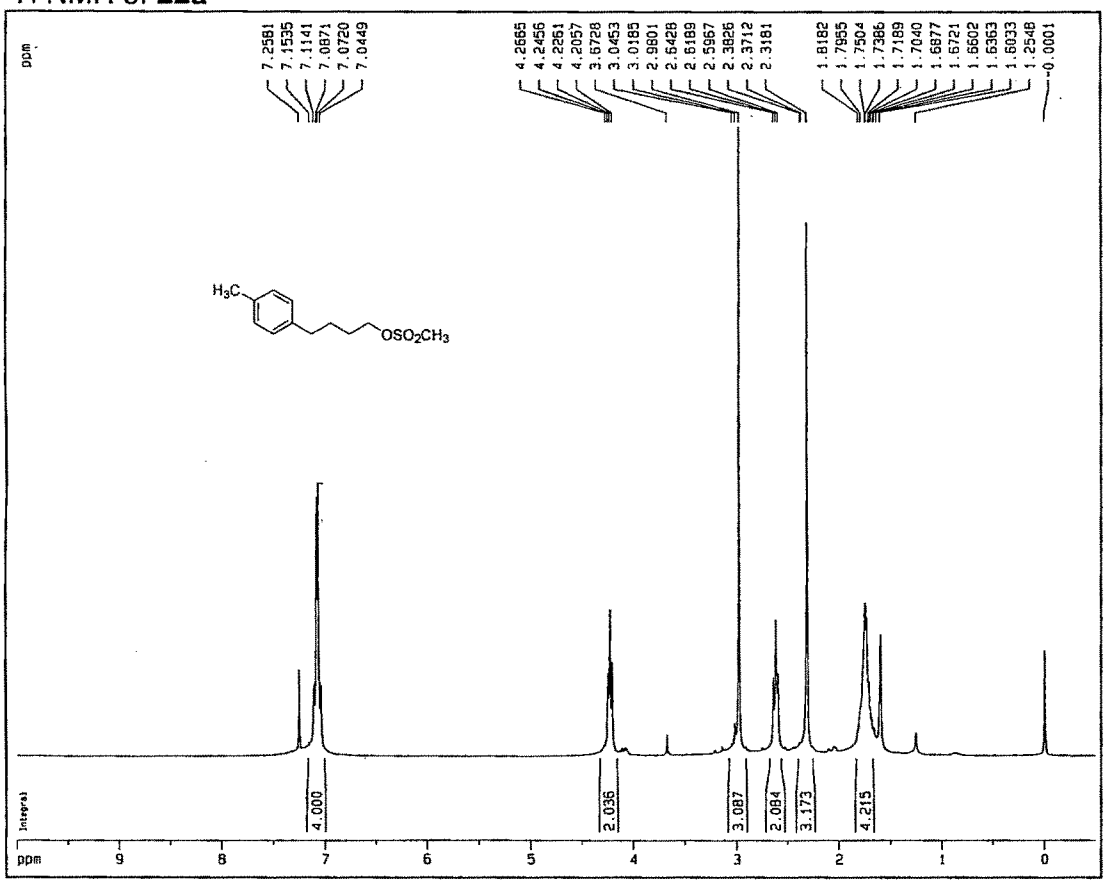
^{1}H NMR of **21f**



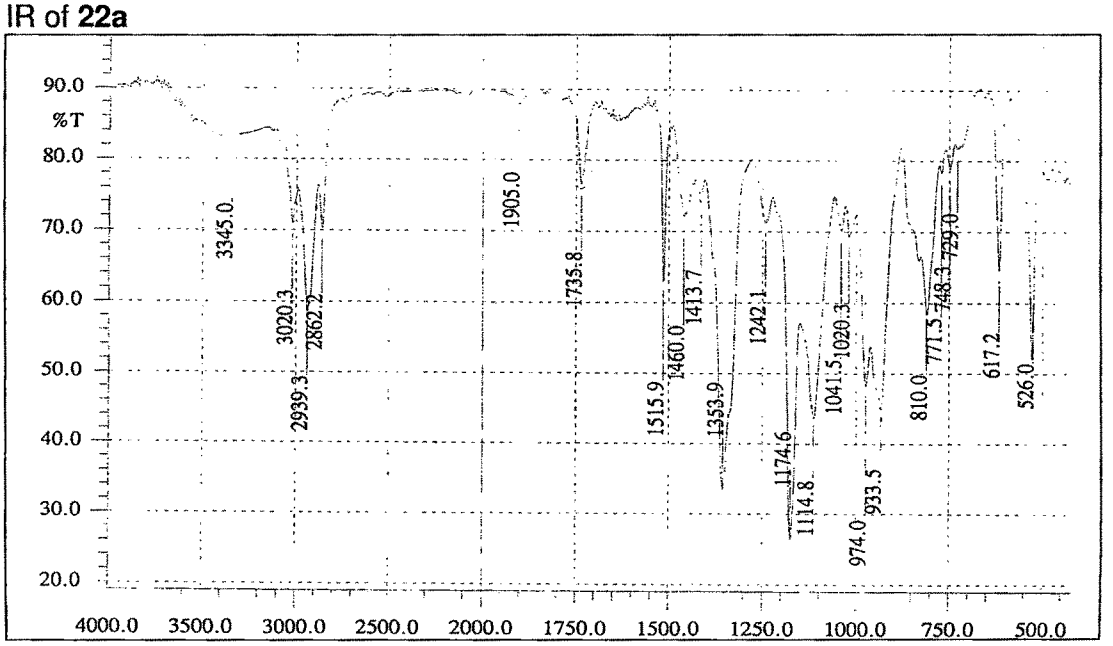
IR of **21f**



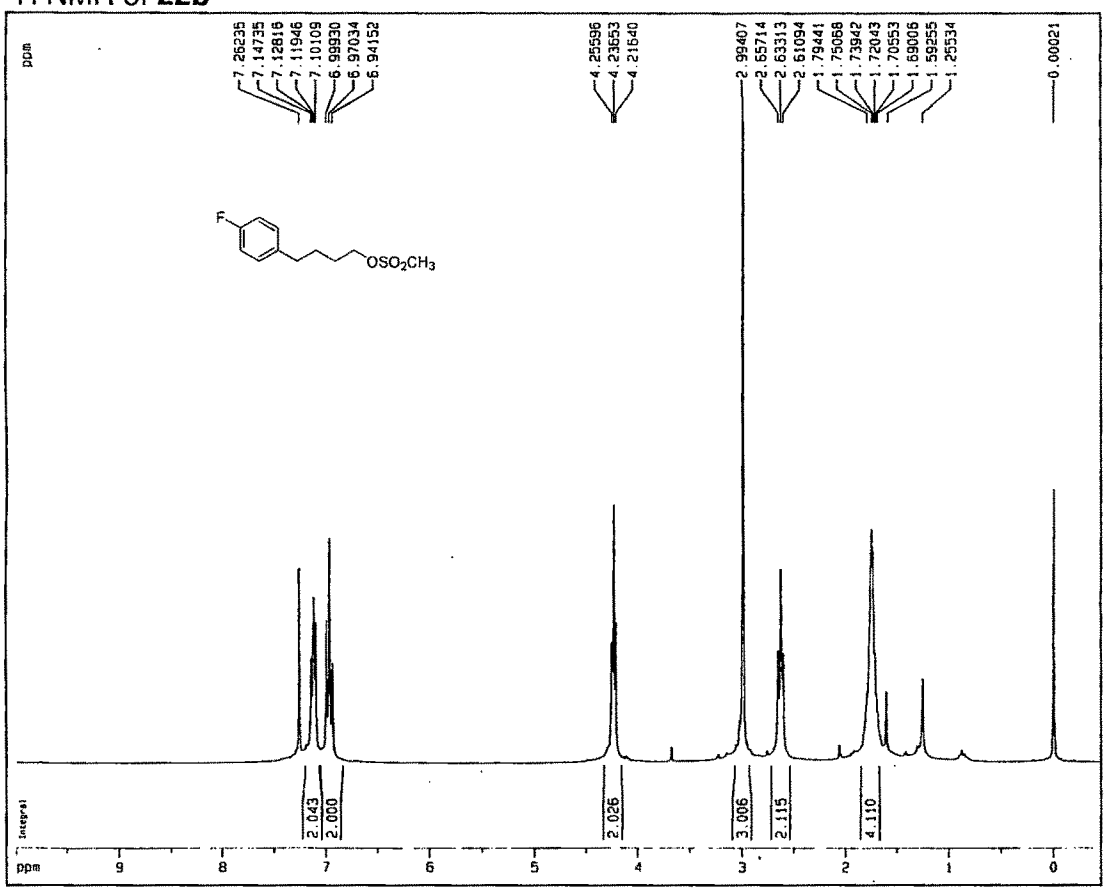
^{1}H NMR of **22a**



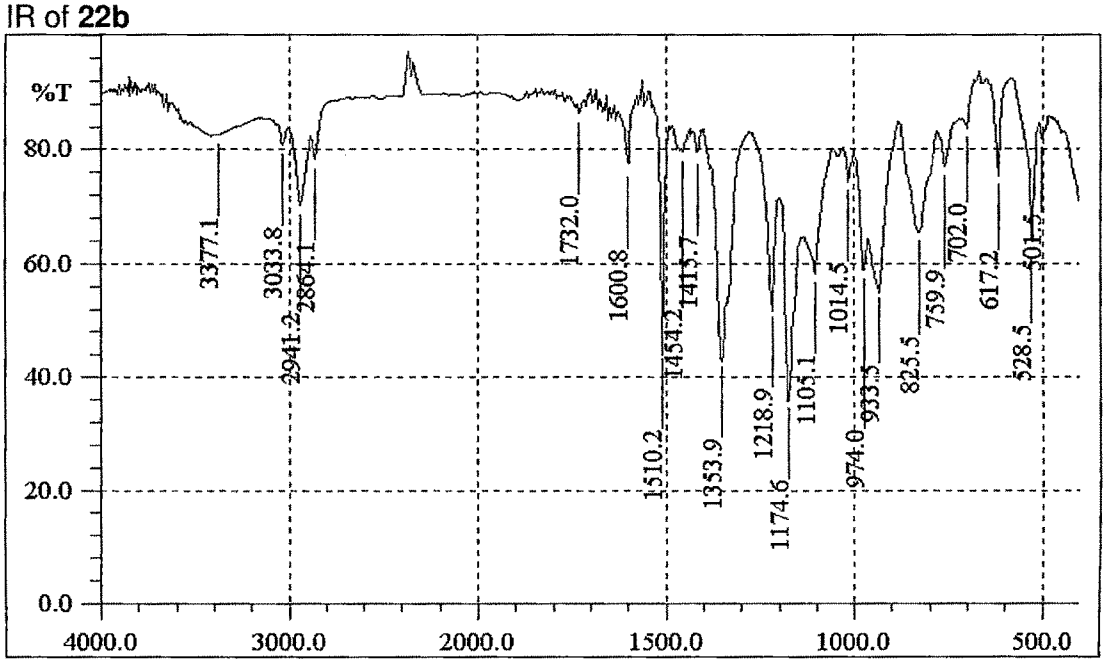
IR of **22a**



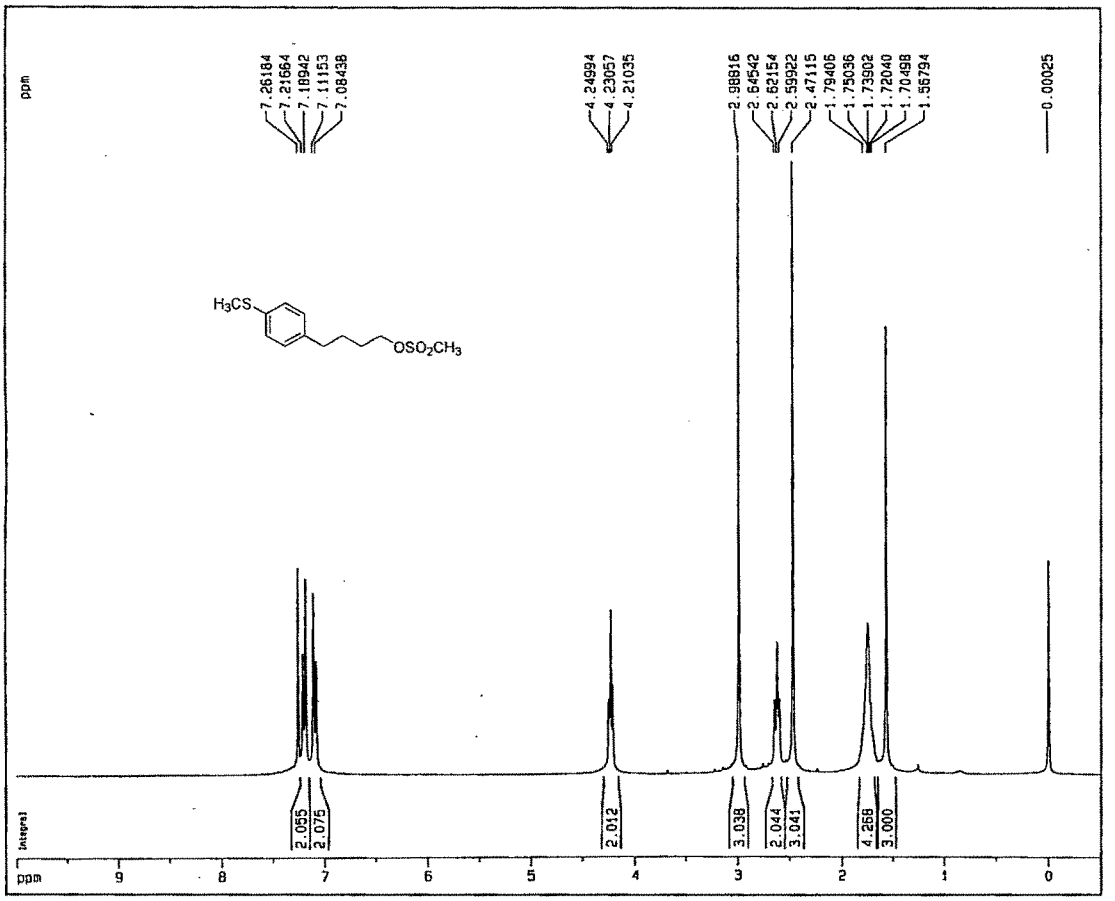
^{1}H NMR of **22b**



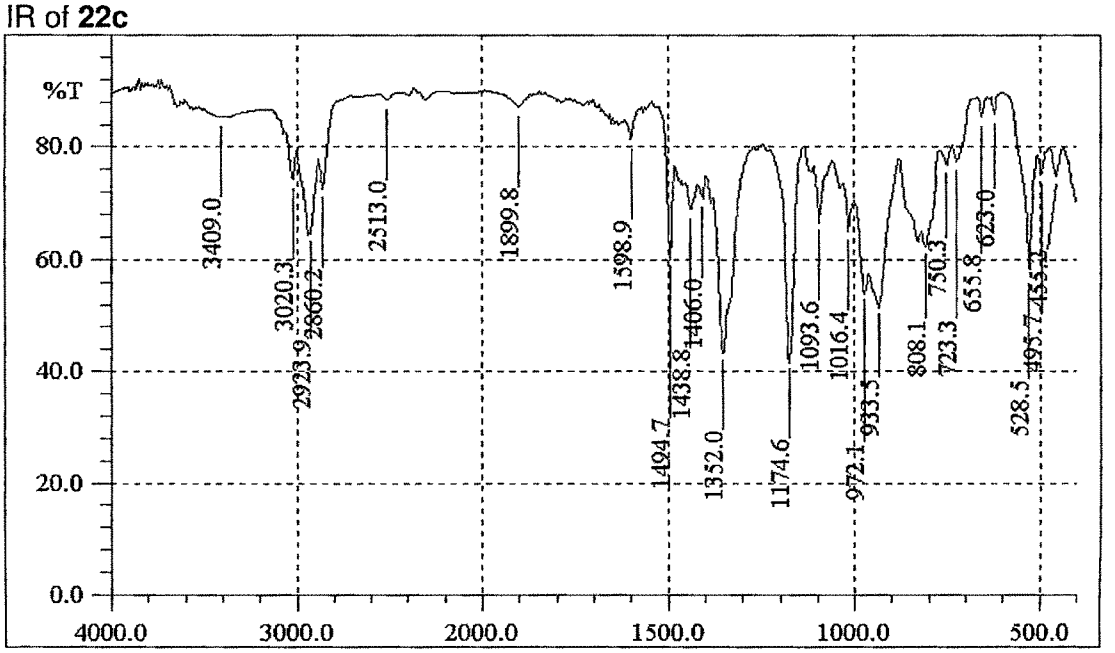
IR of **22b**



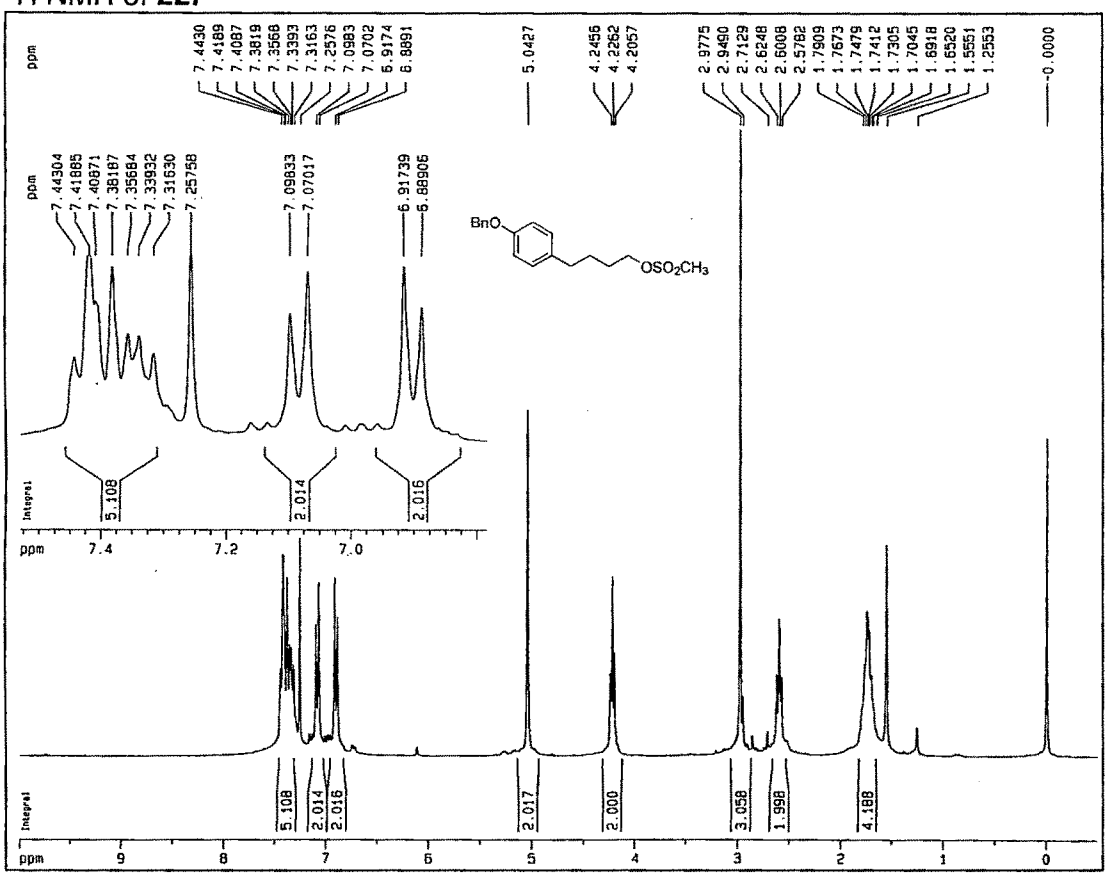
^{1}H NMR of **22c**



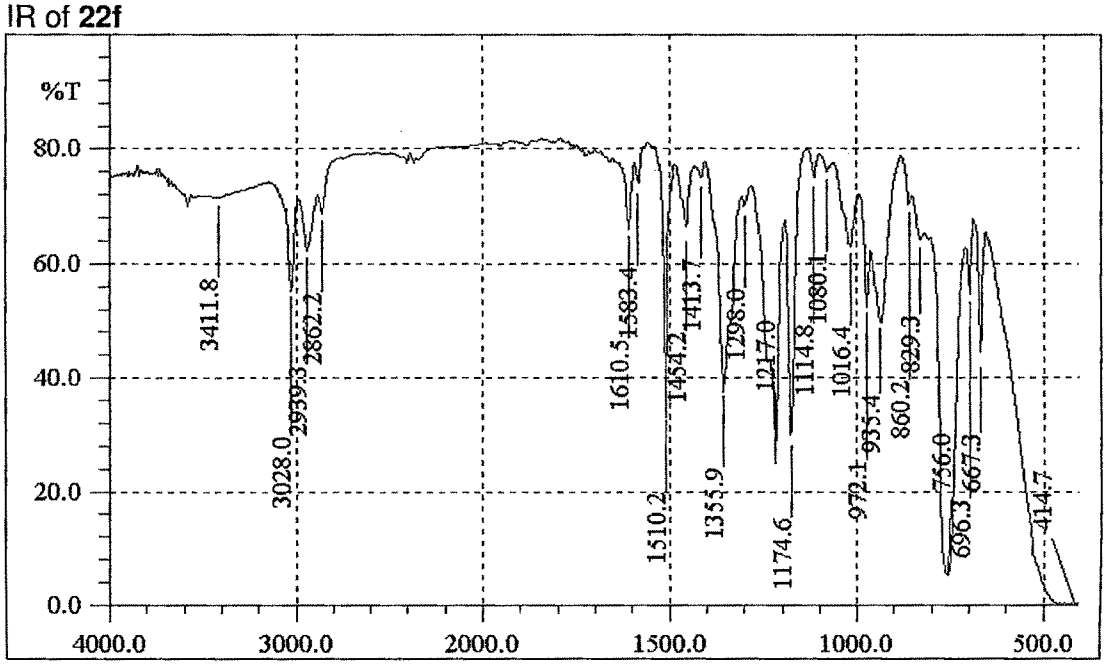
IR of **22c**



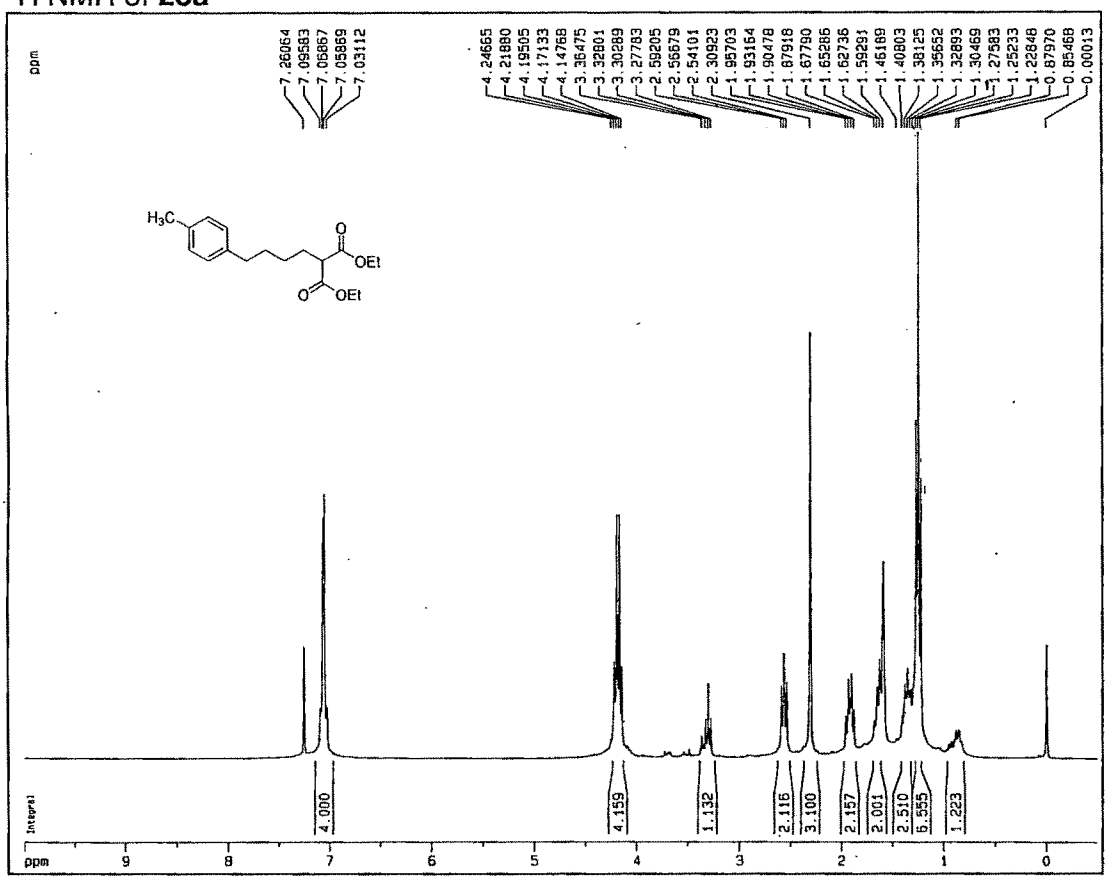
^{1}H NMR of **22f**



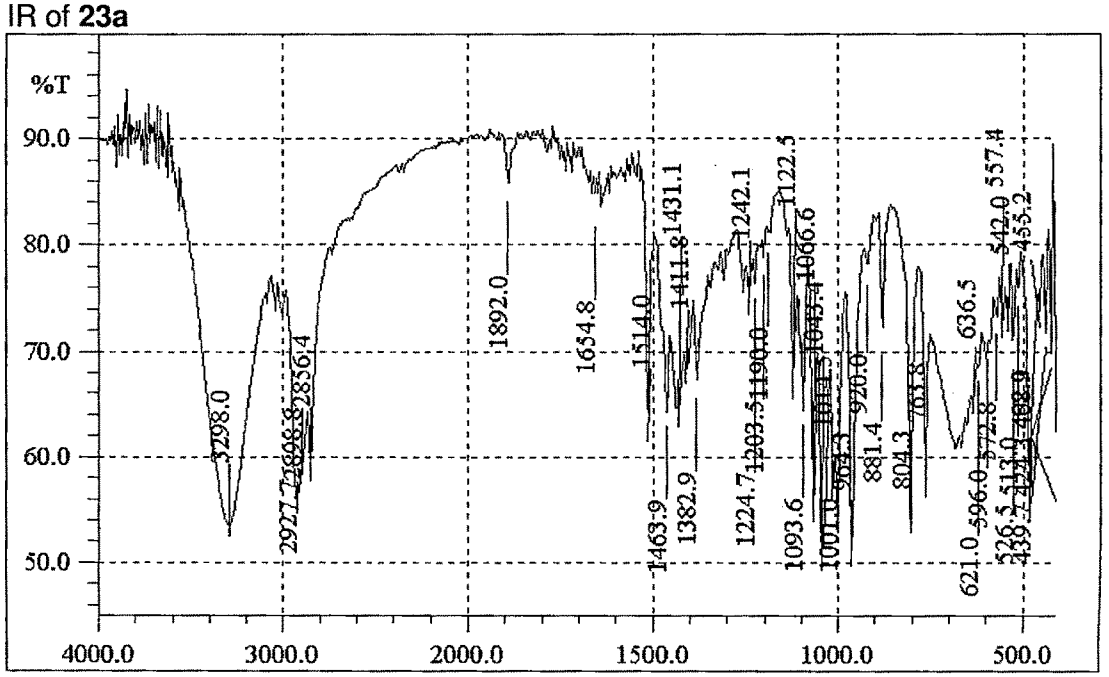
IR of **22f**



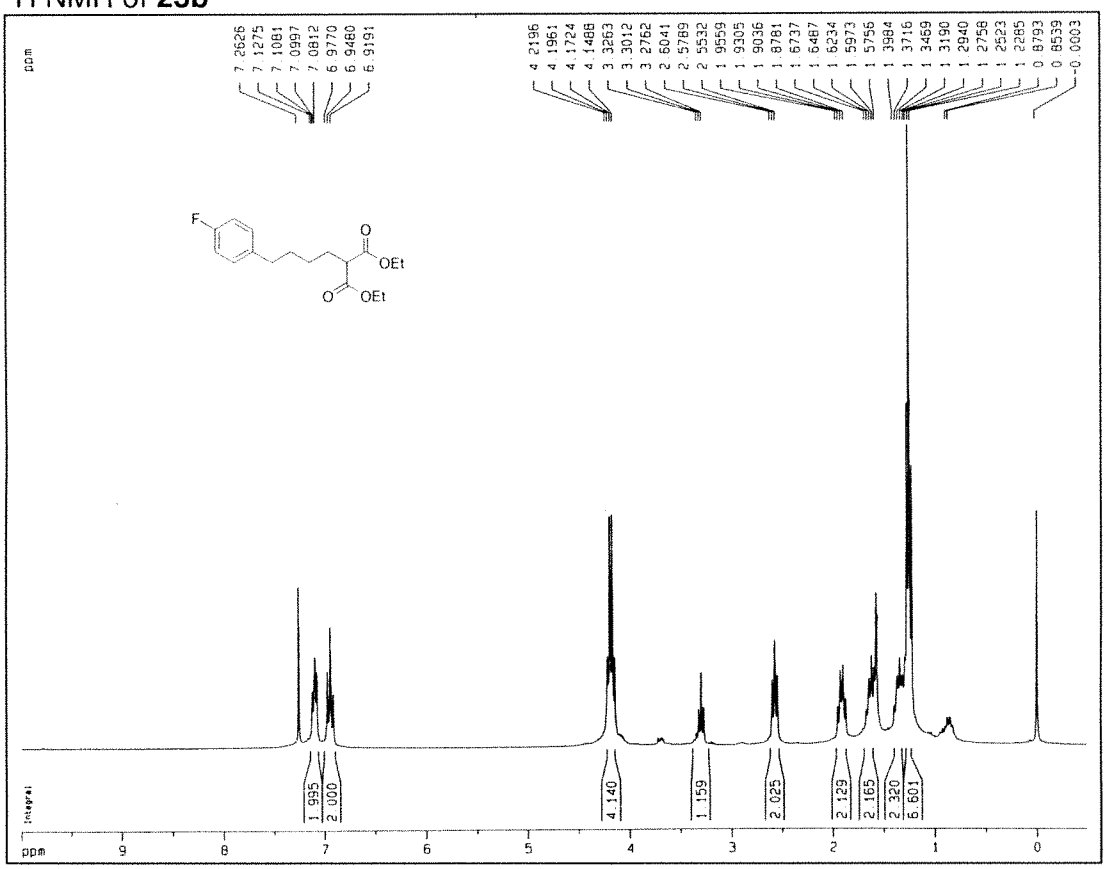
^{1}H NMR of **23a**



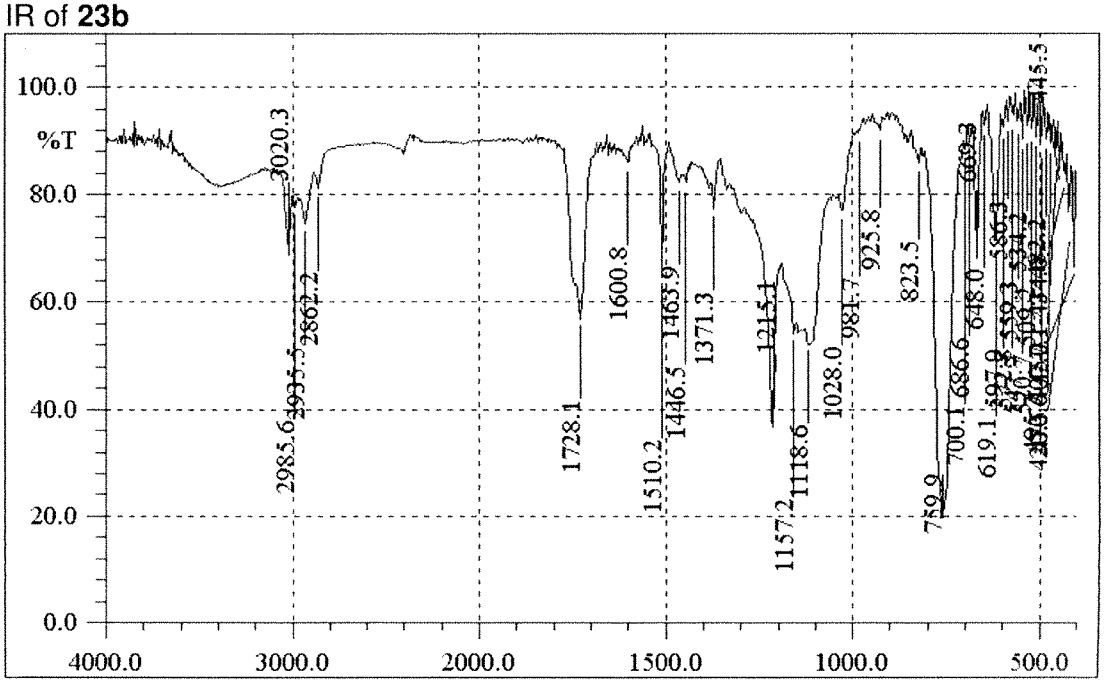
IR of **23a**



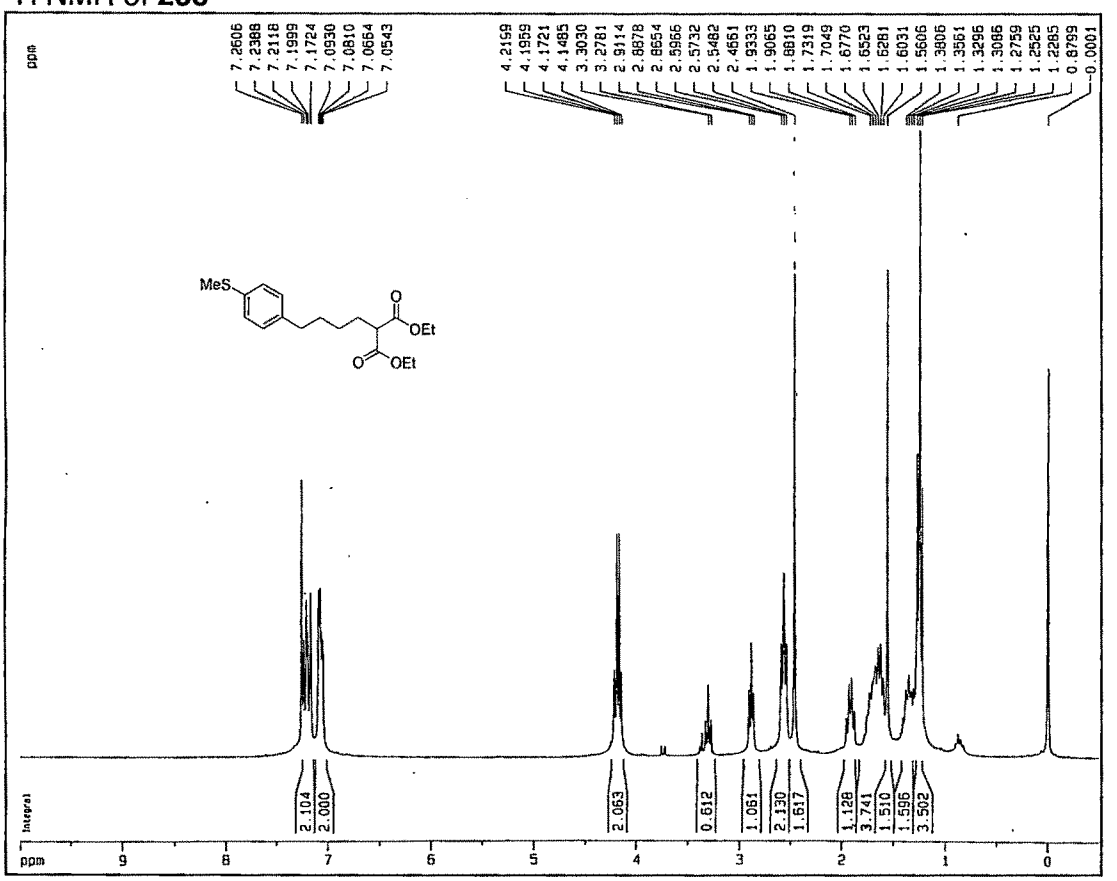
^{1}H NMR of **23b**



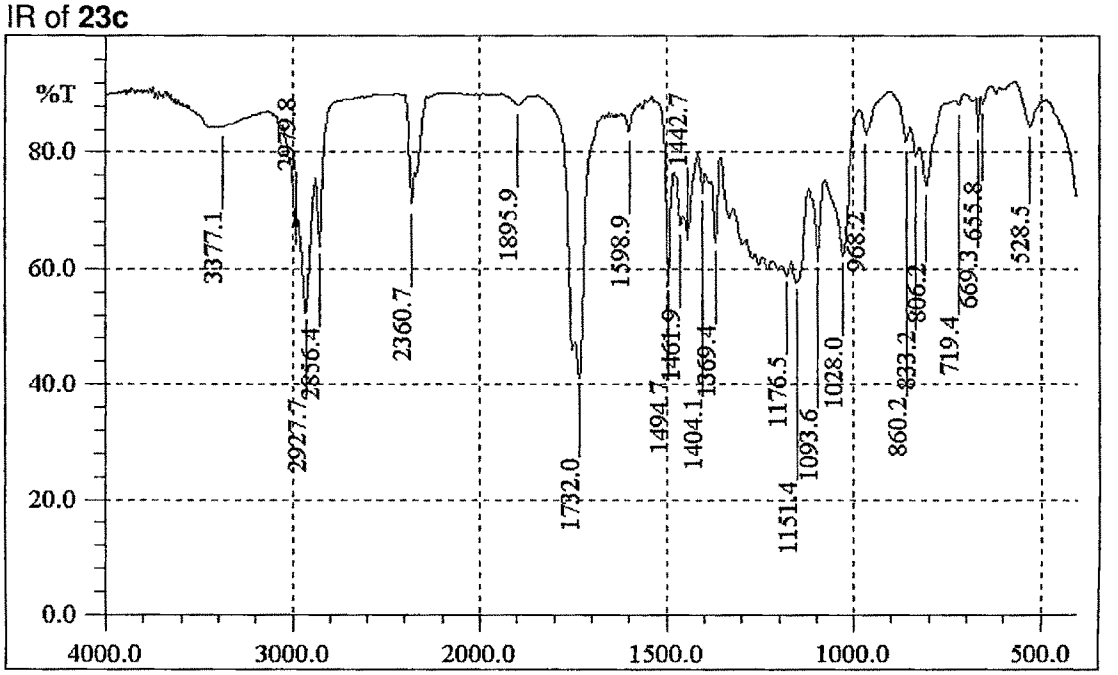
IR of **23b**



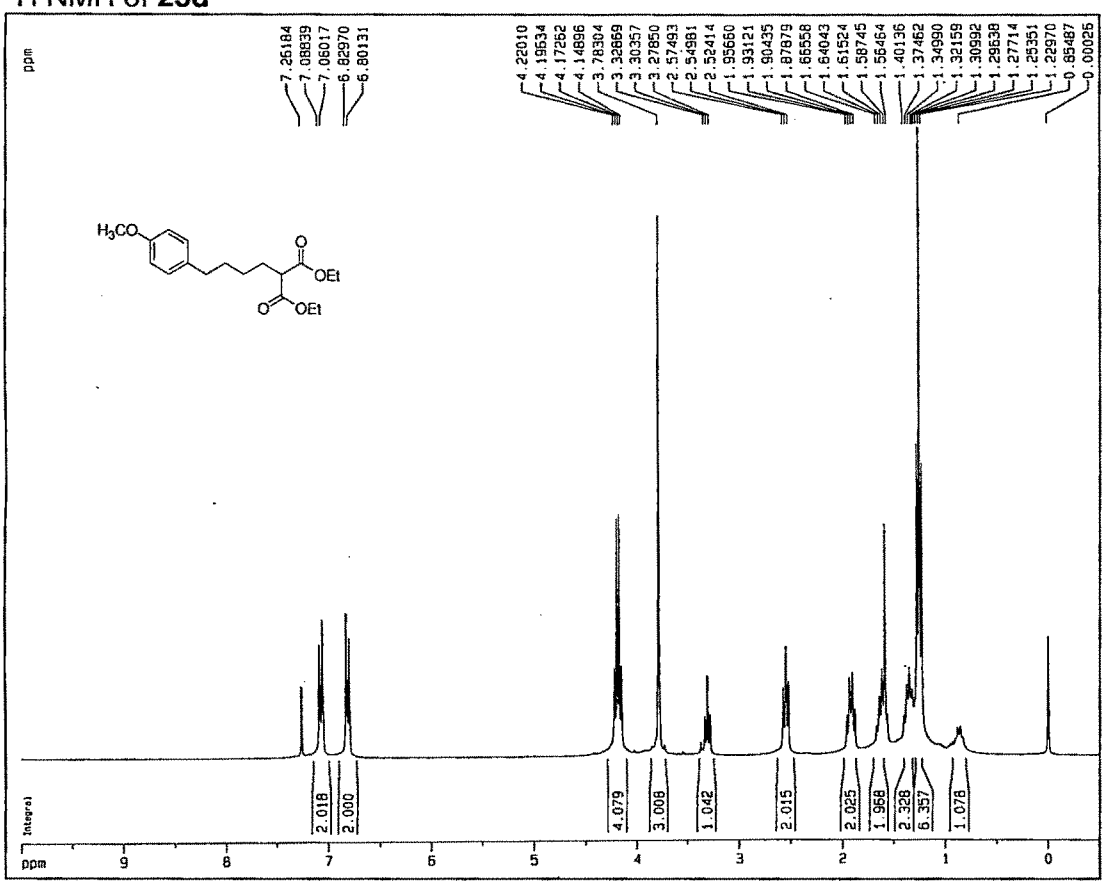
^{1}H NMR of **23c**



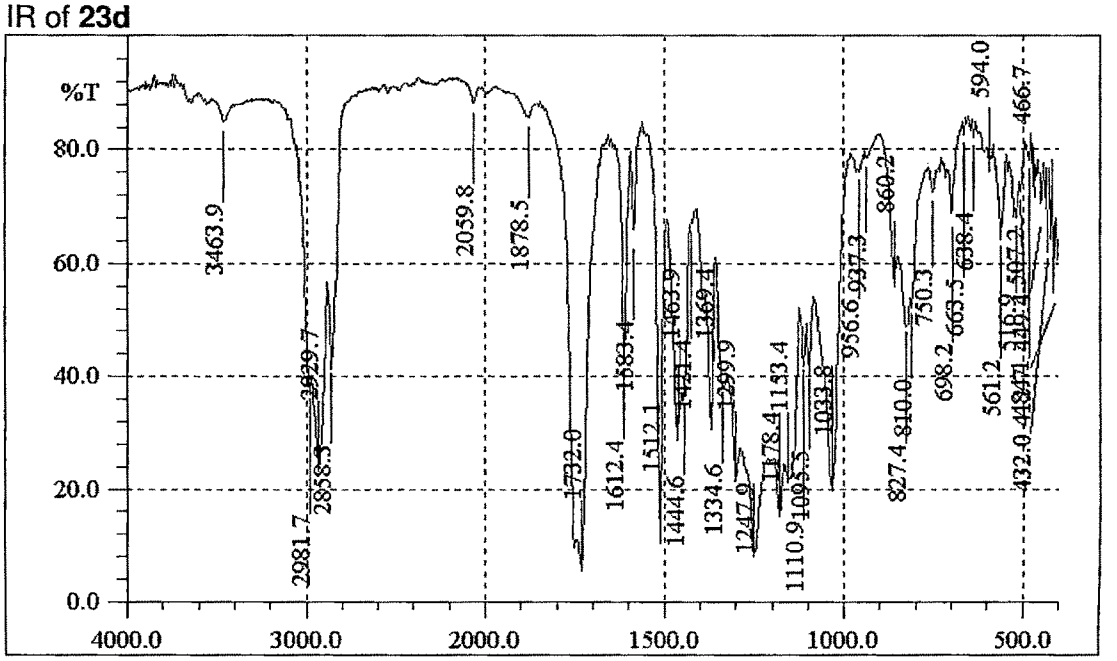
IR of **23c**



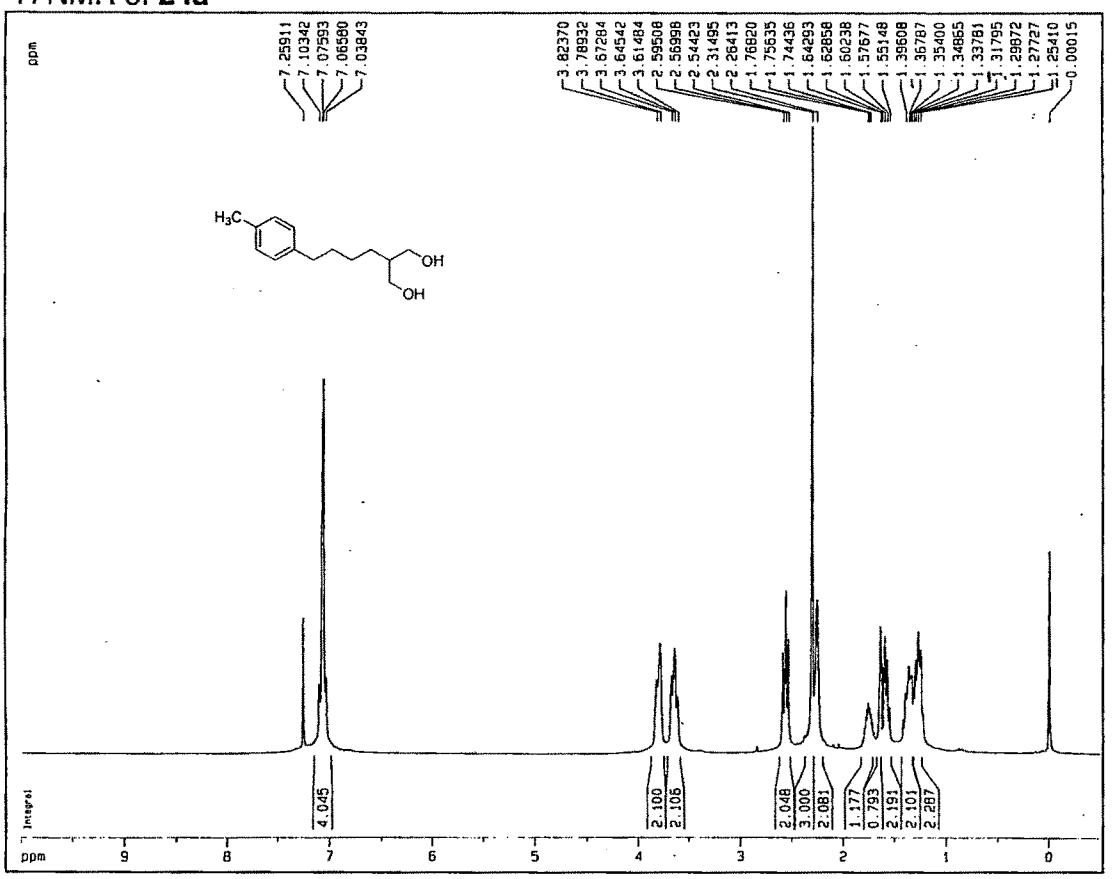
^{1}H NMR of **23d**



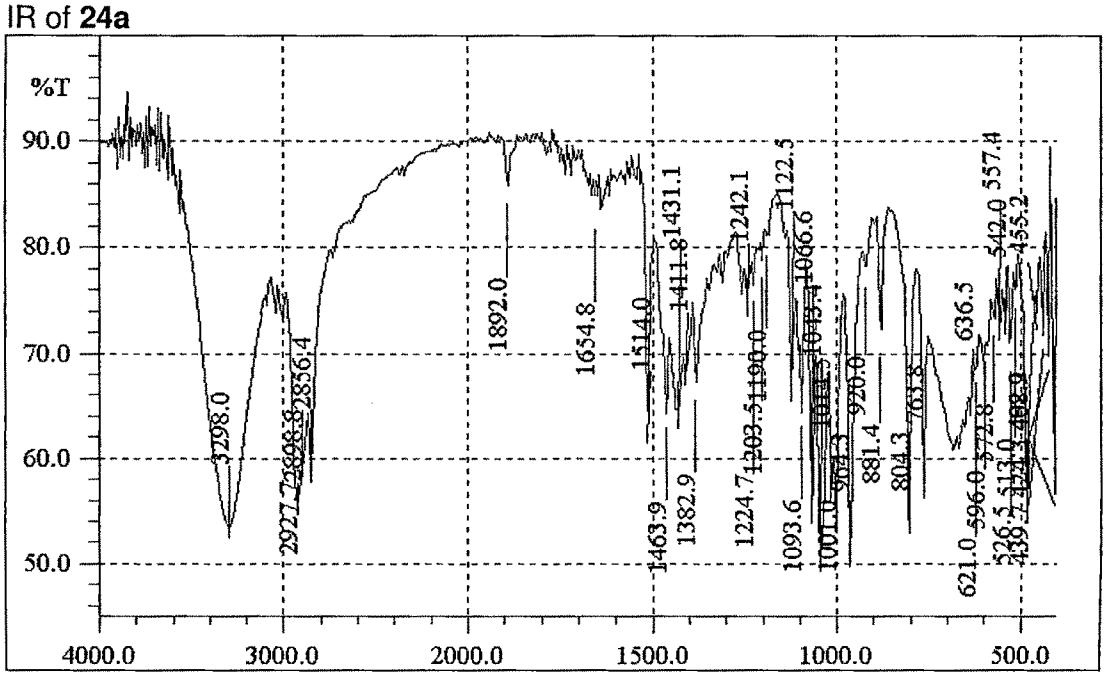
IR of **23d**



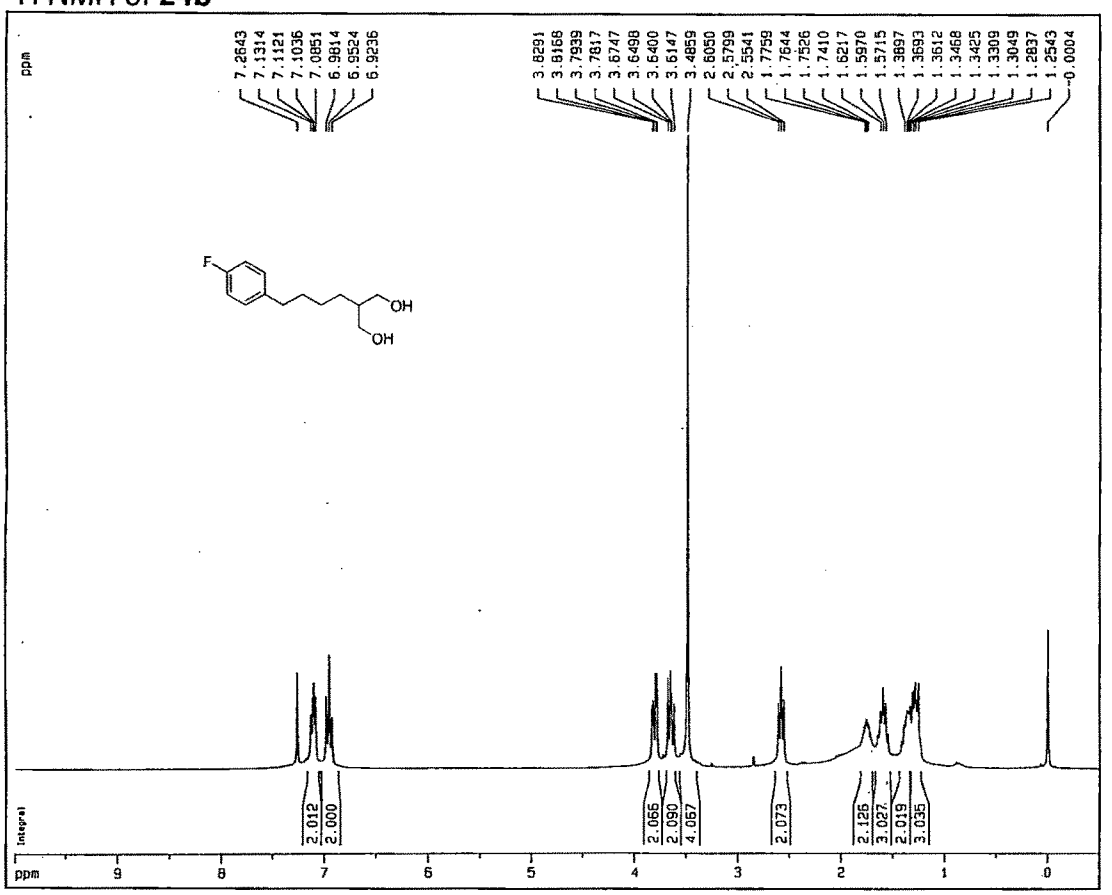
^{1}H NMR of **24a**



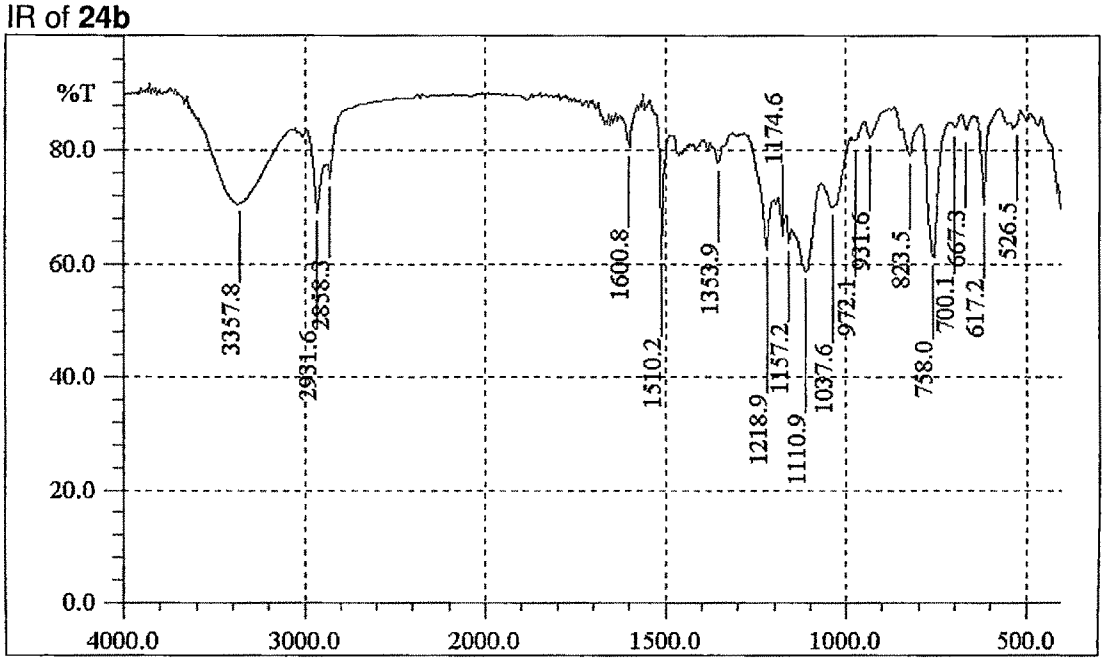
IR of **24a**



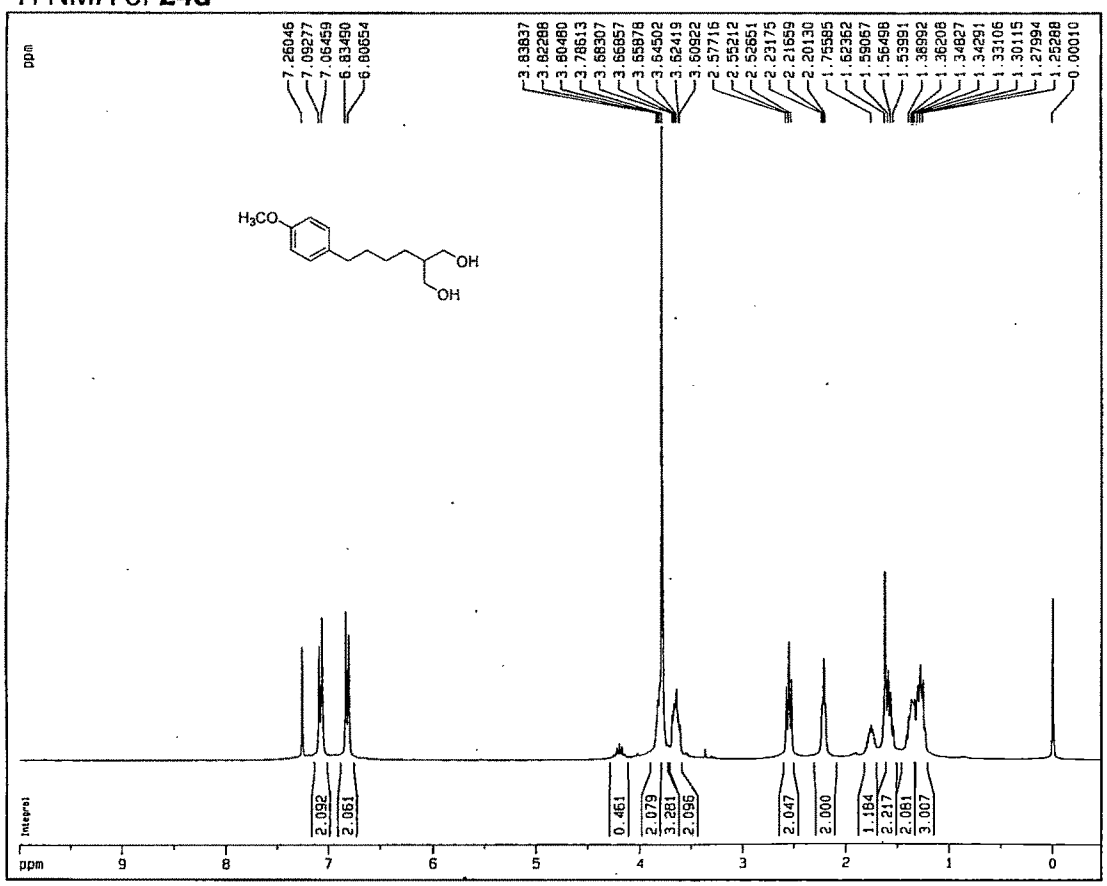
^{1}H NMR of **24b**



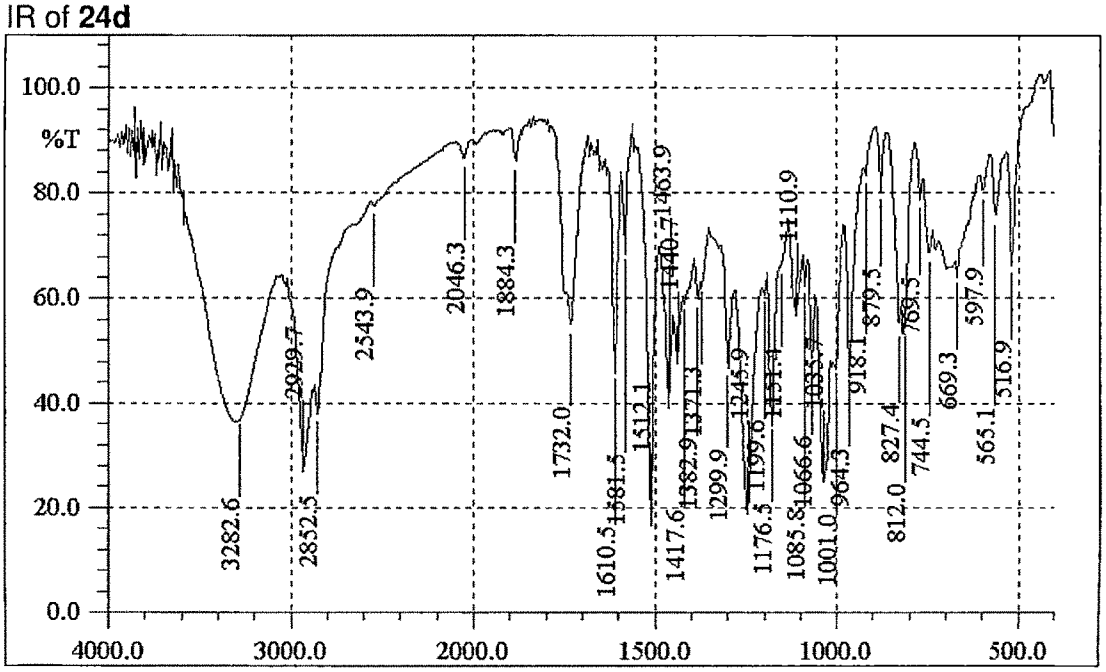
IR of **24b**



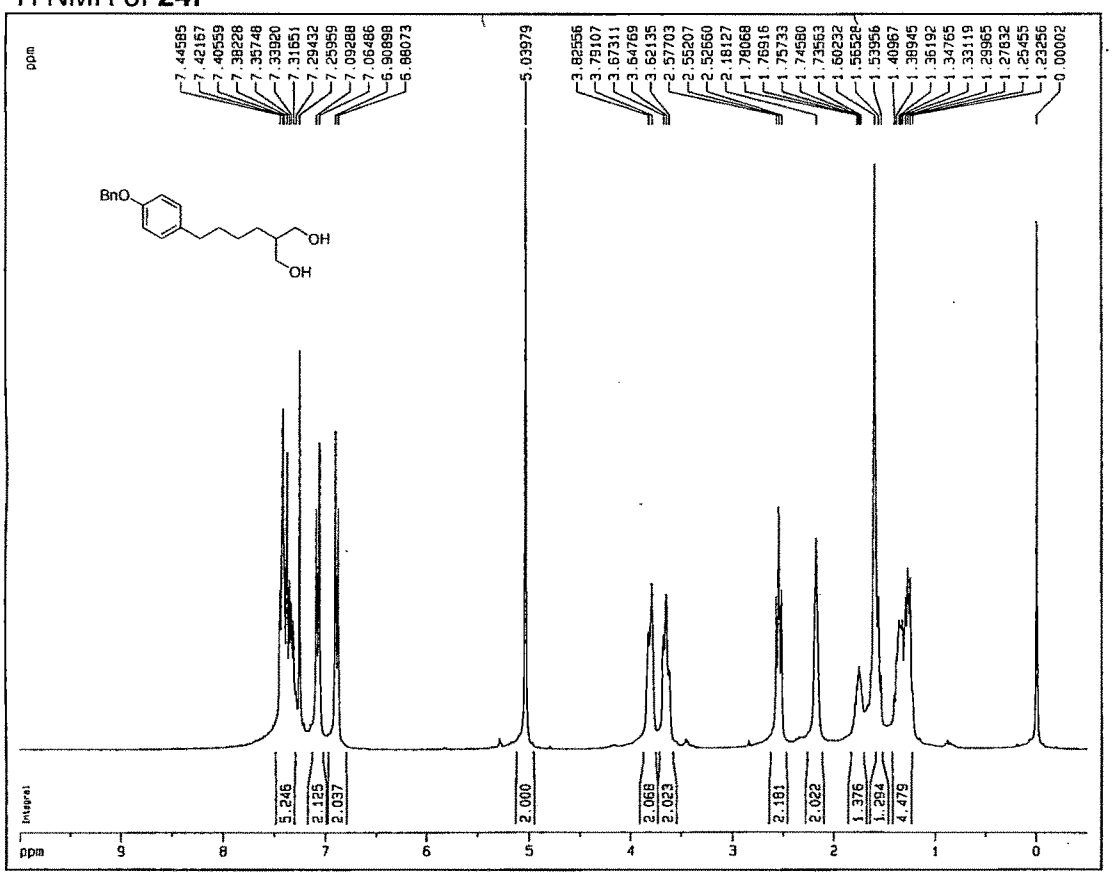
^{1}H NMR of **24d**



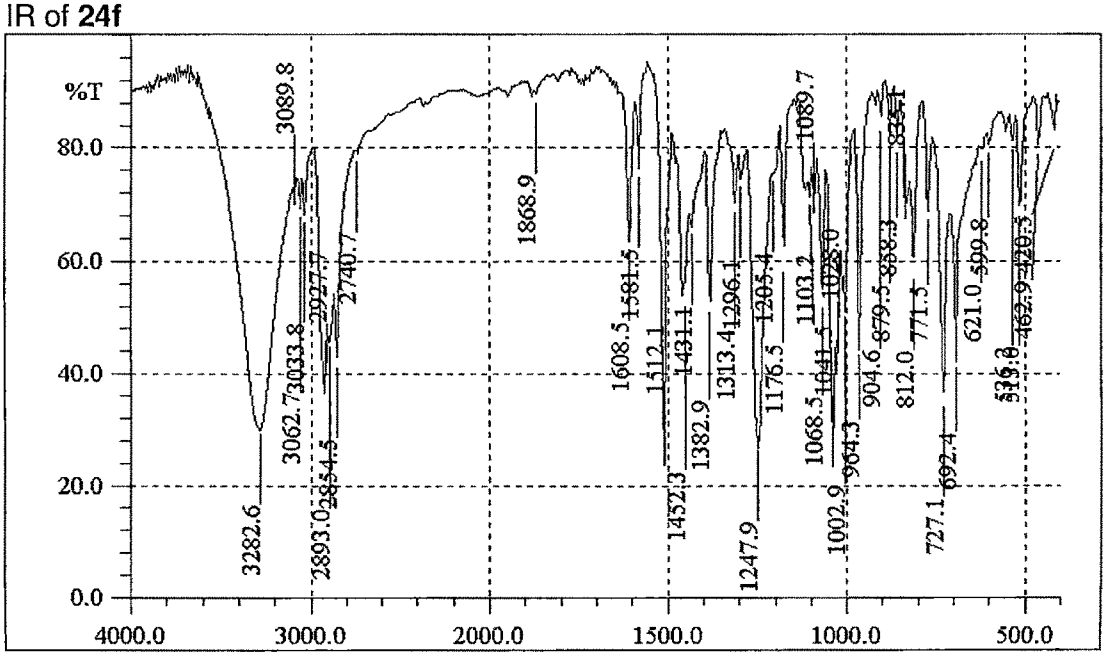
IR of **24d**



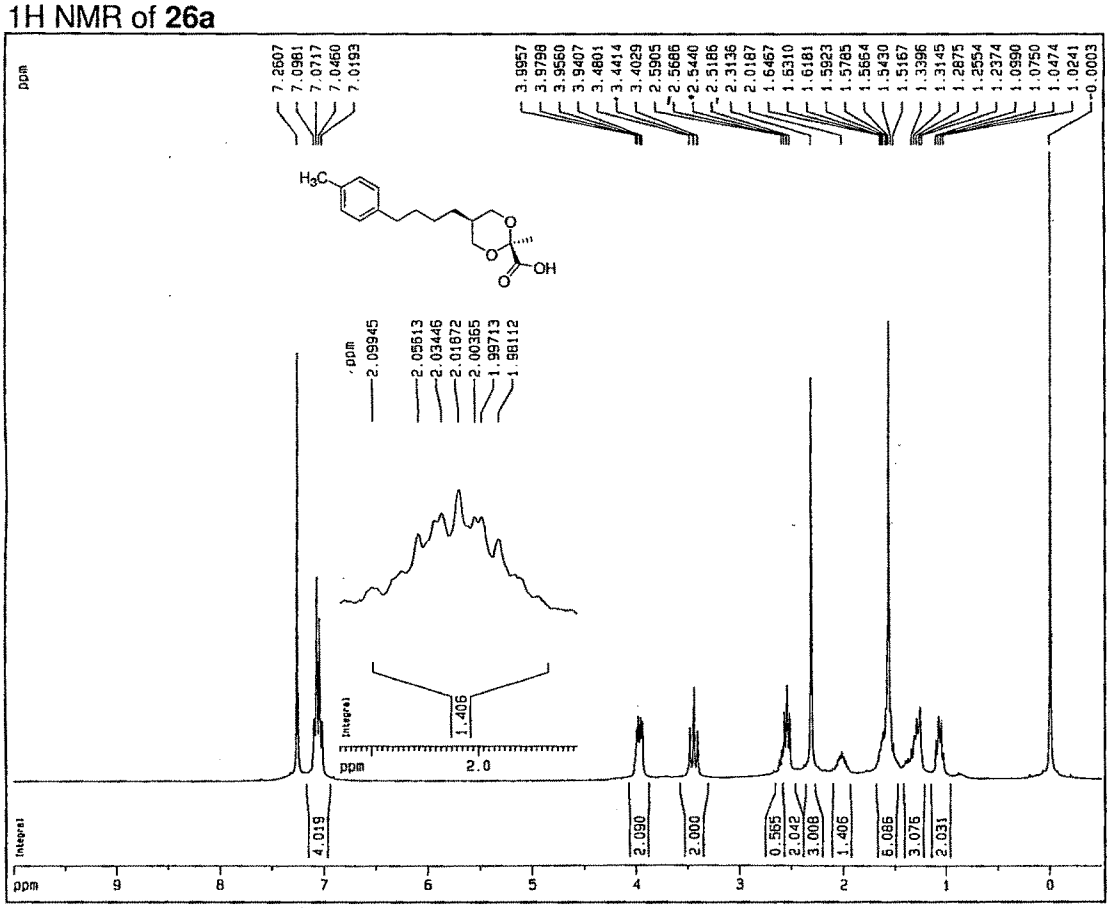
^{1}H NMR of **24f**



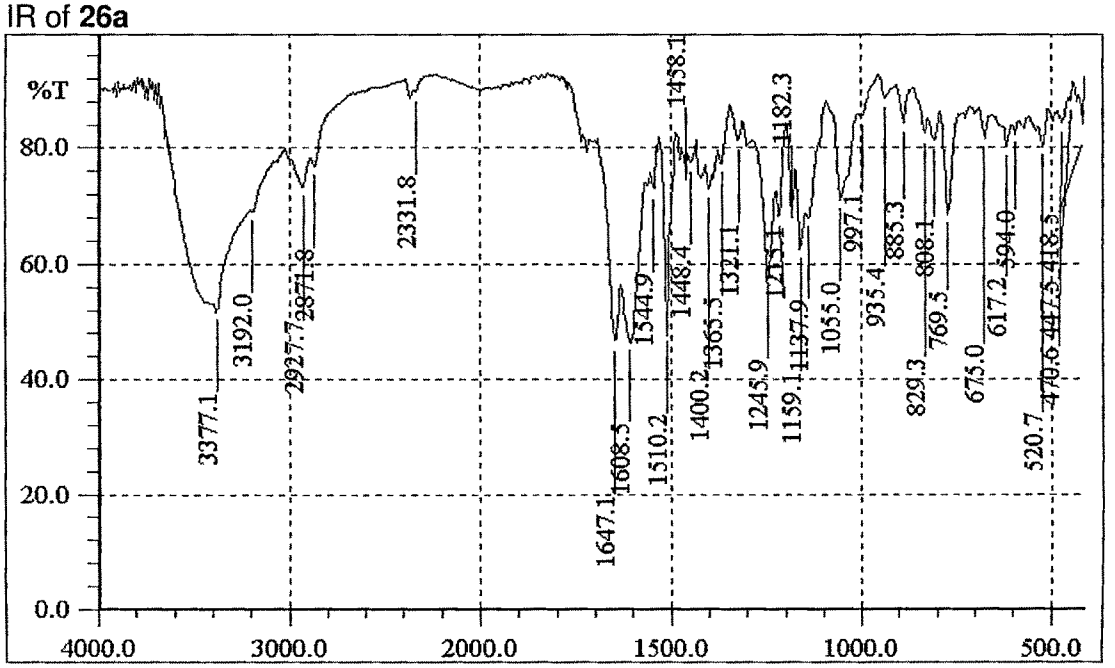
IR of **24f**



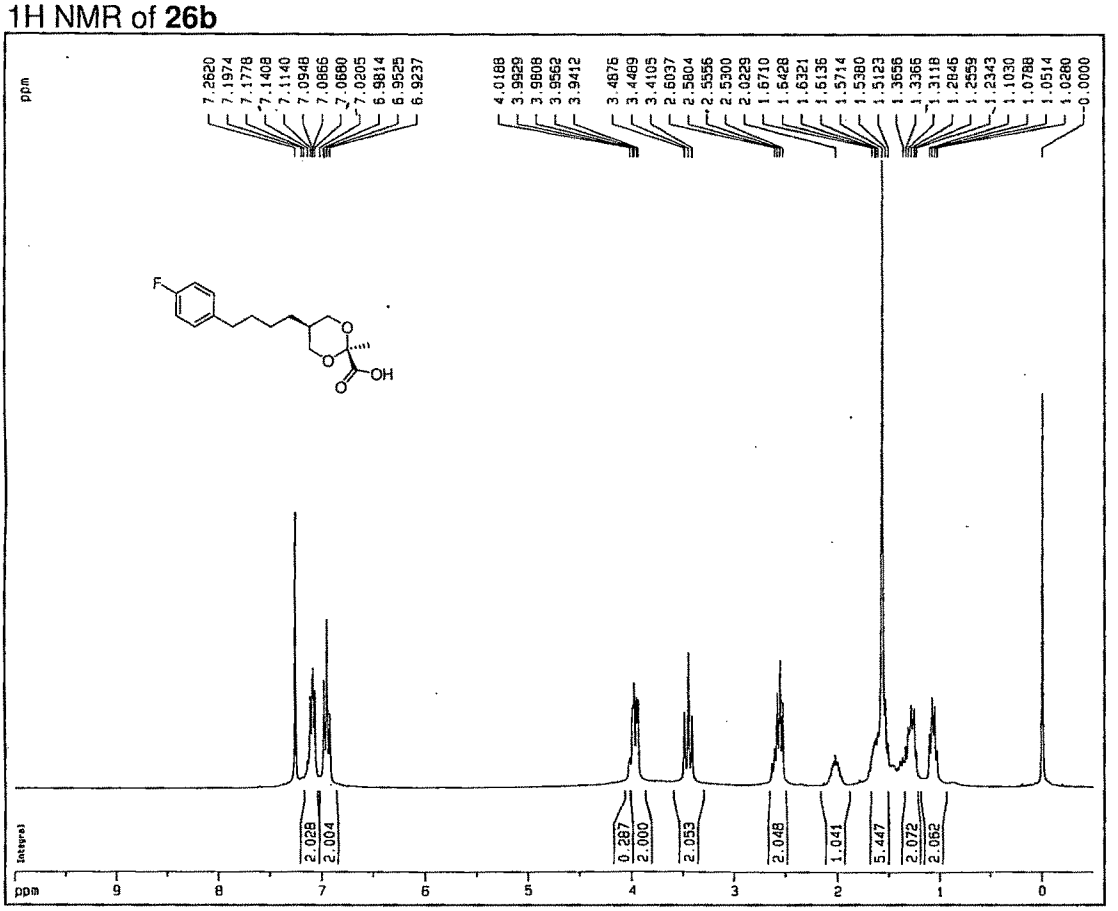
1H NMR of **26a**



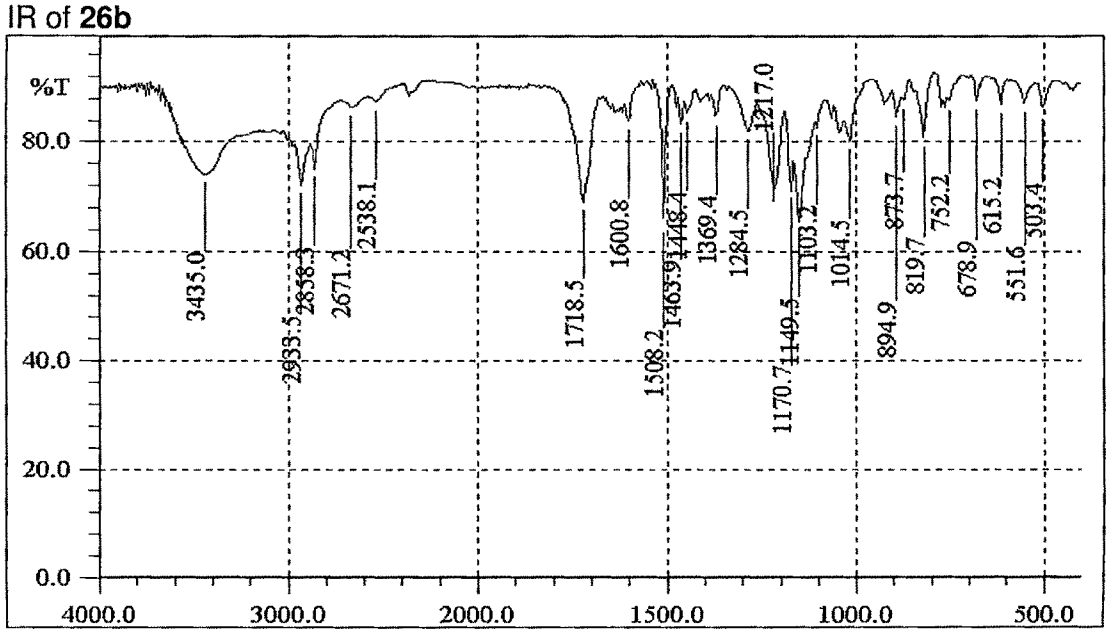
IR of **26a**



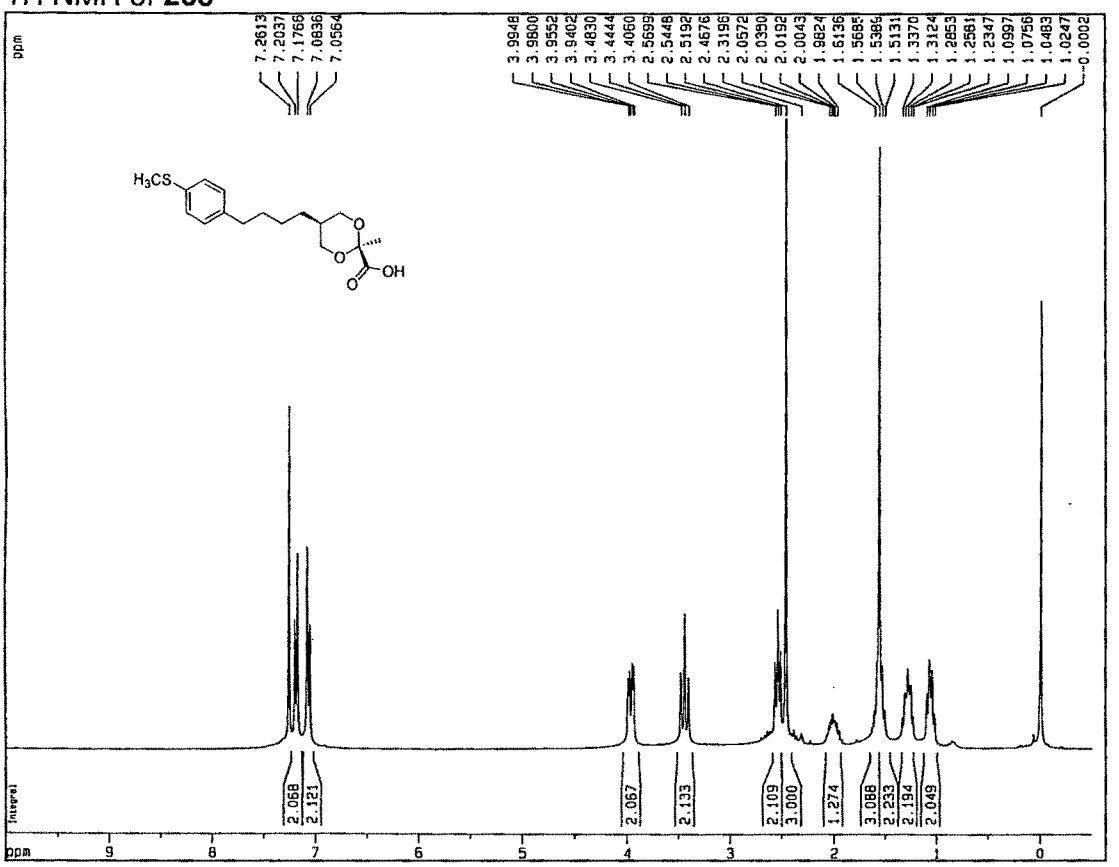
1H NMR of **26b**



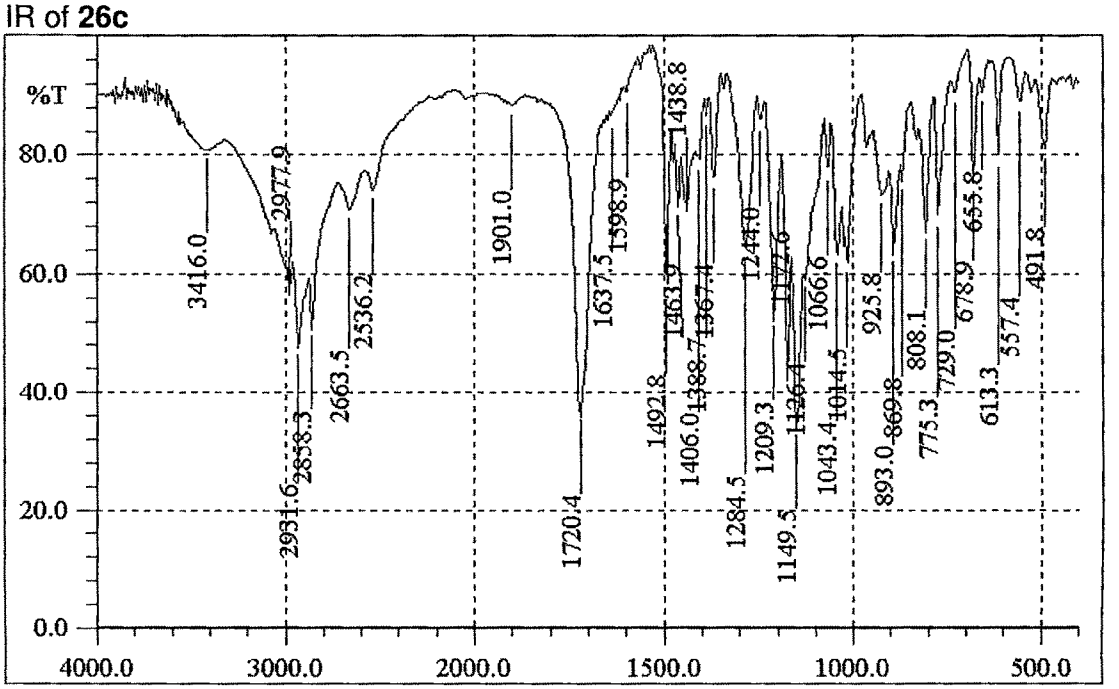
IR of **26b**



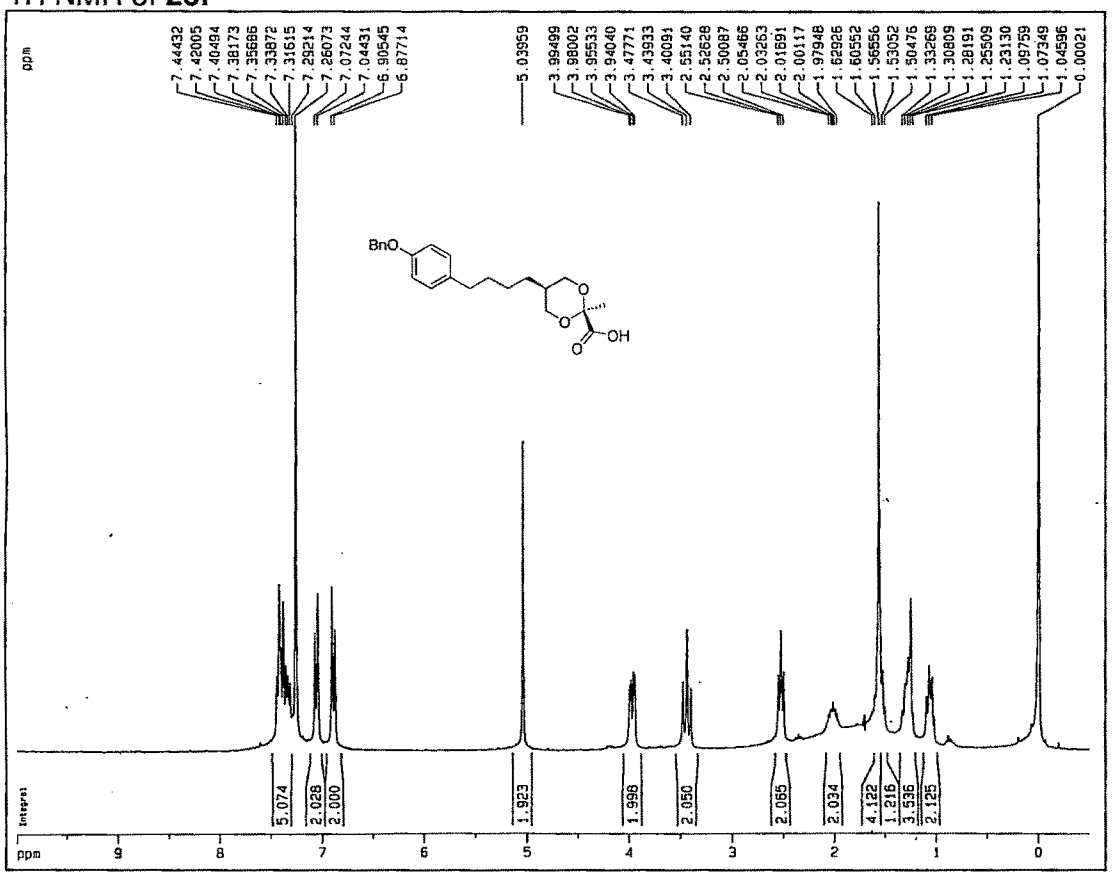
1H NMR of **26c**



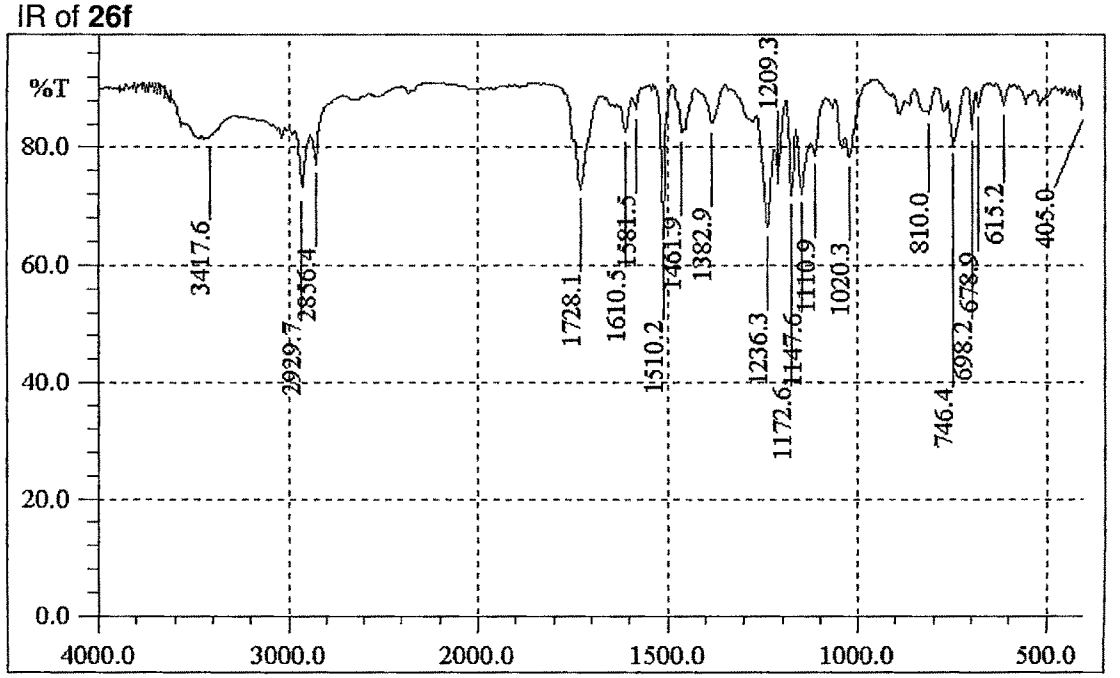
IR of **26c**



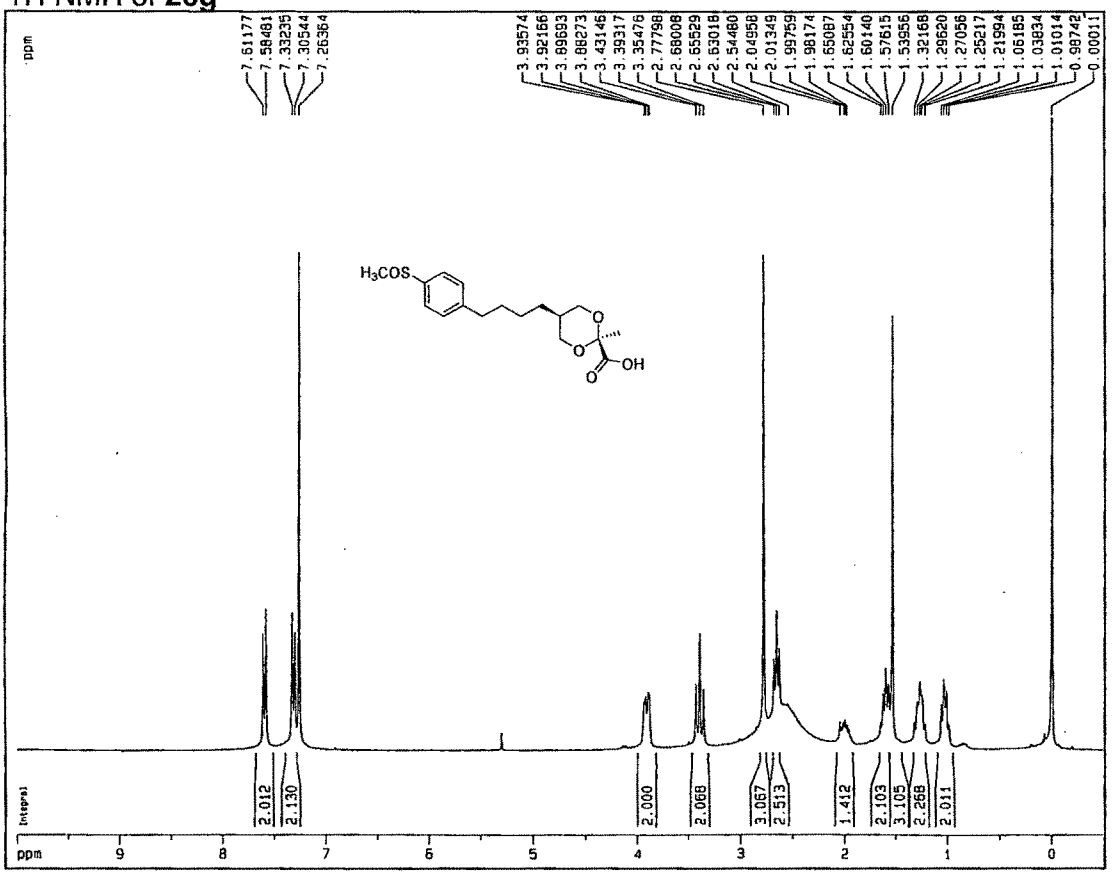
1H NMR of **26f**



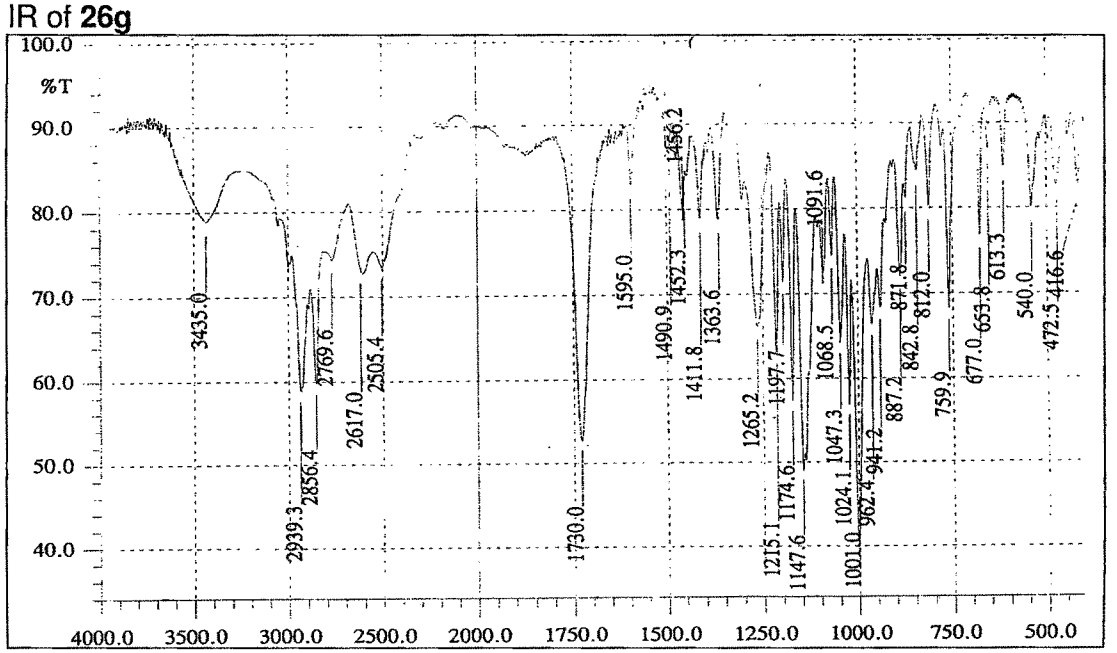
IR of **26f**



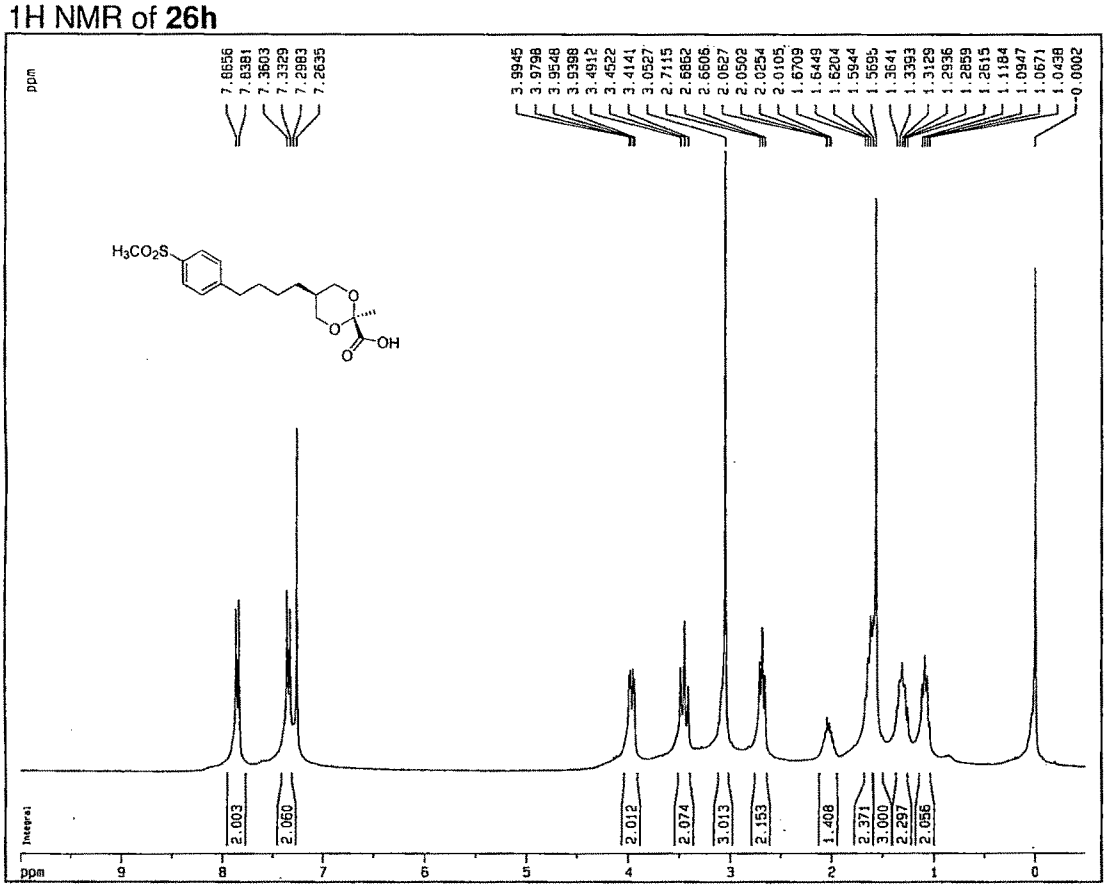
1H NMR of **26g**



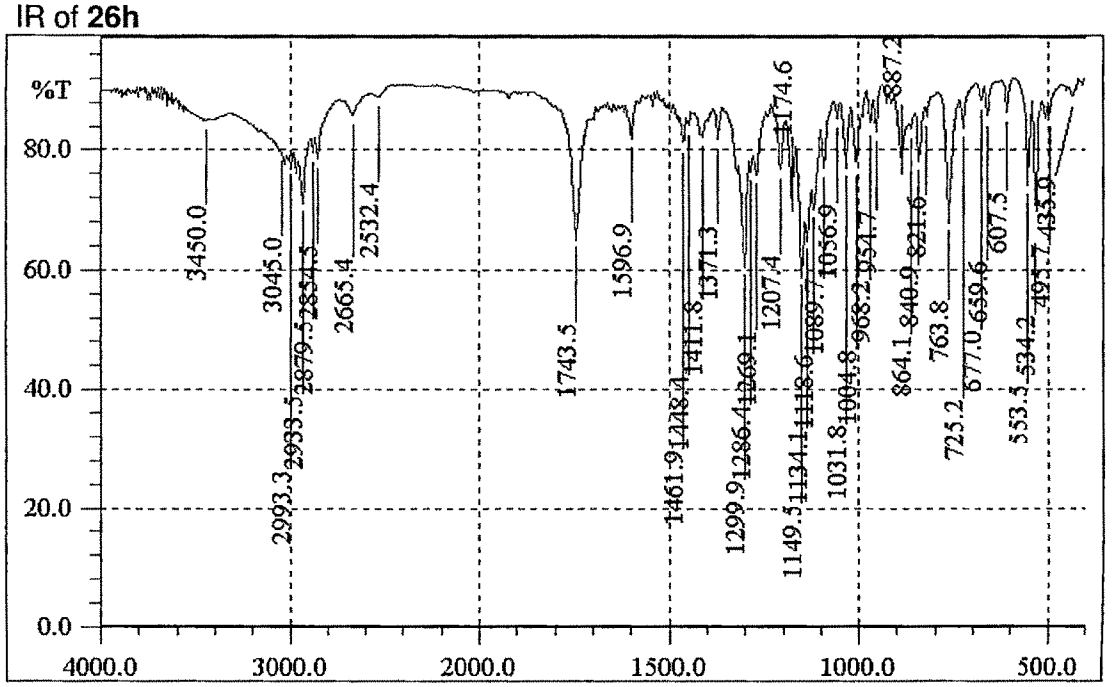
IR of **26g**



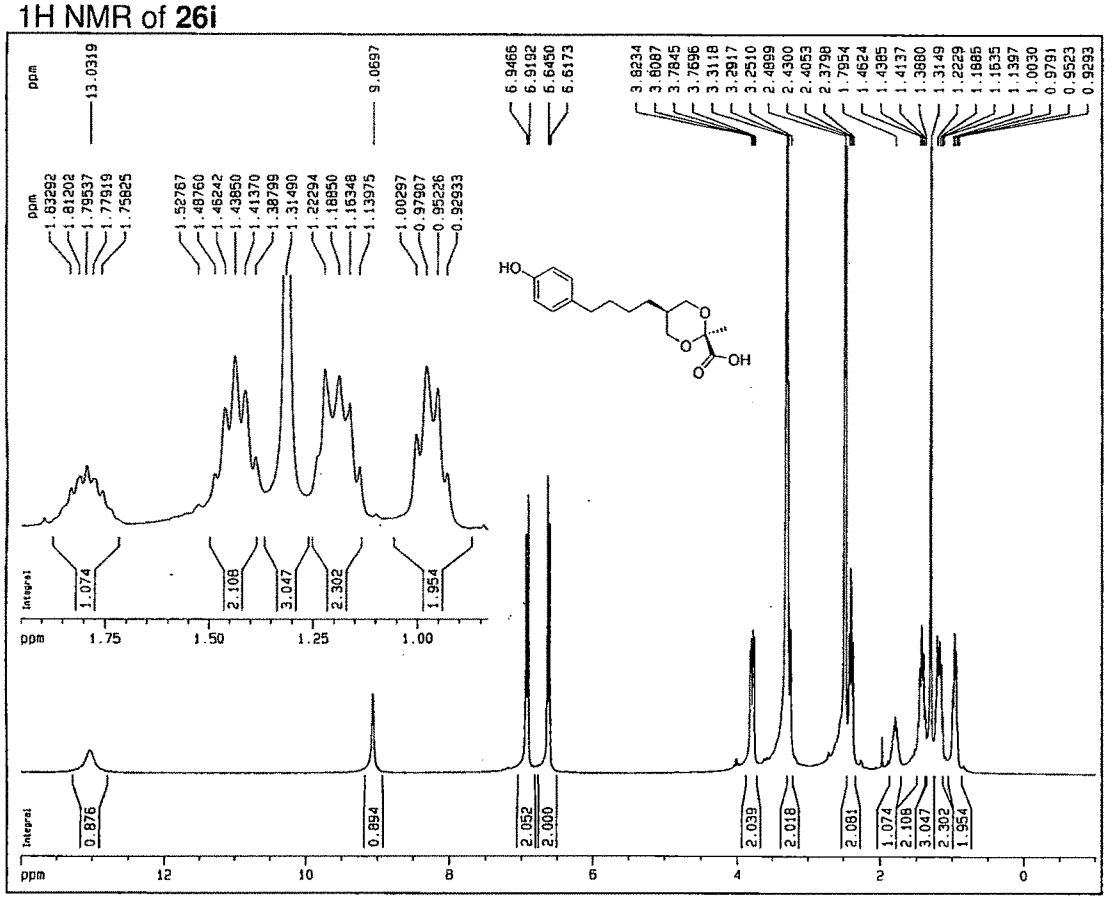
1H NMR of **26h**



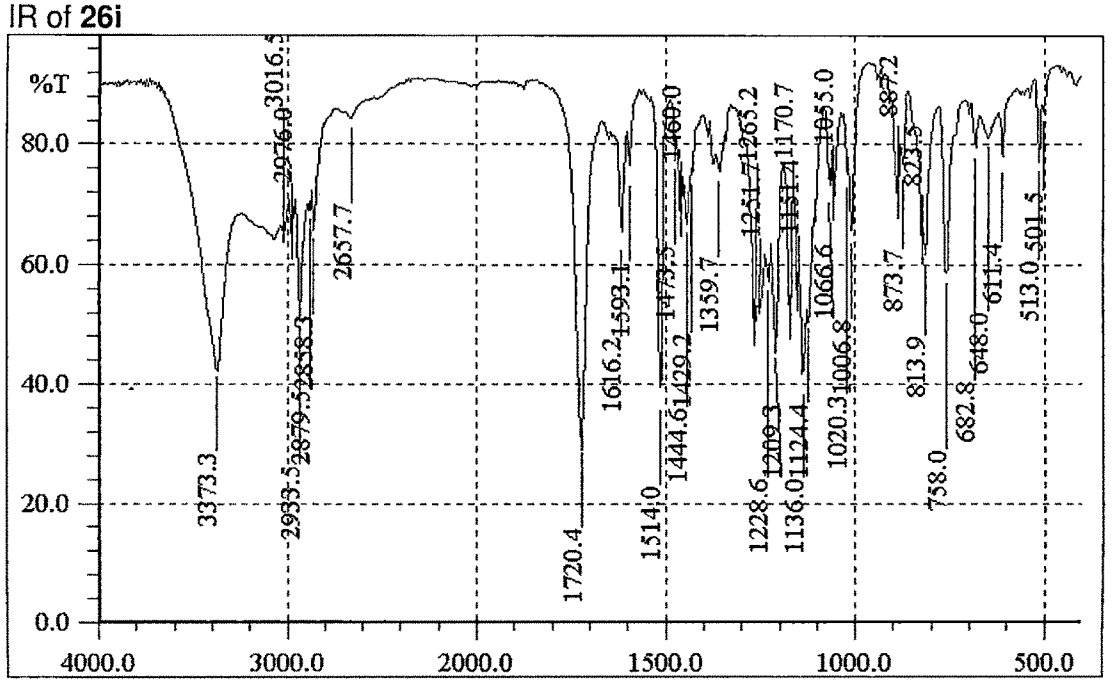
IR of **26h**



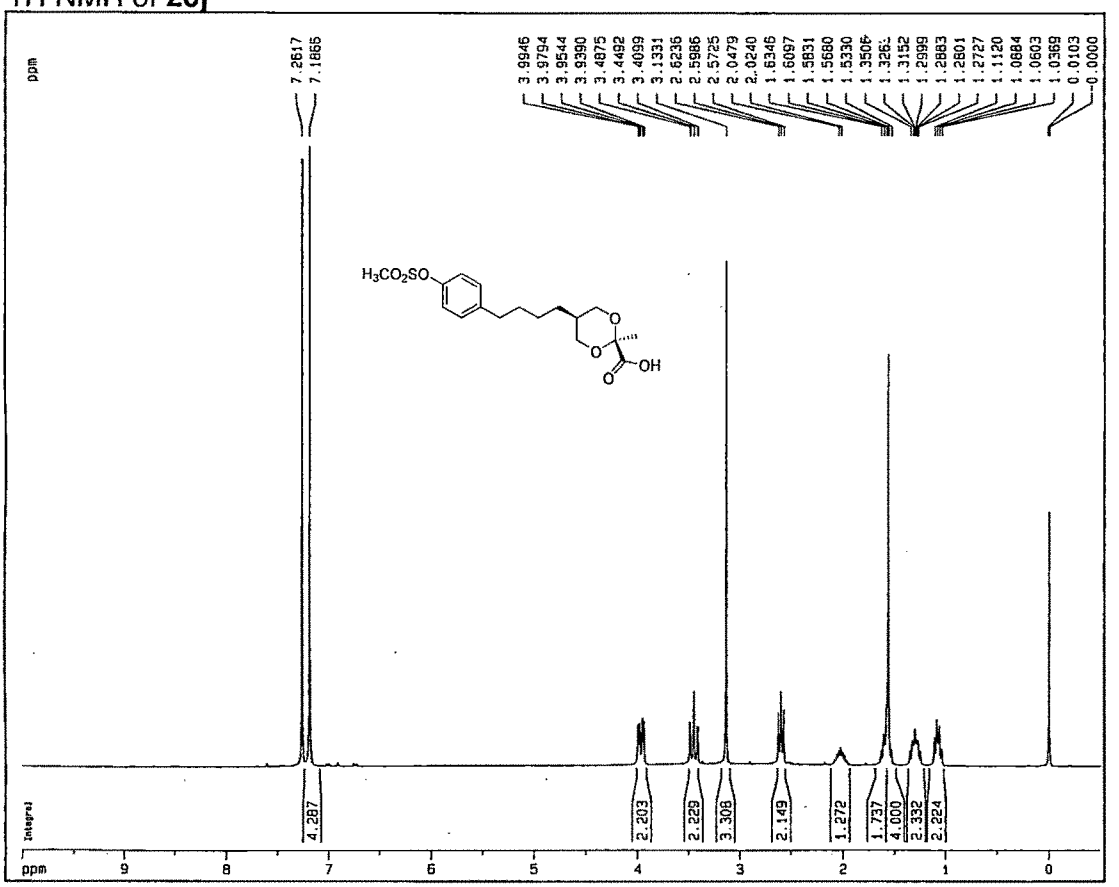
1H NMR of **26i**



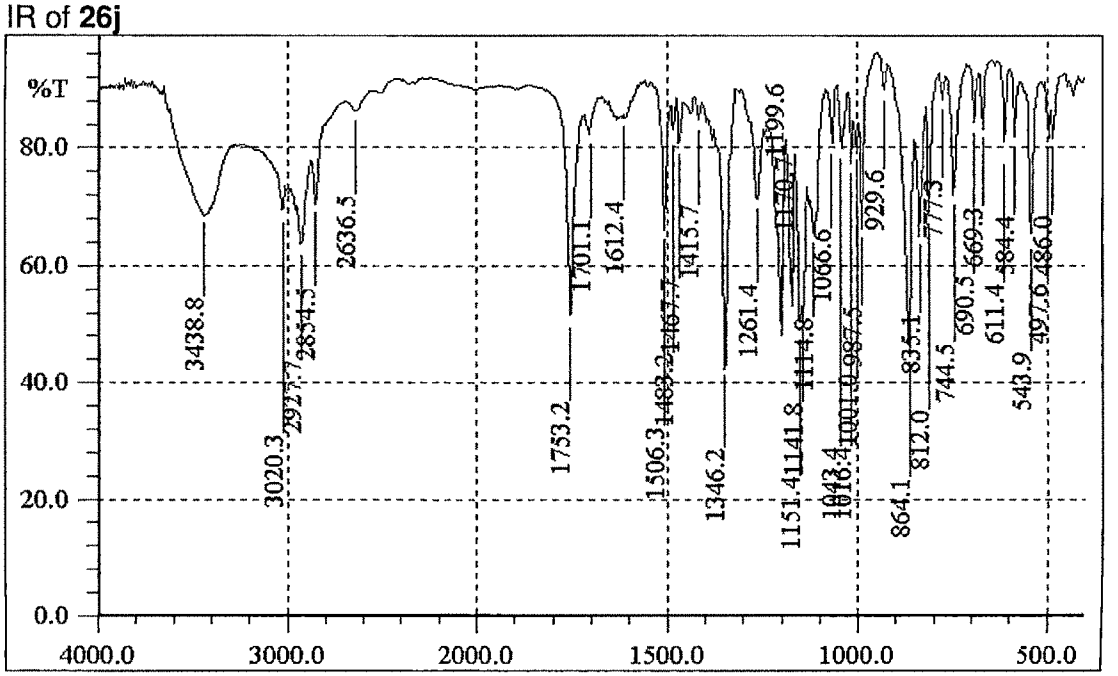
IR of **26i**



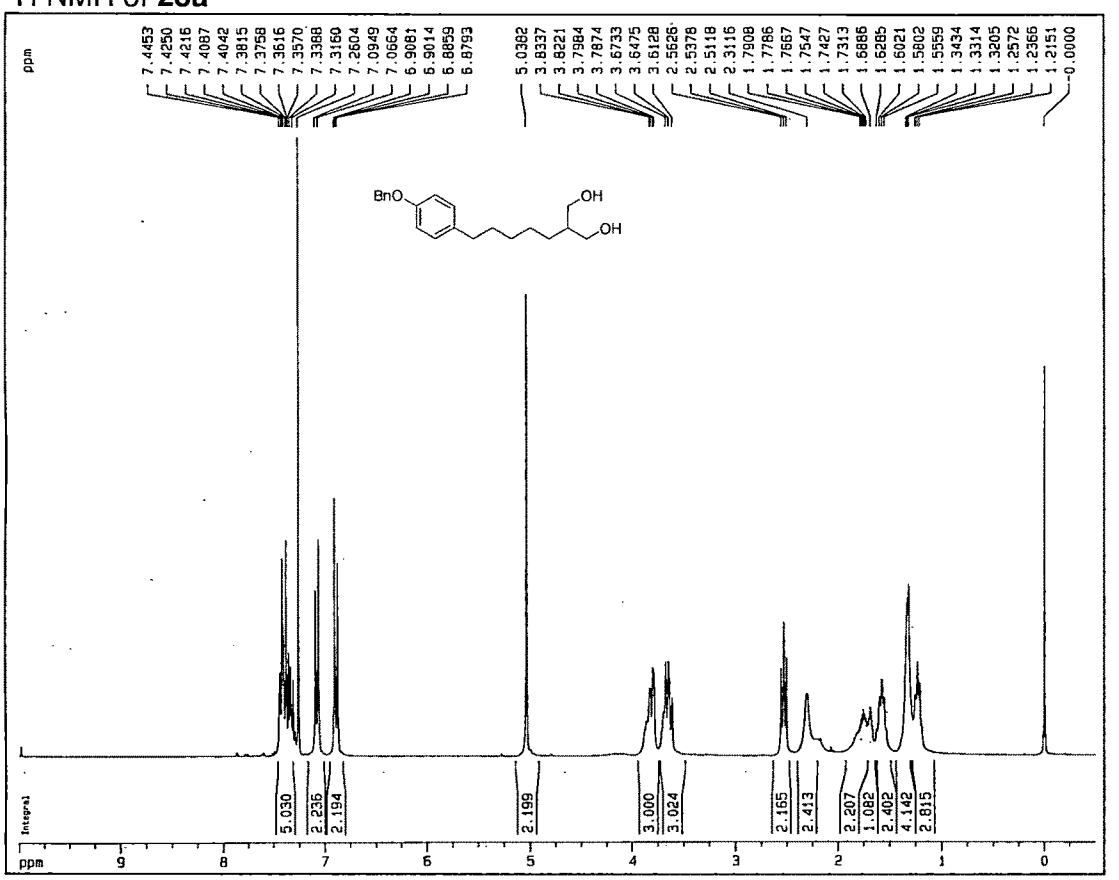
1H NMR of **26j**



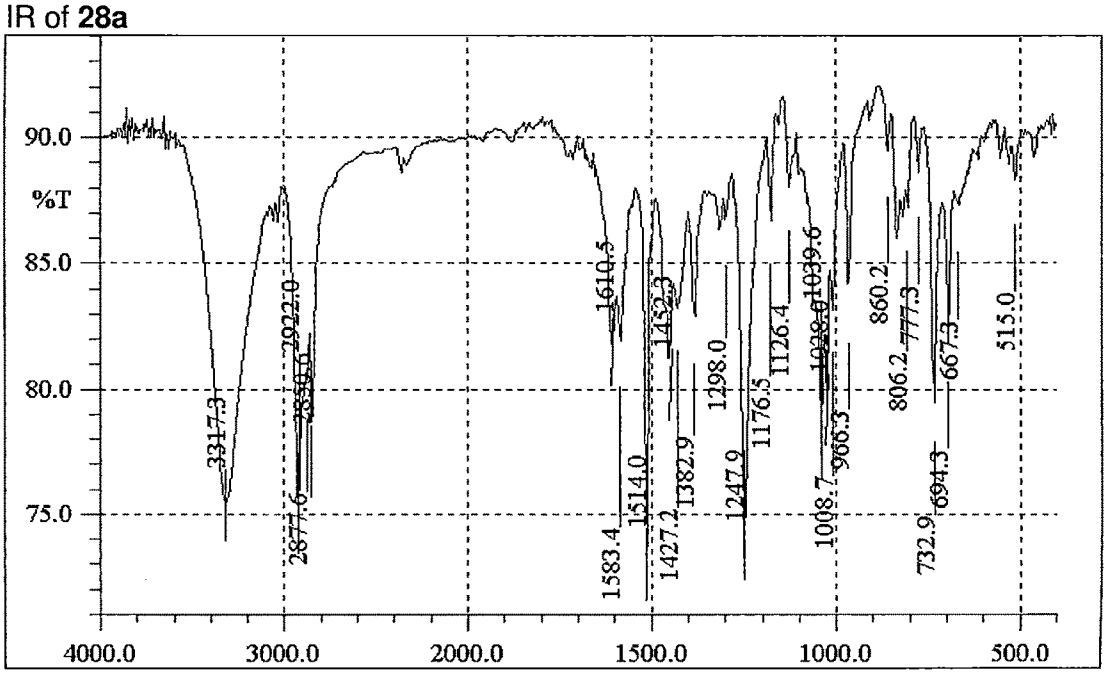
IR of **26j**



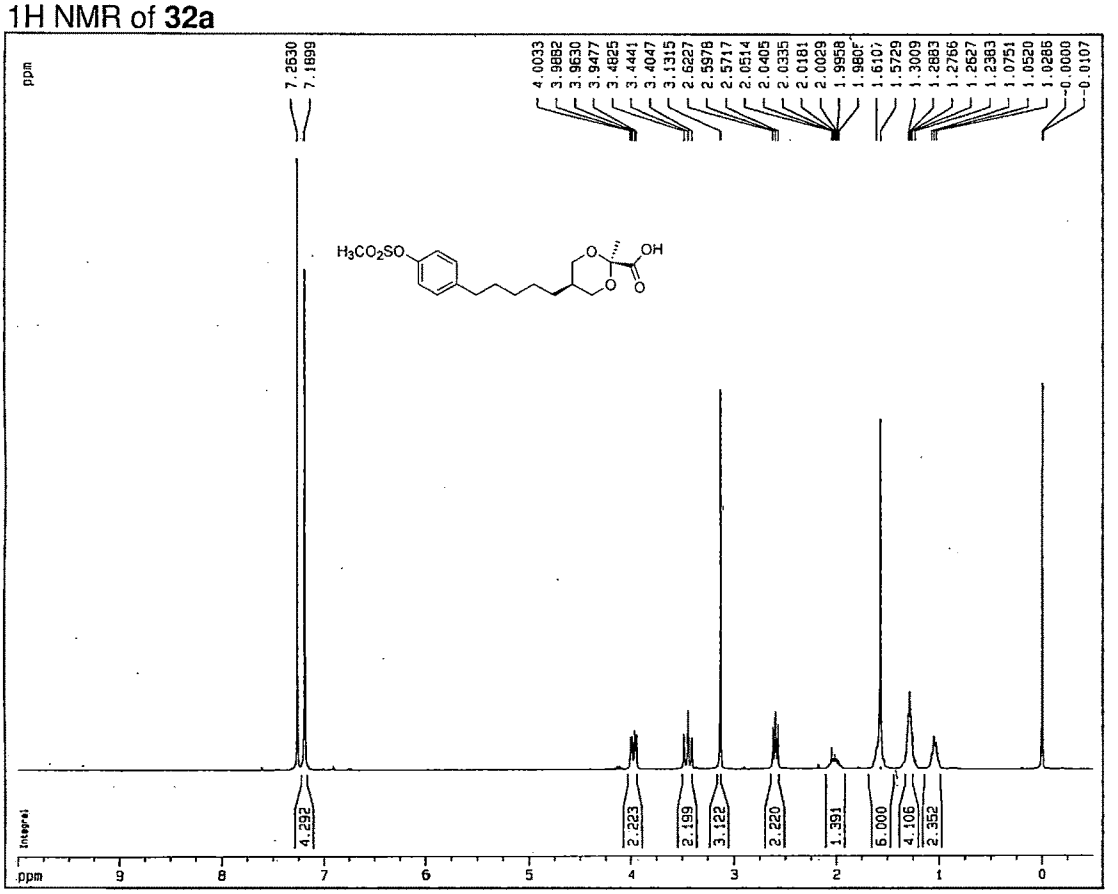
^{1}H NMR of **28a**



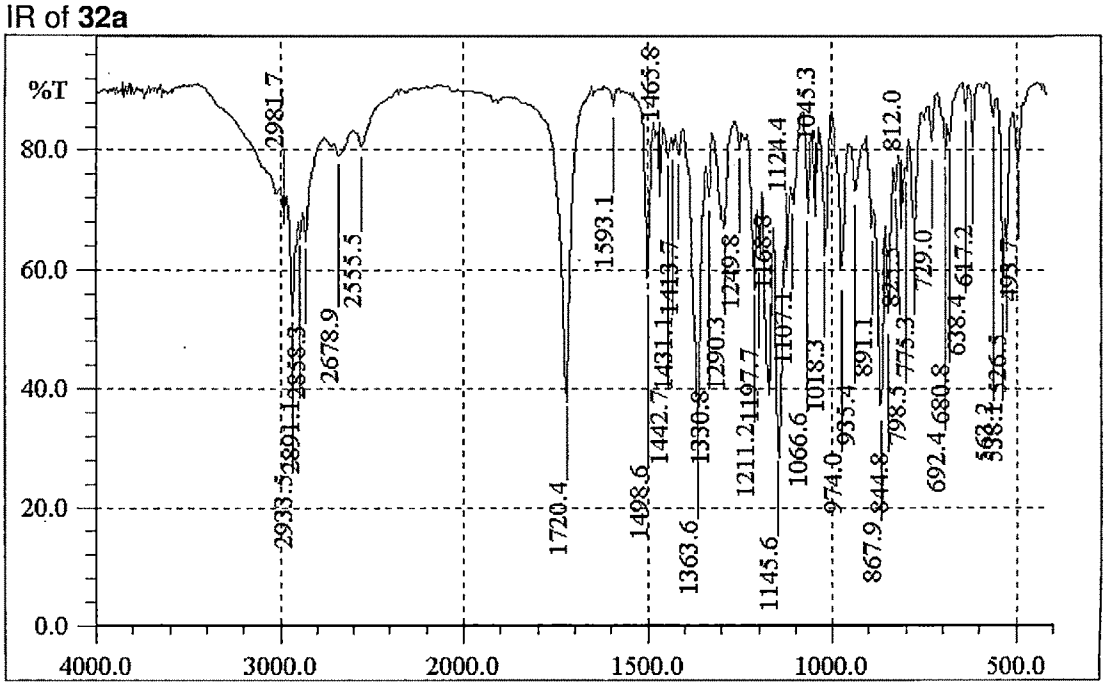
IR of **28a**



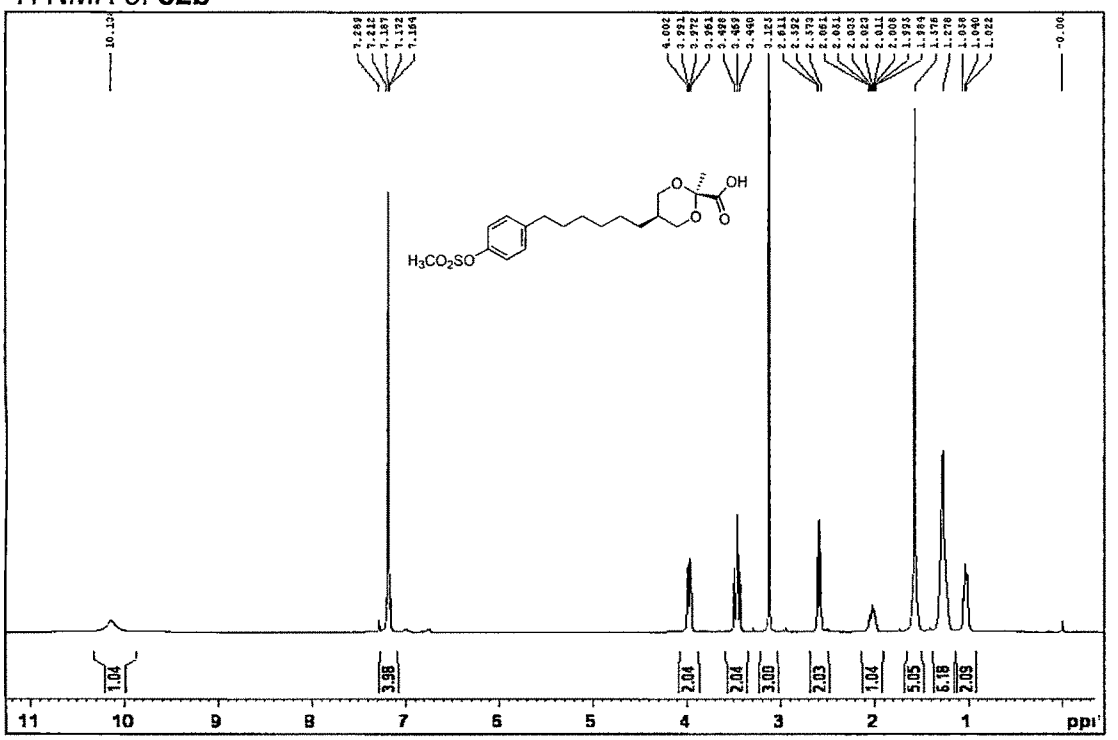
1H NMR of **32a**



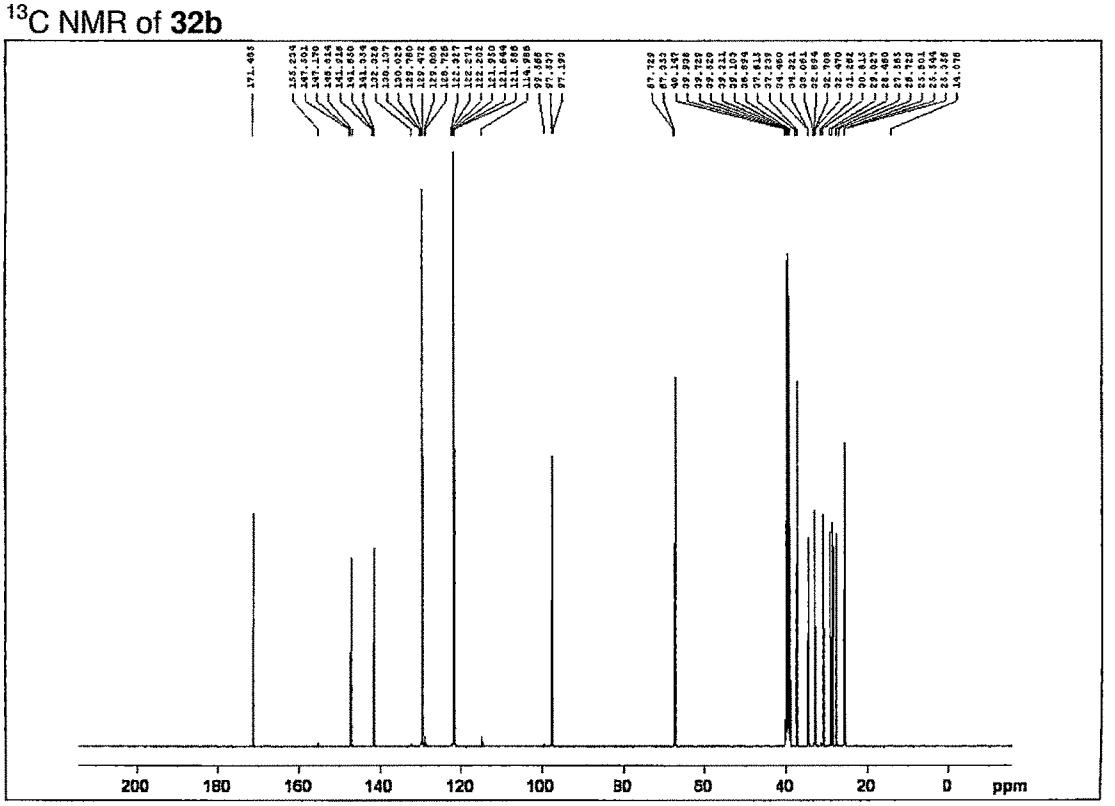
IR of **32a**



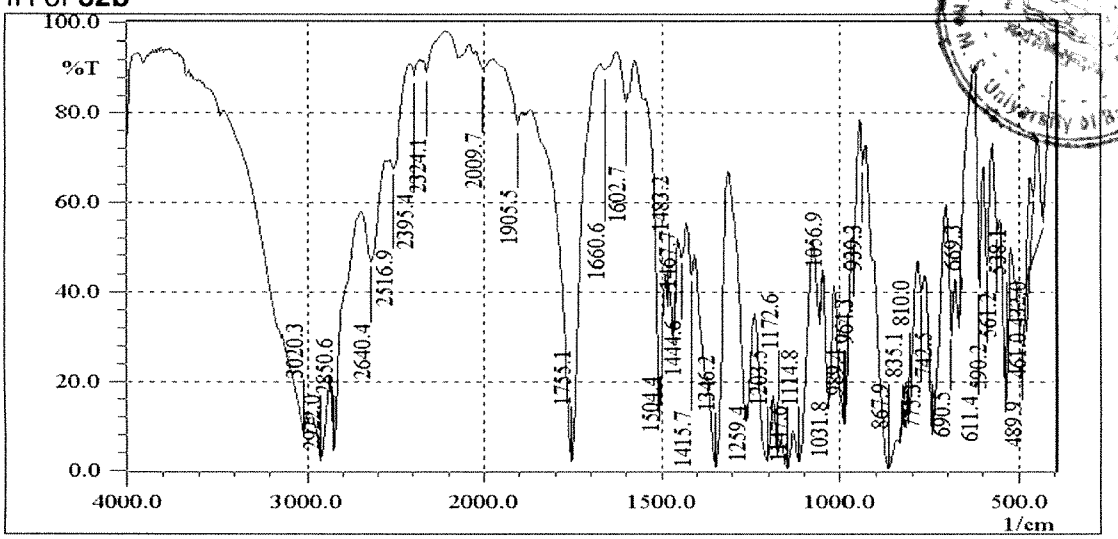
^{1}H NMR of **32b**



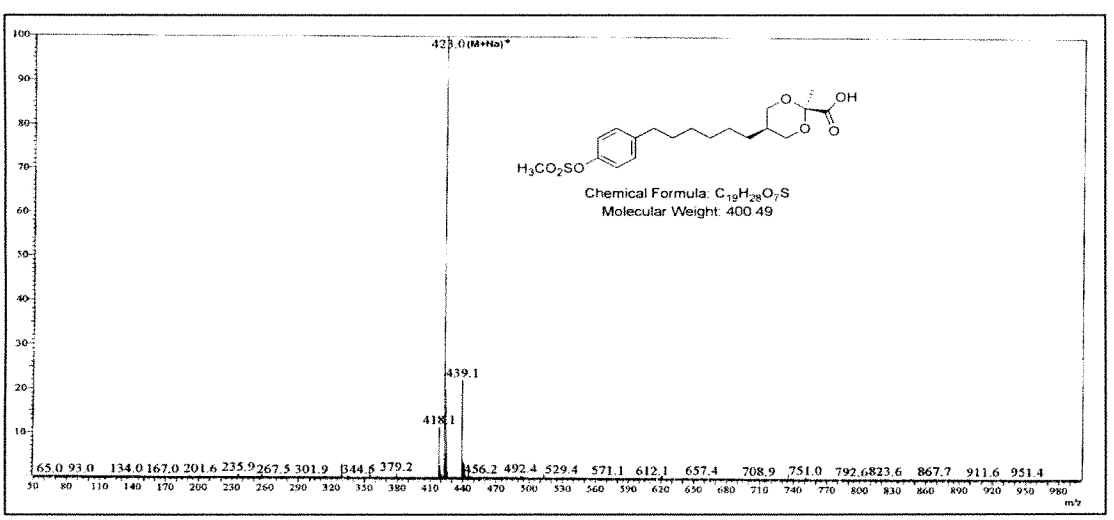
^{13}C NMR of **32b**



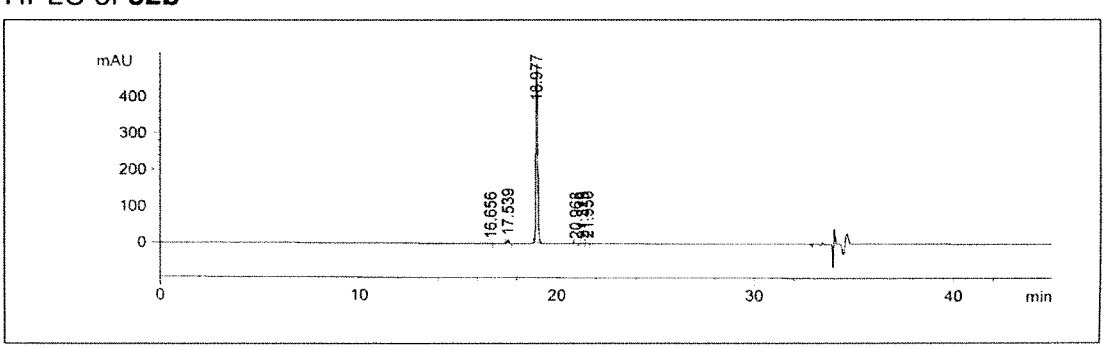
IR of **32b**



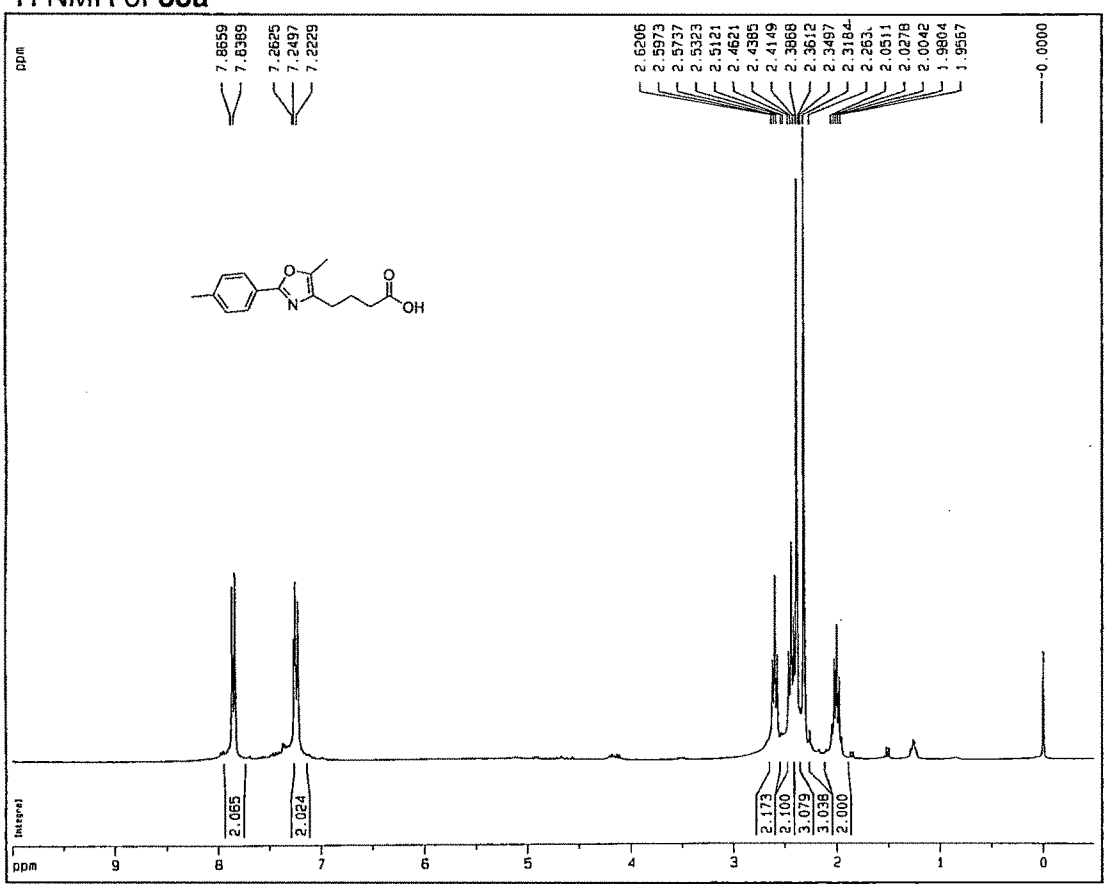
ESI-MS of **32b**



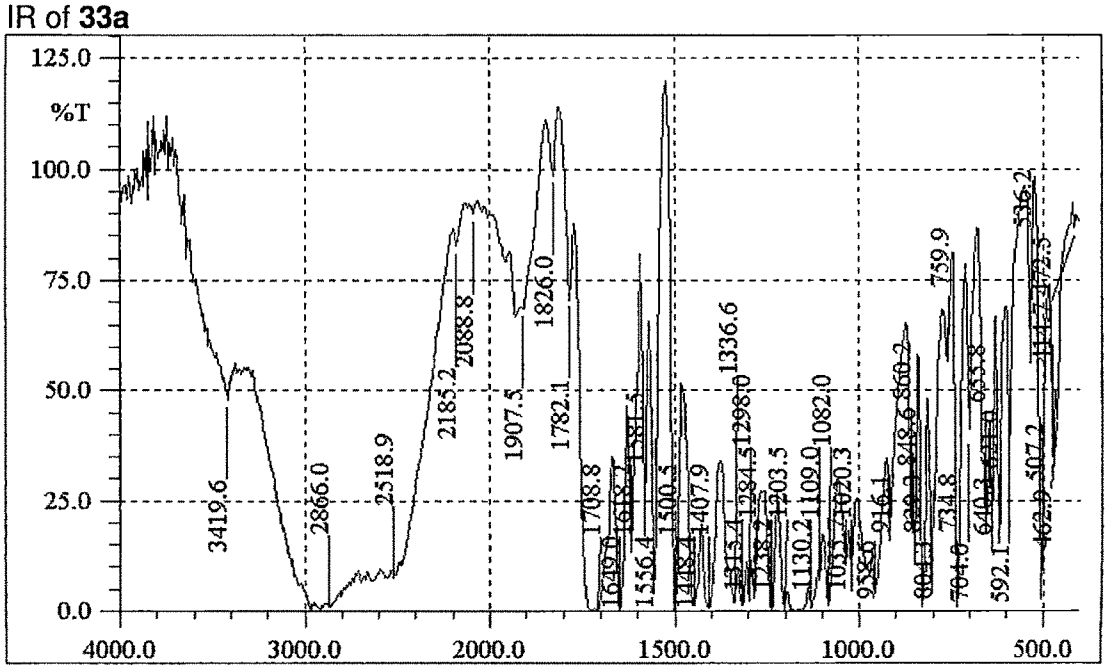
HPLC of **32b**



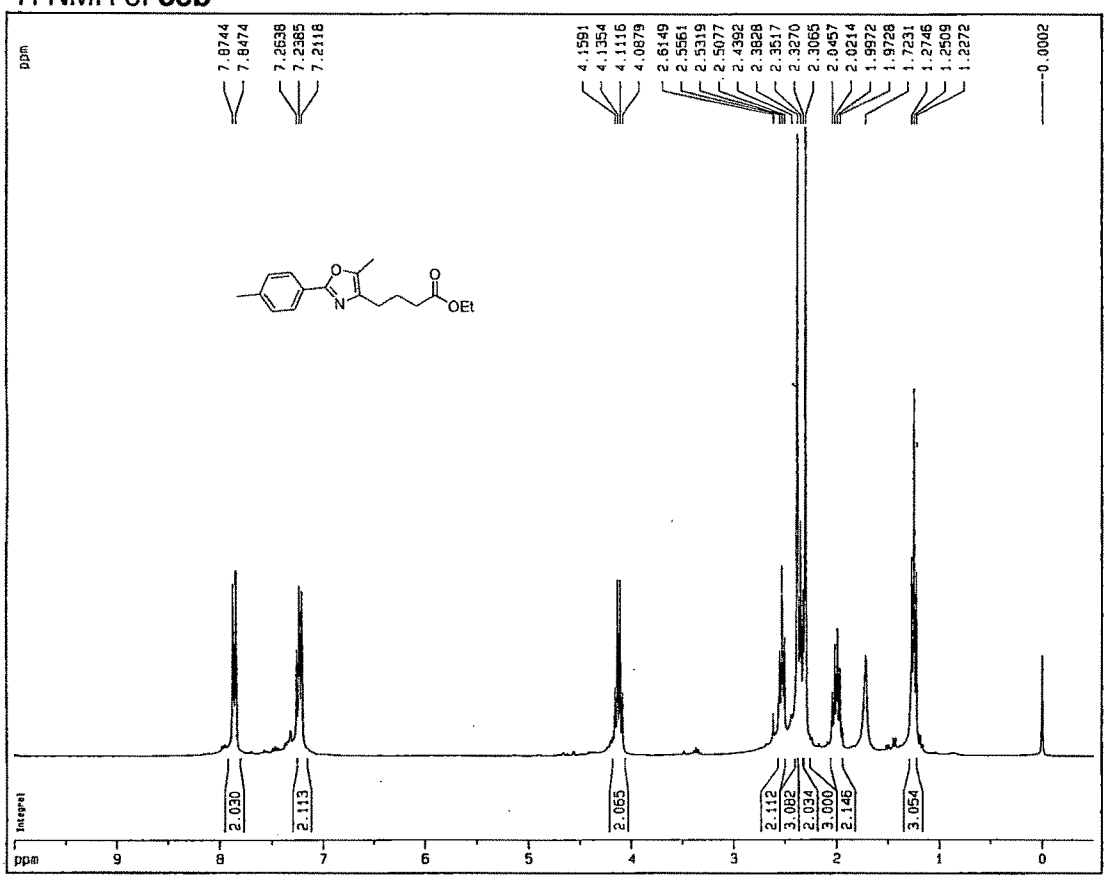
^{1}H NMR of **33a**



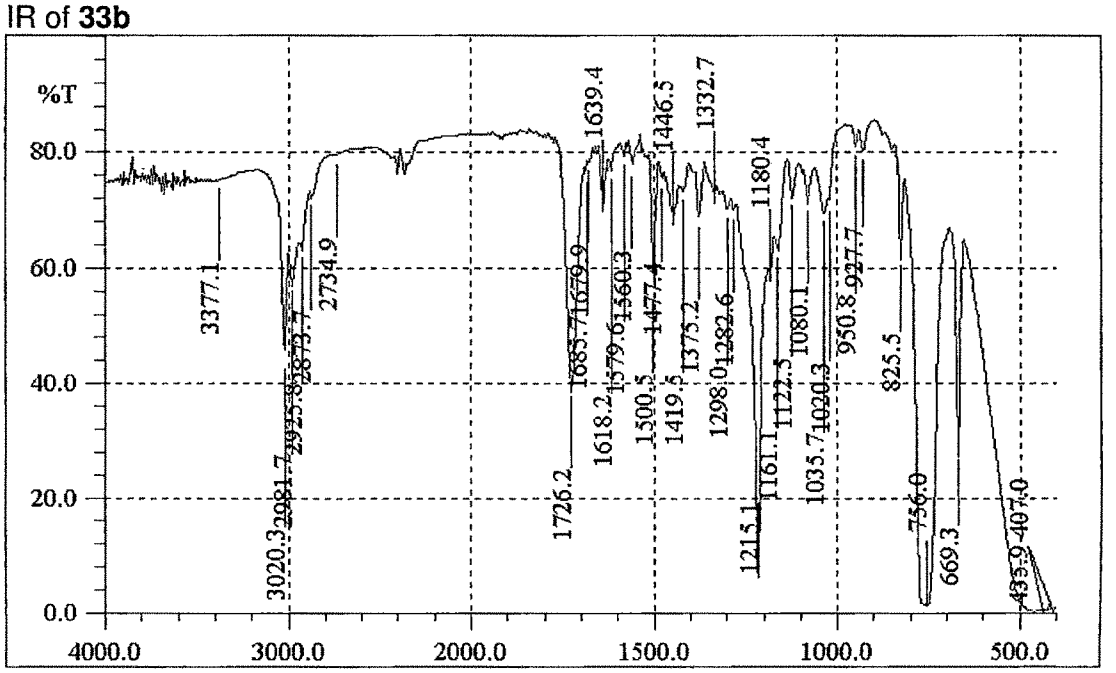
IR of **33a**



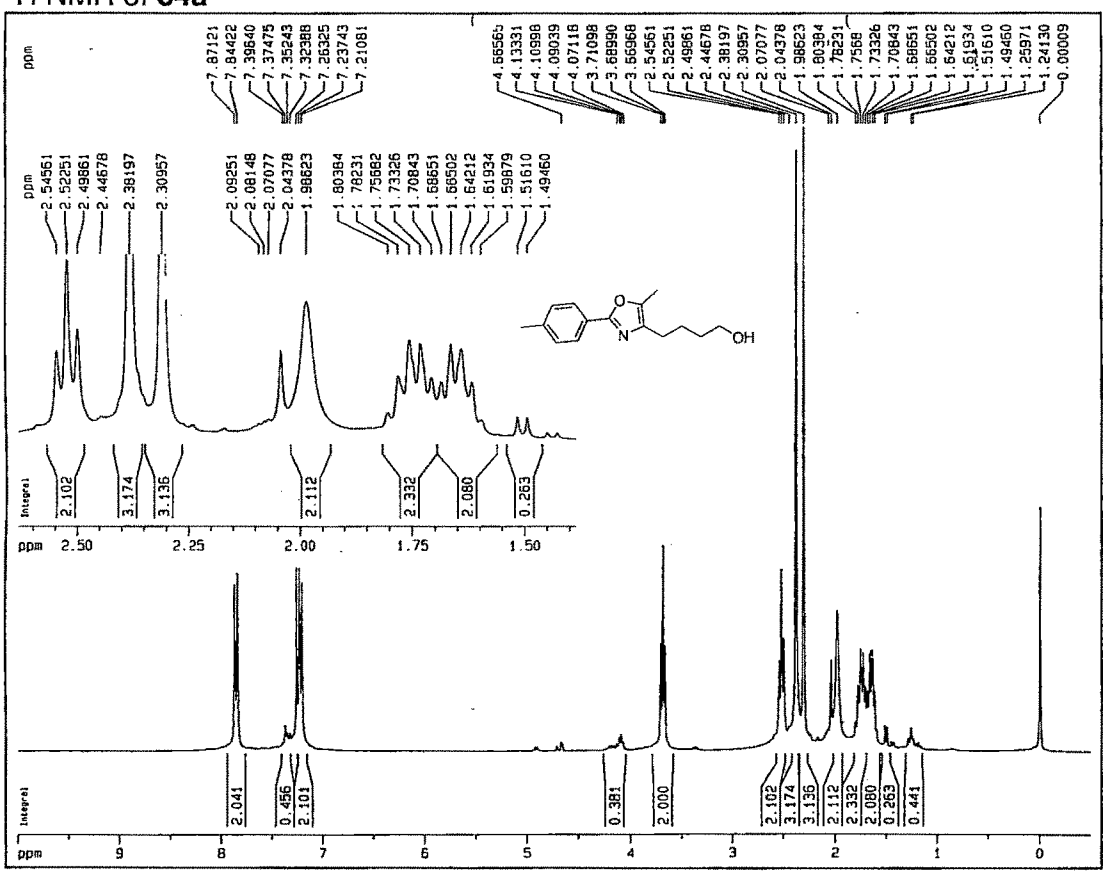
^{1}H NMR of **33b**



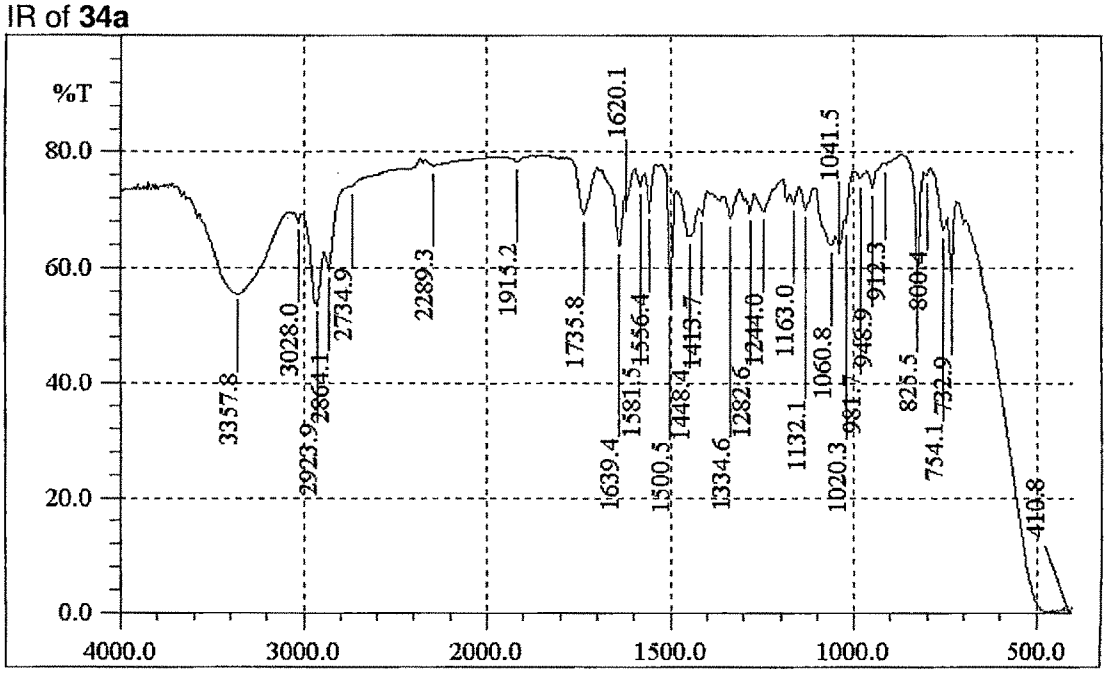
IR of **33b**



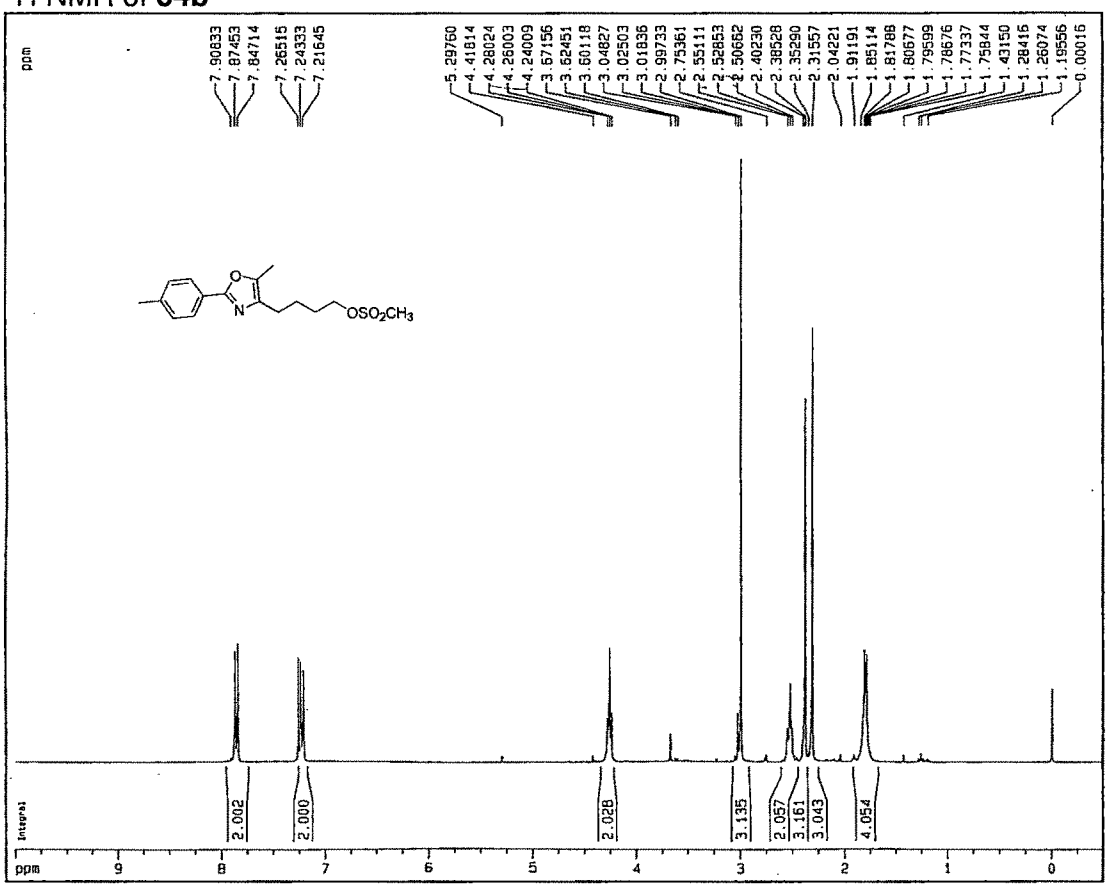
^{1}H NMR of **34a**



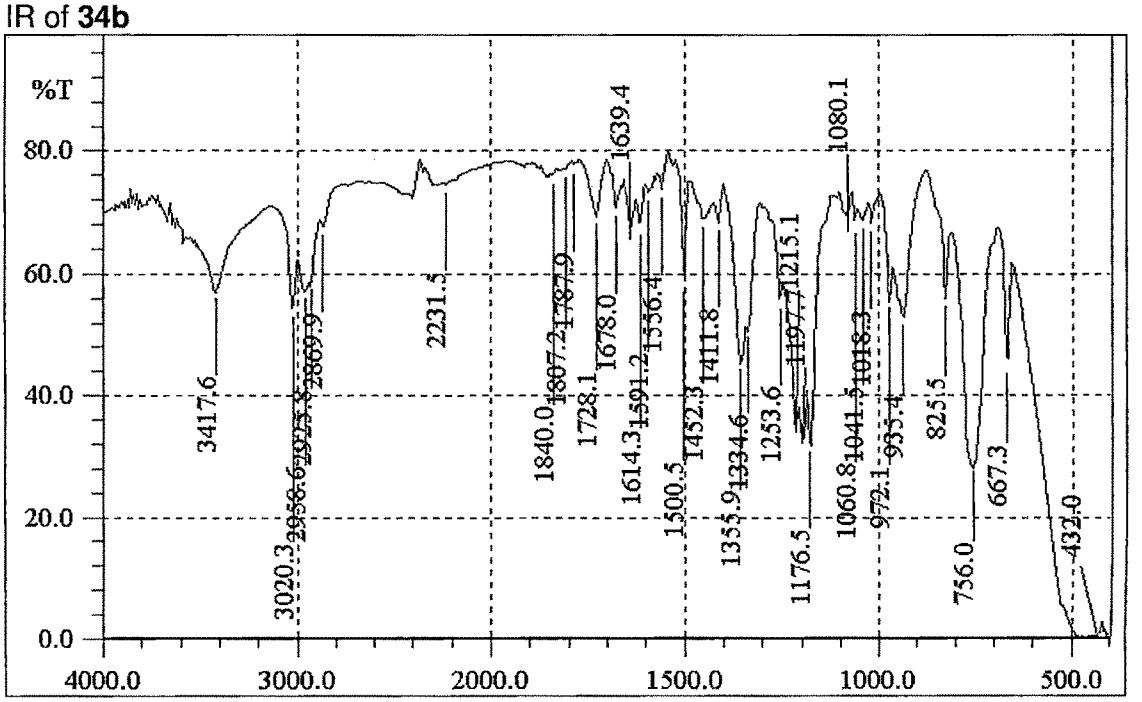
IR of **34a**



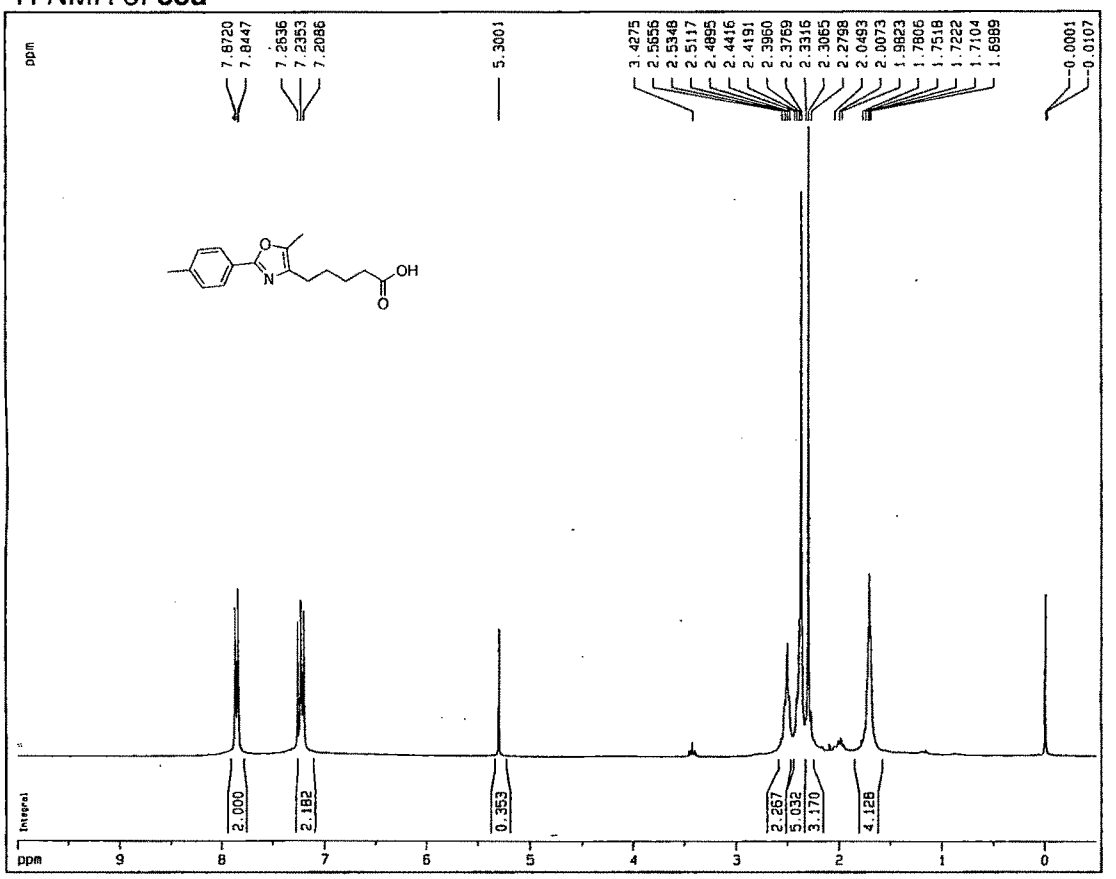
^{1}H NMR of **34b**



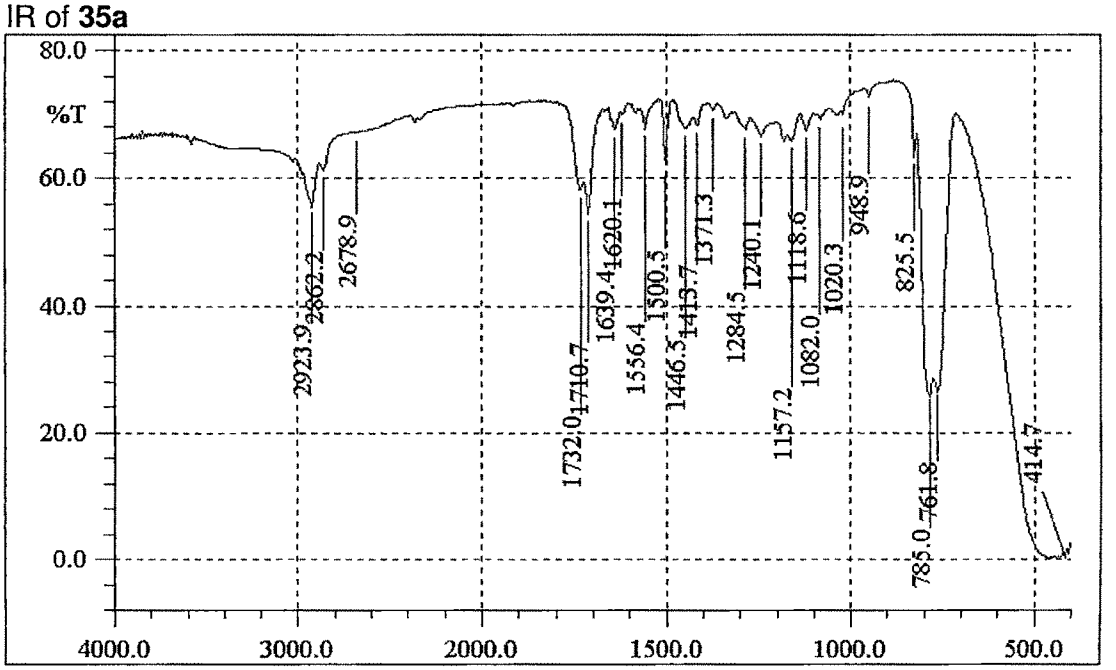
IR of **34b**



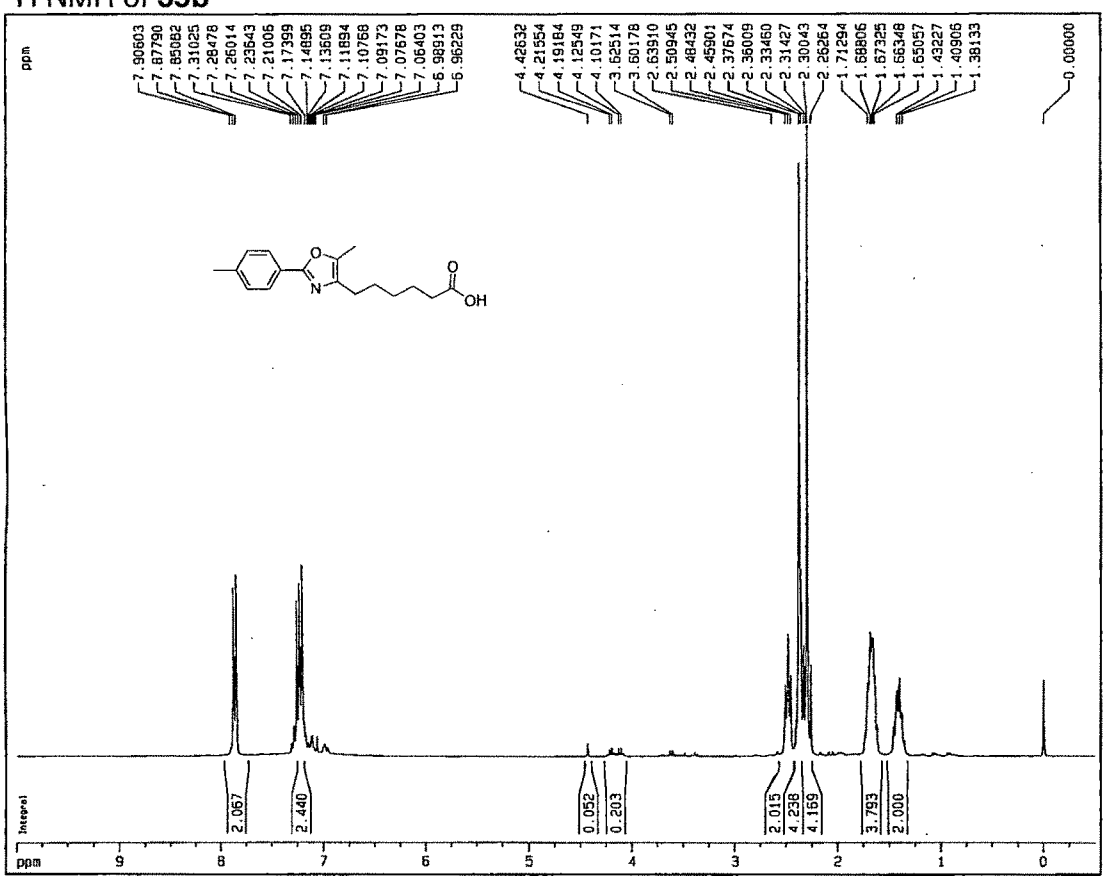
^{1}H NMR of **35a**



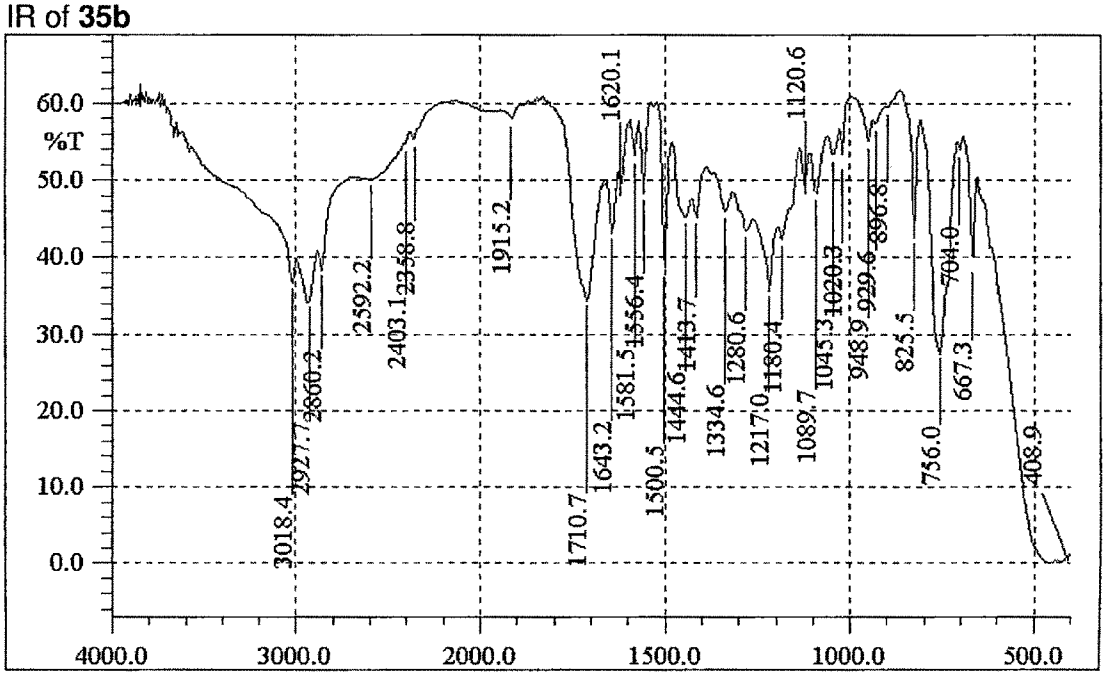
IR of **35a**



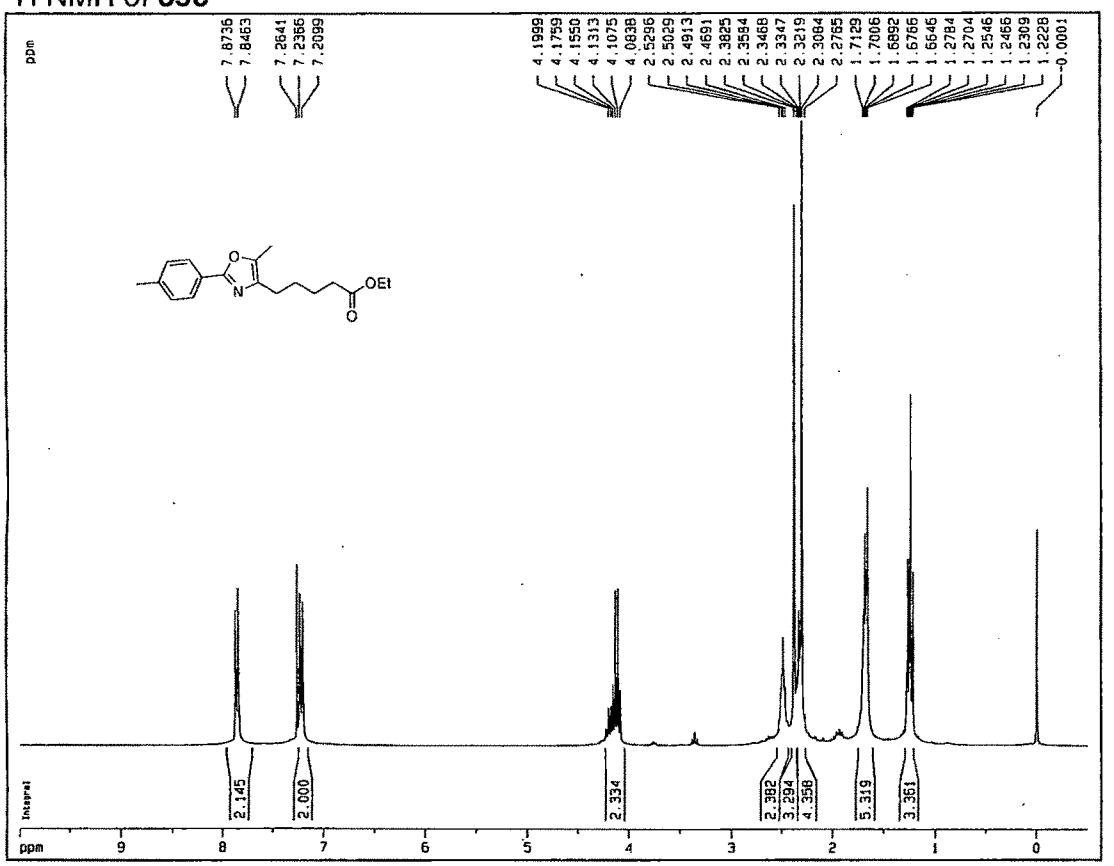
^{1}H NMR of **35b**



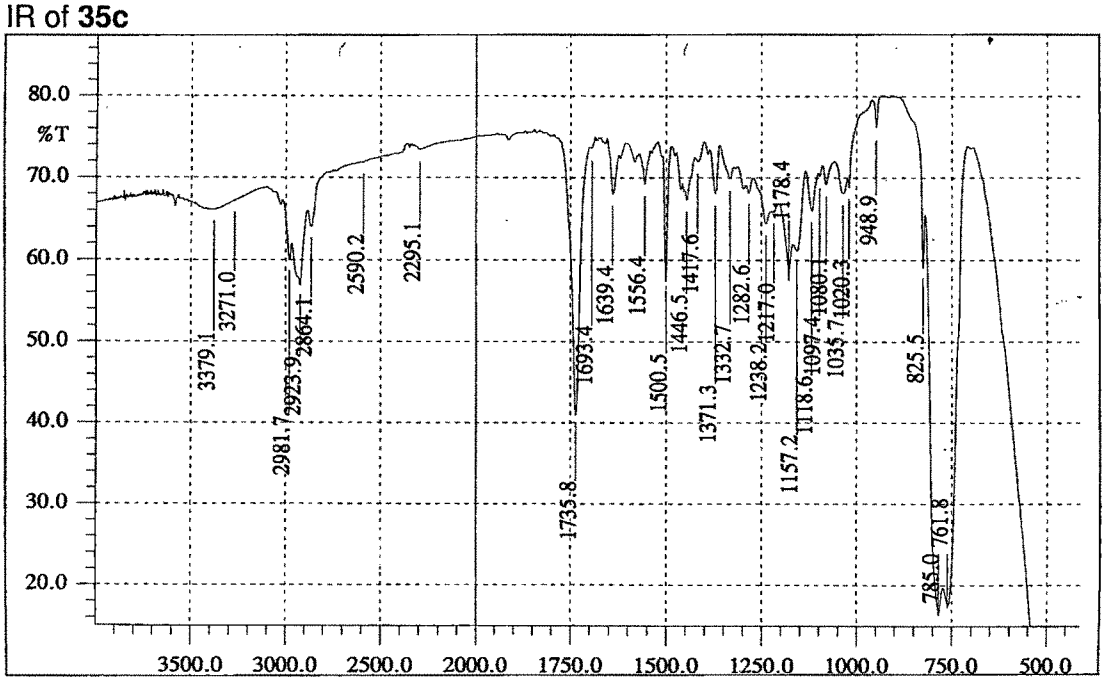
IR of **35b**



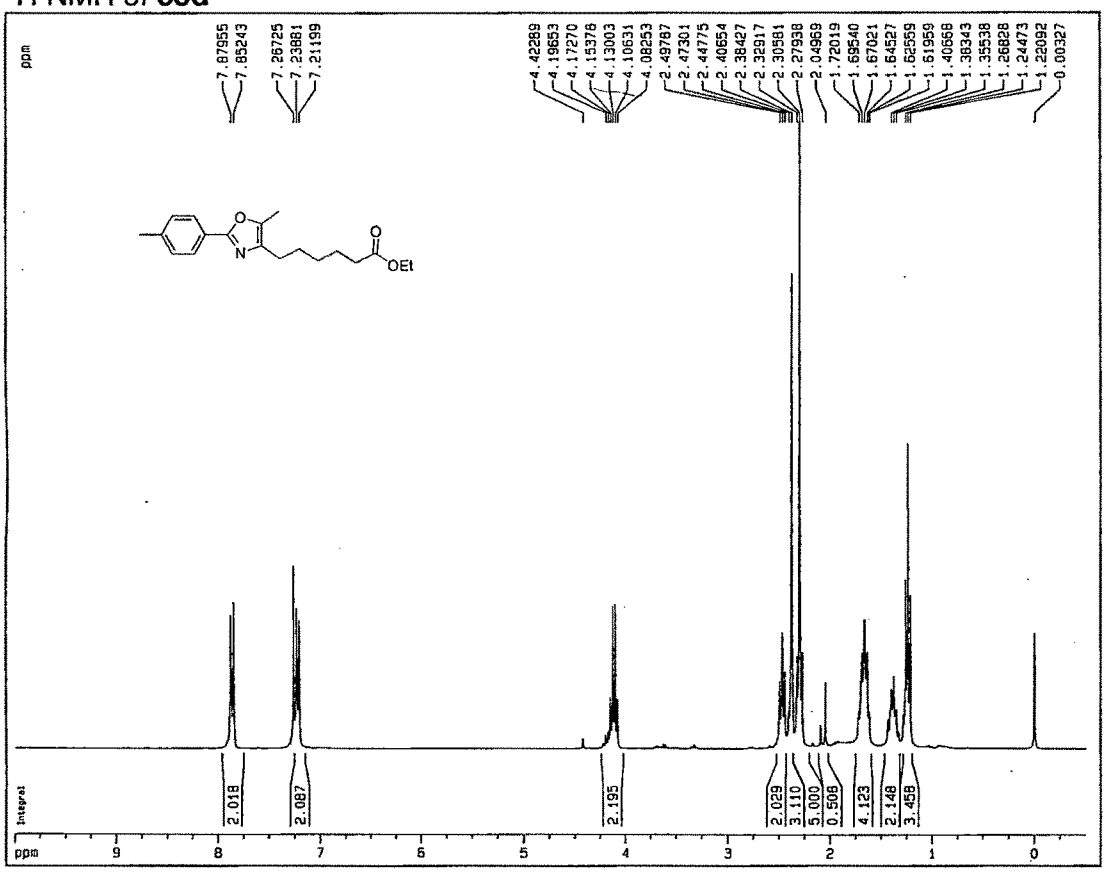
^{1}H NMR of **35c**



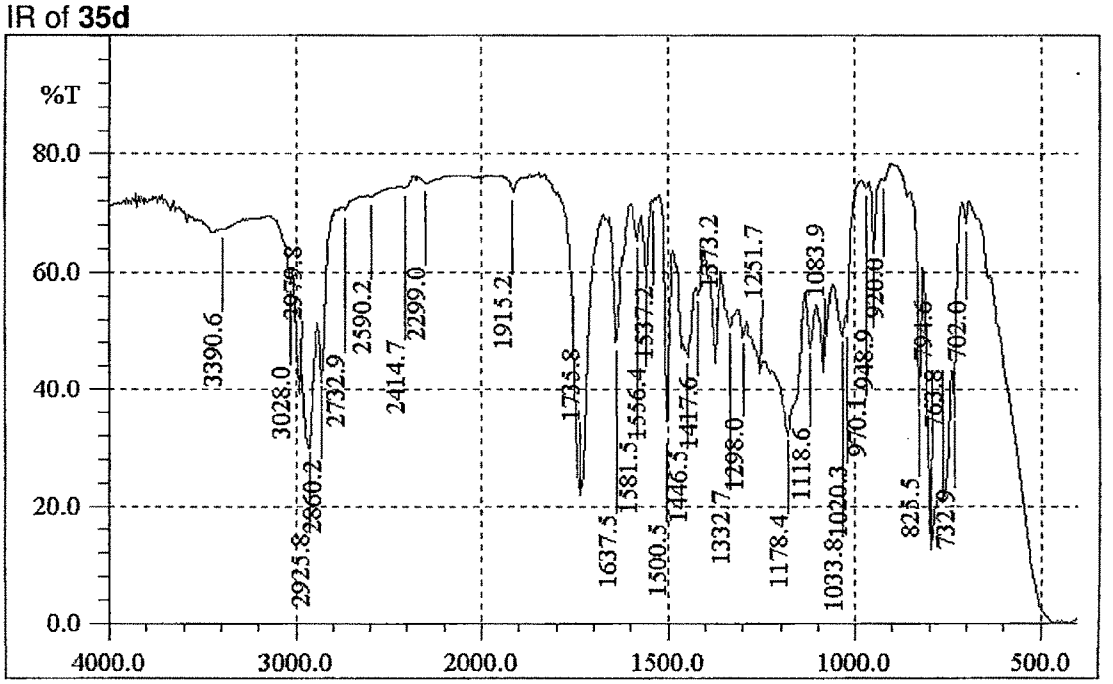
IR of **35c**



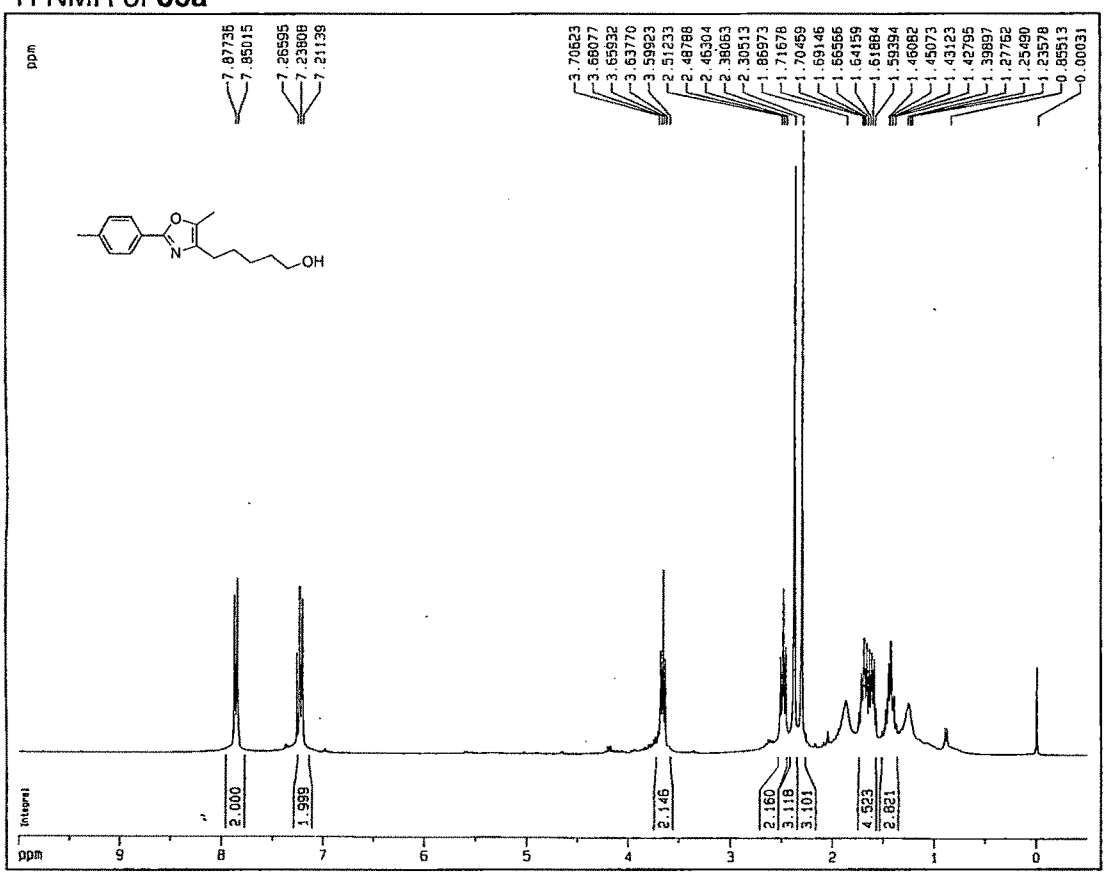
^{1}H NMR of **35d**



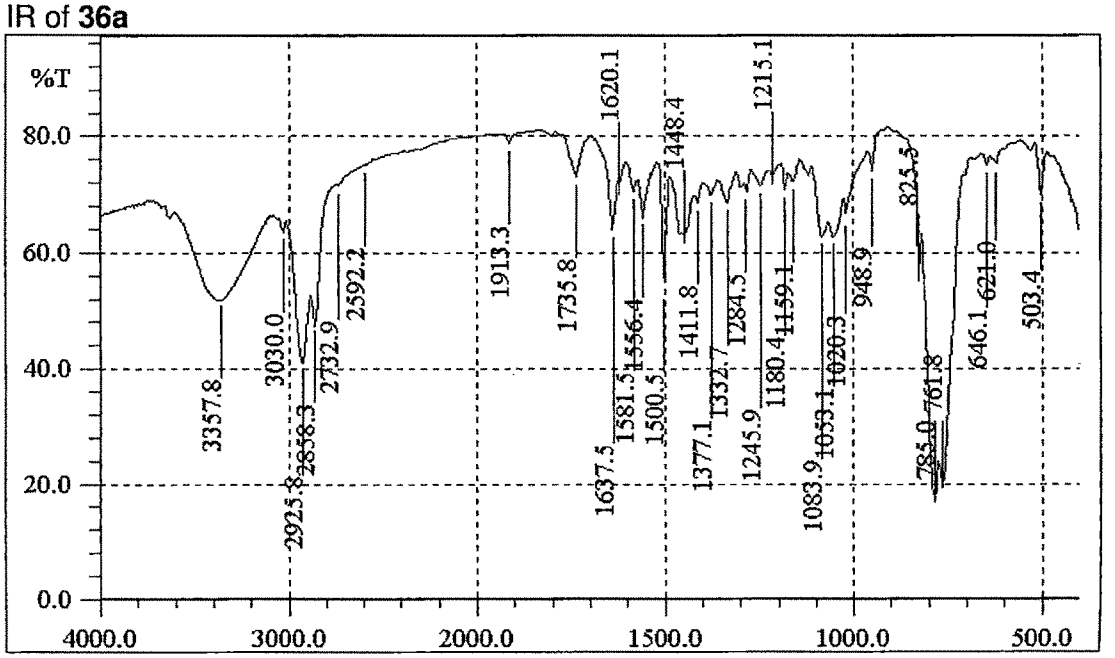
IR of **35d**



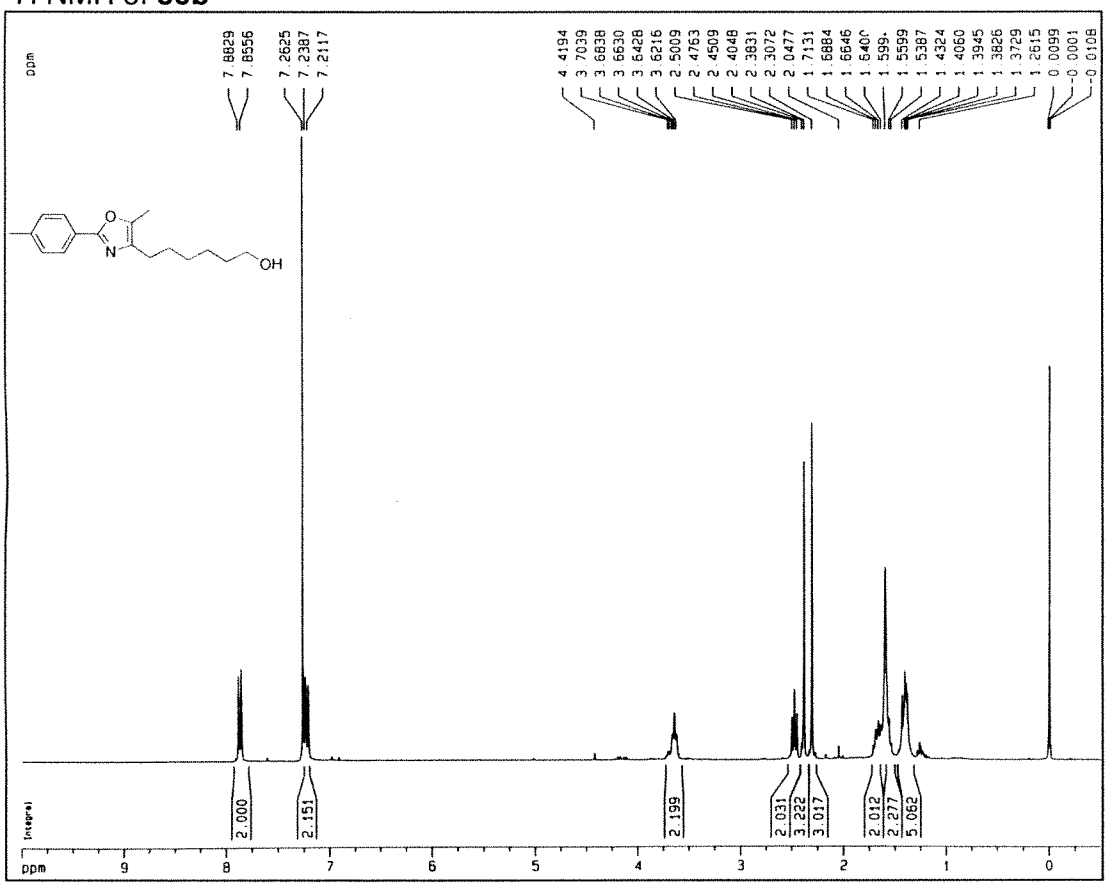
^{1}H NMR of **36a**



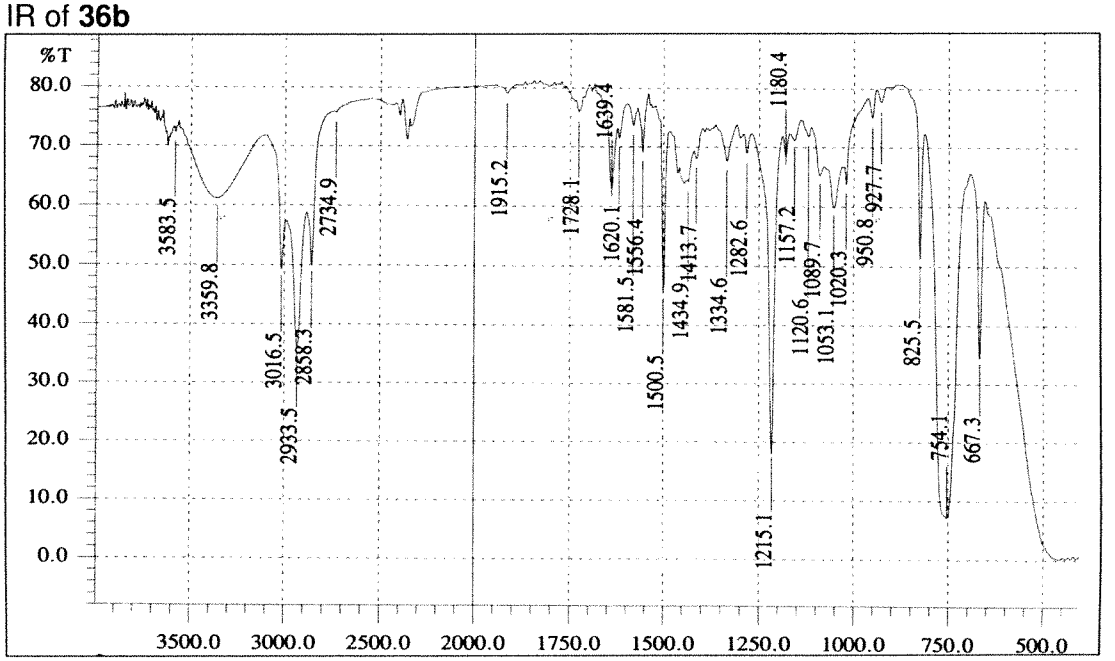
IR of **36a**



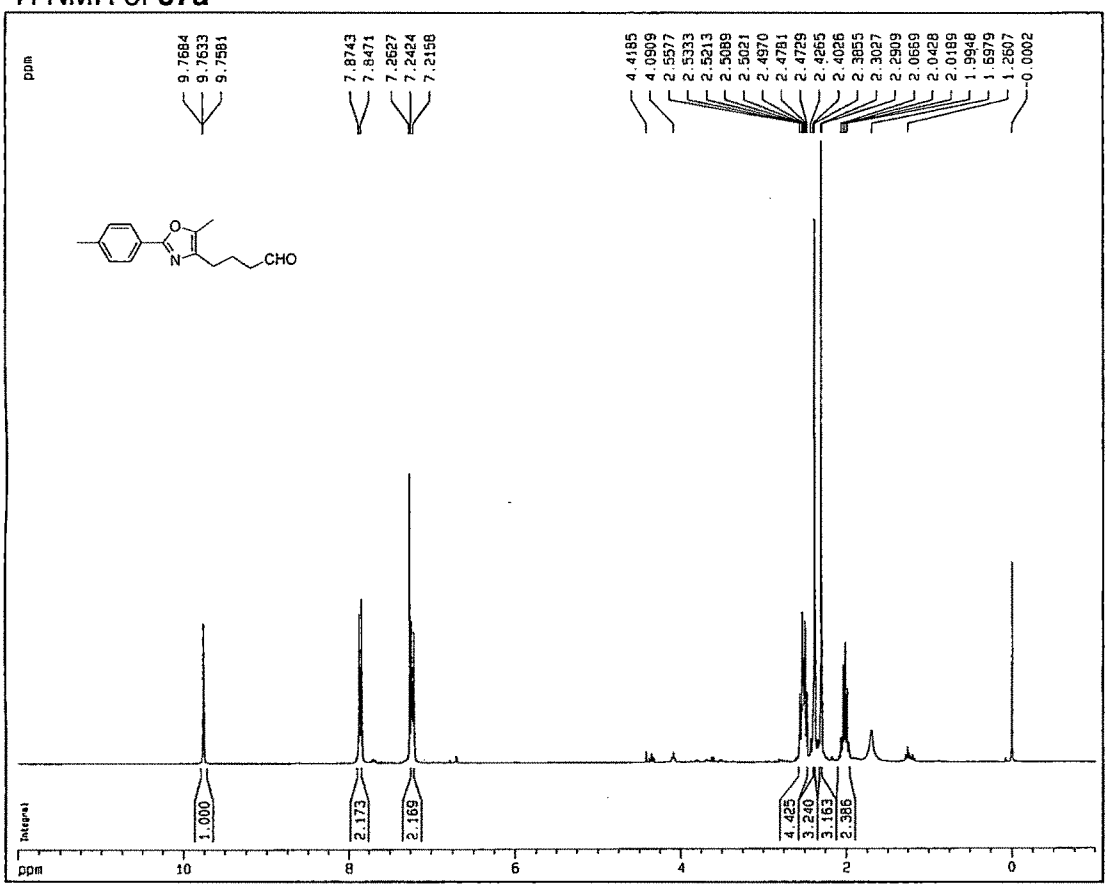
^{1}H NMR of **36b**



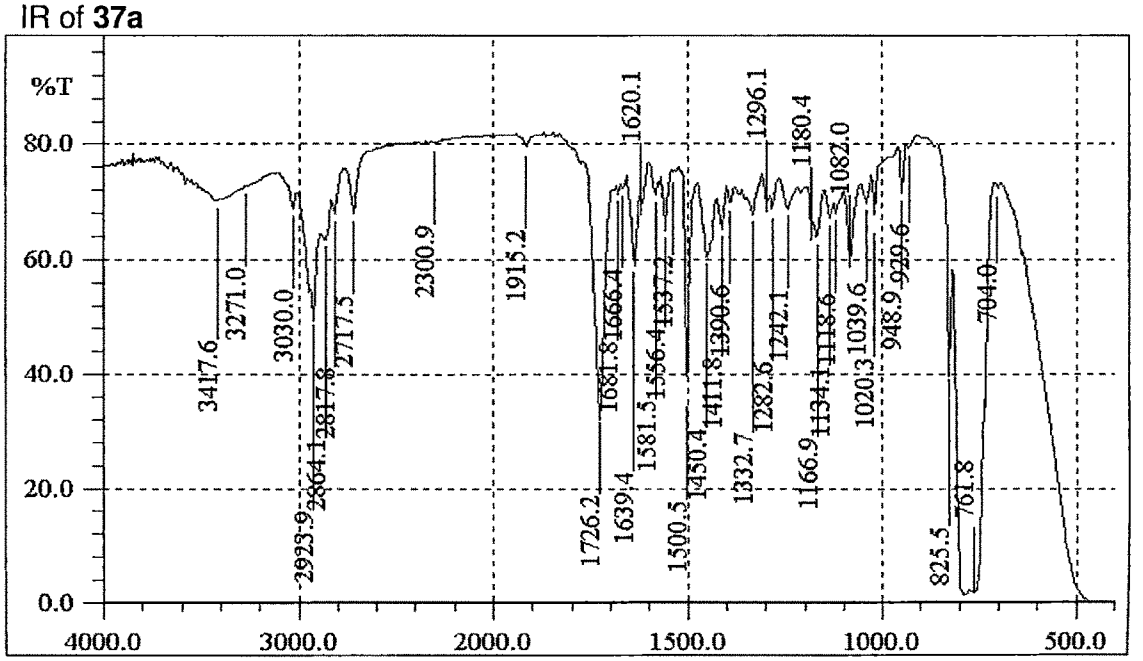
IR of **36b**



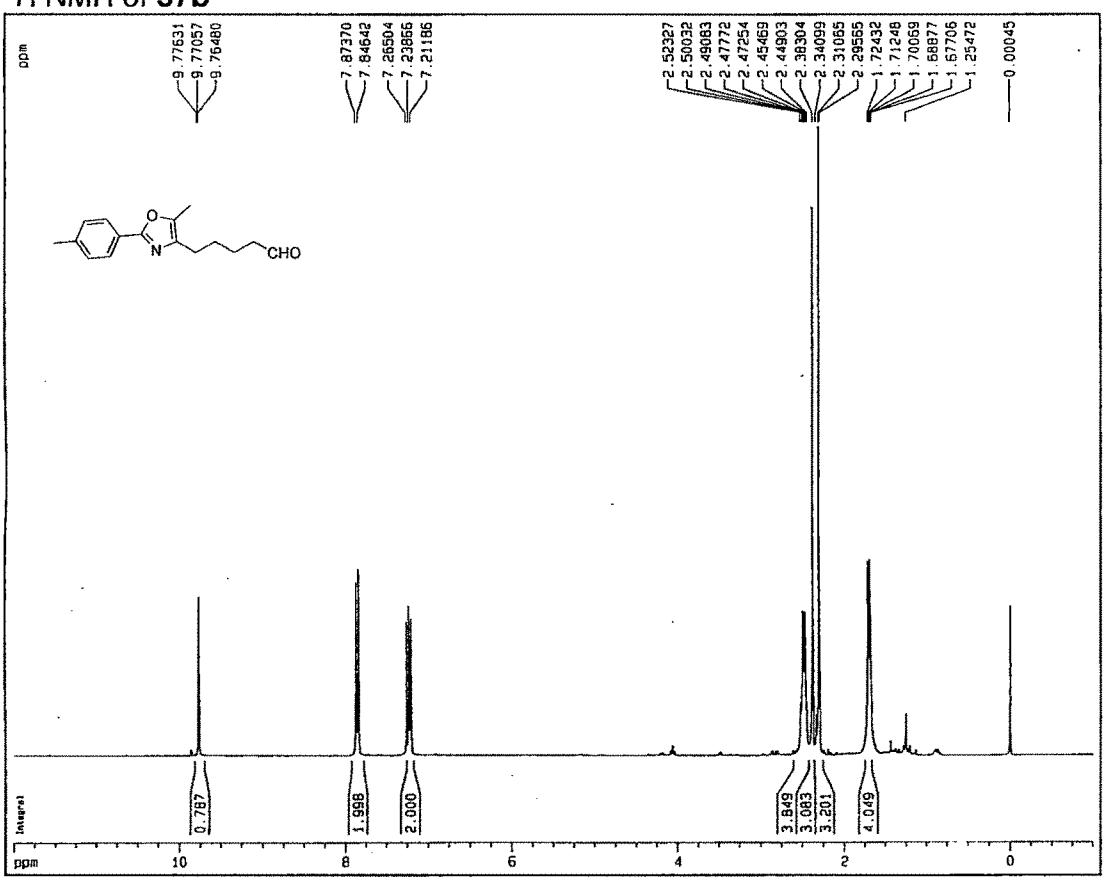
^{1}H NMR of **37a**



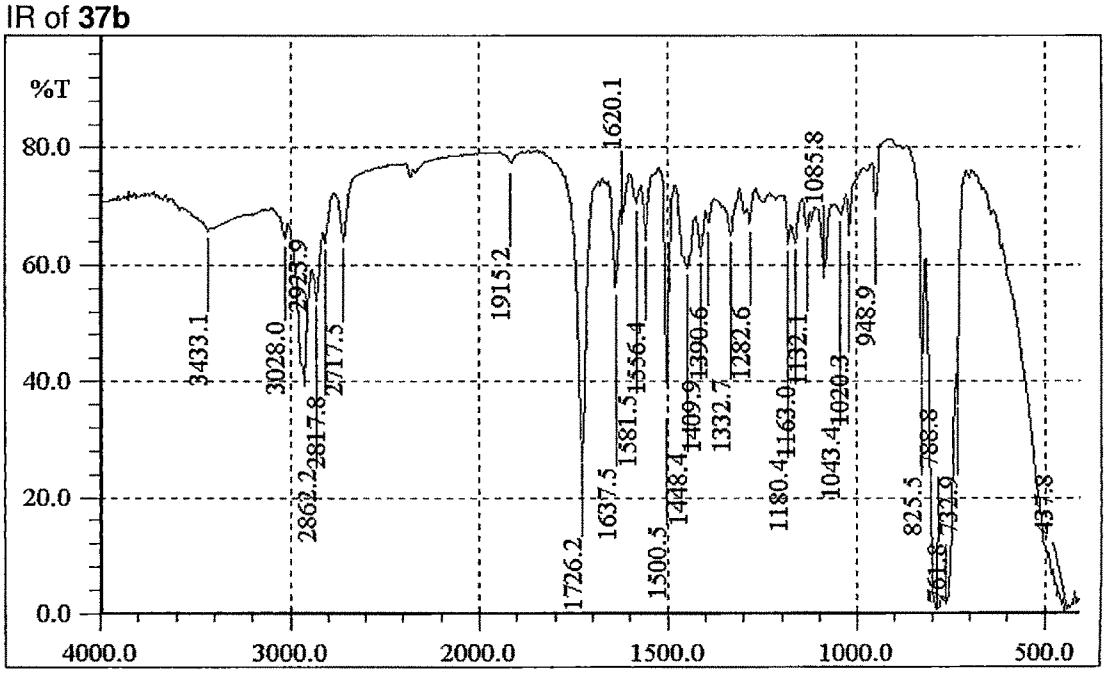
IR of **37a**



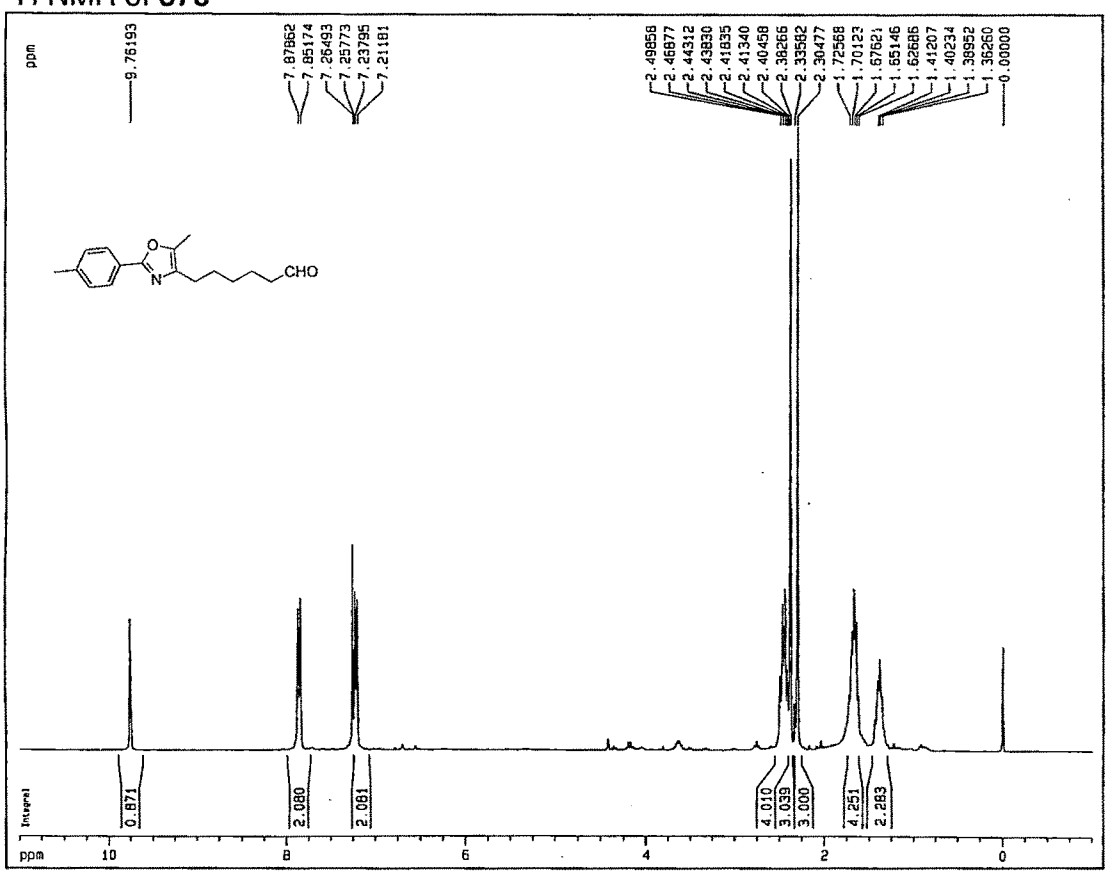
^{1}H NMR of **37b**



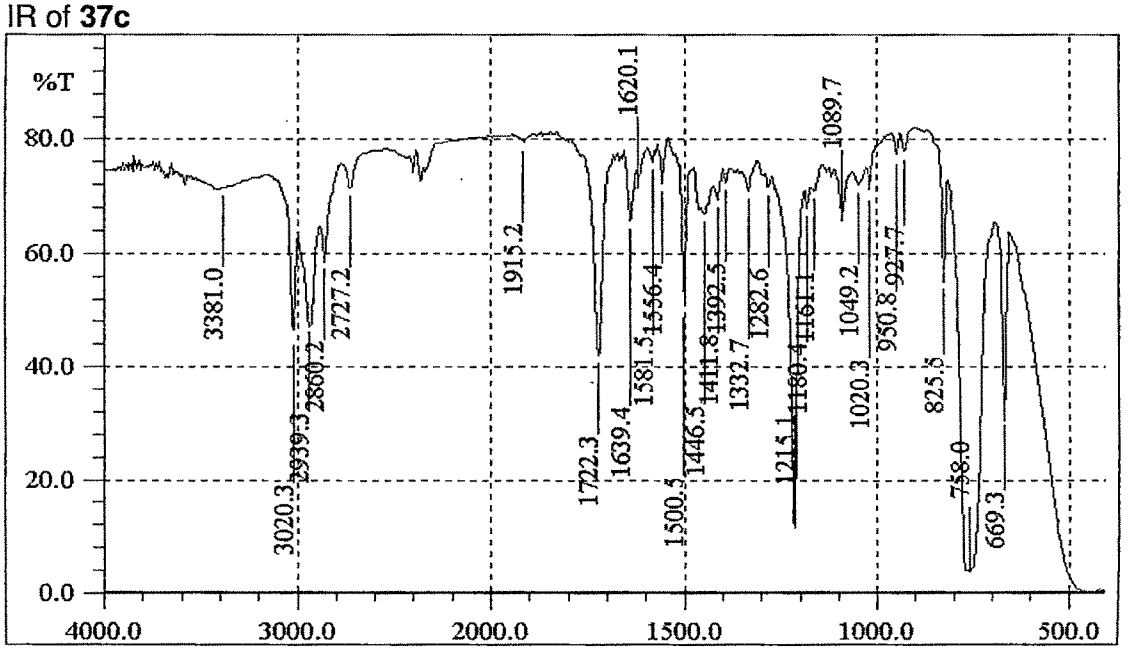
IR of **37b**



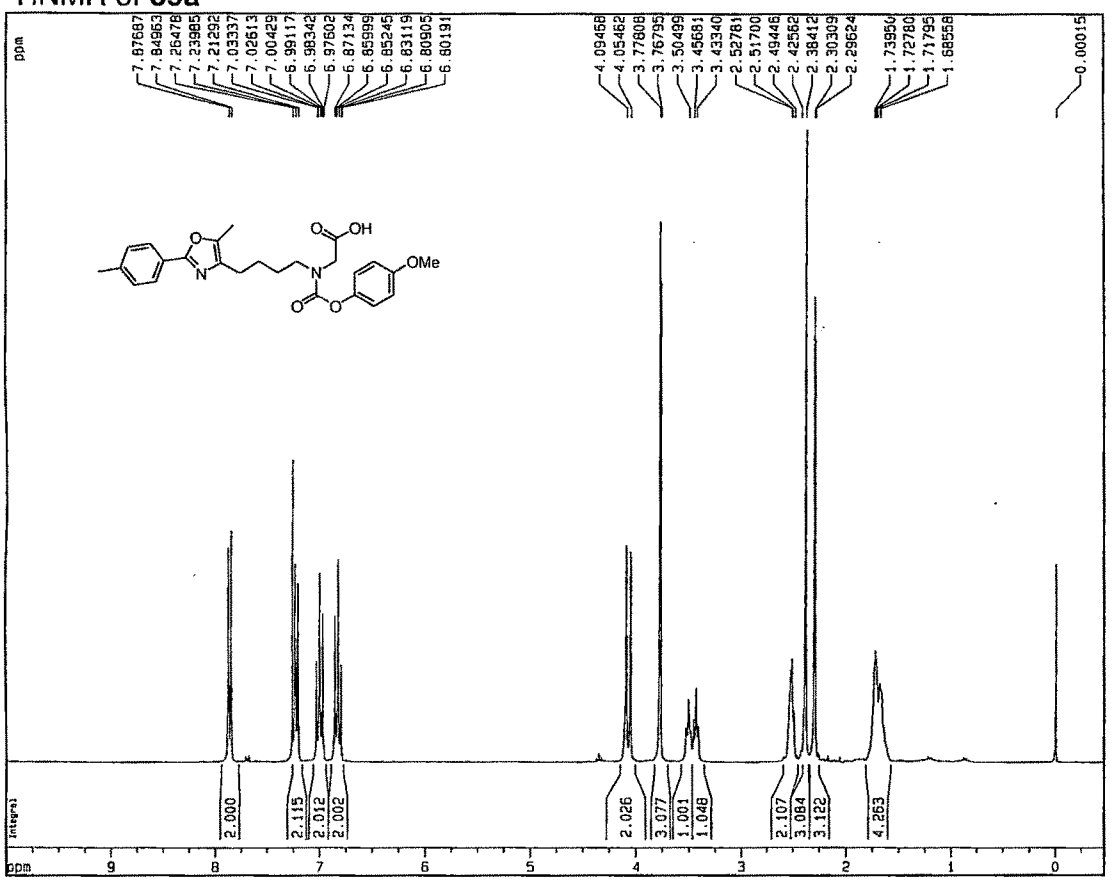
^{1}H NMR of **37c**



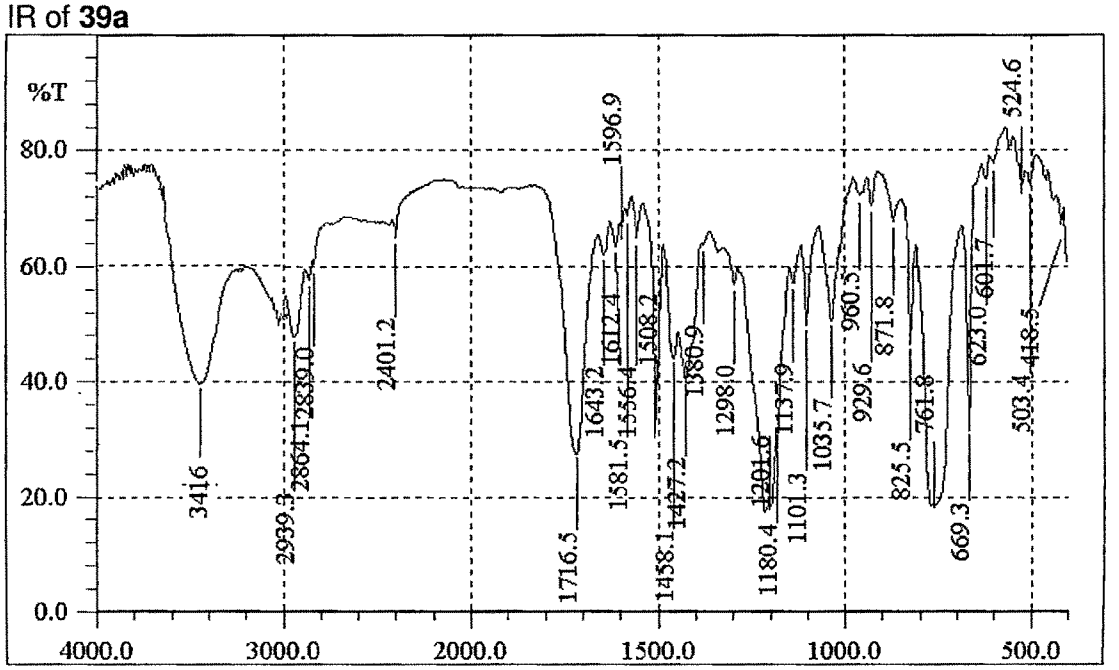
IR of **37c**



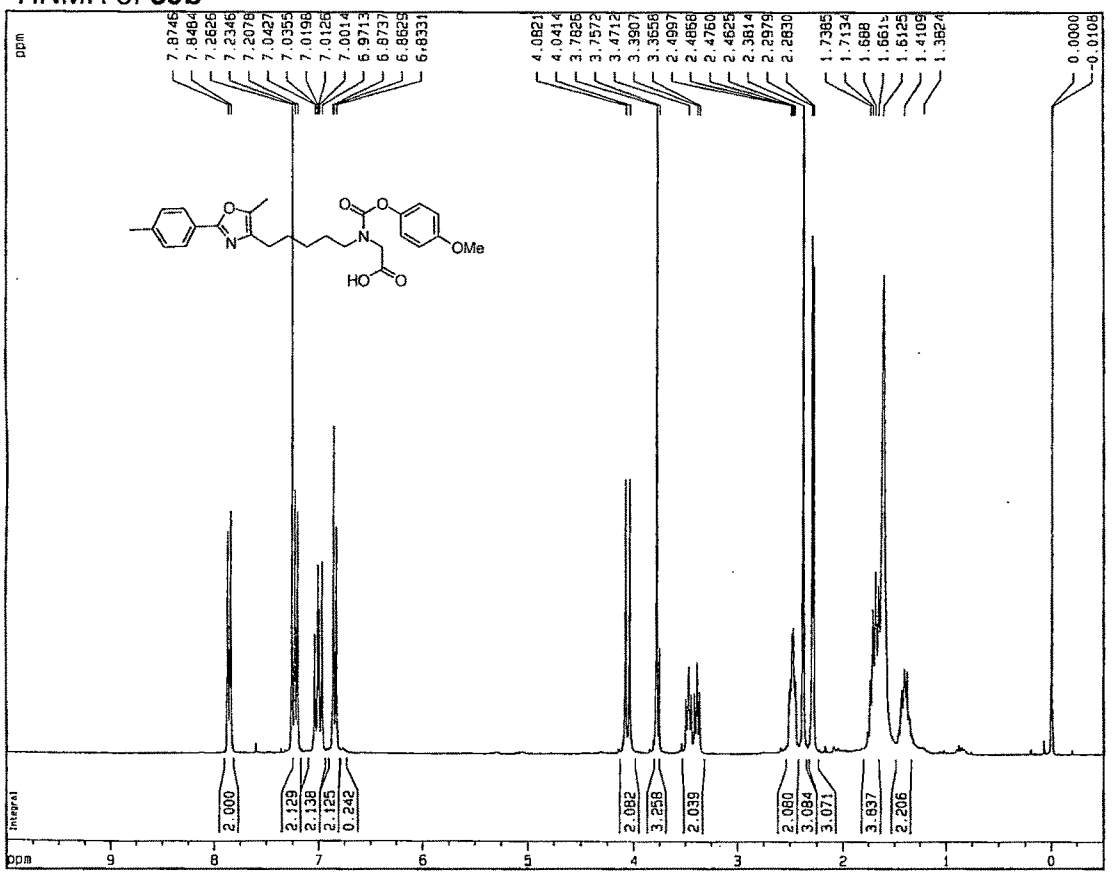
^{1}HNMR of **39a**



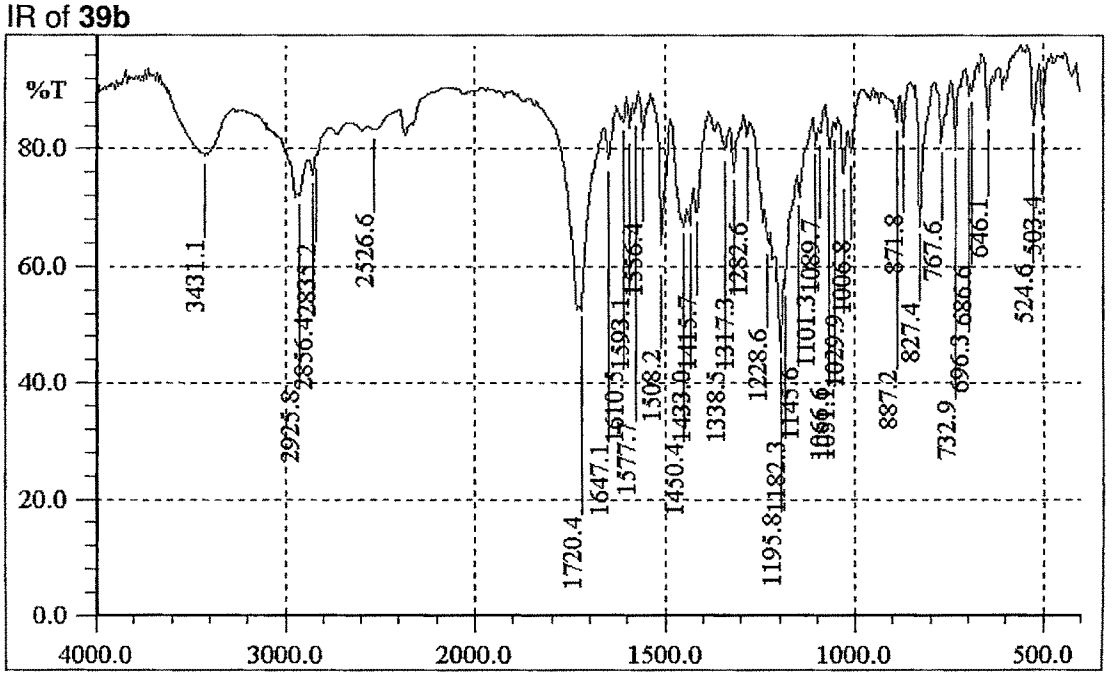
IR of **39a**



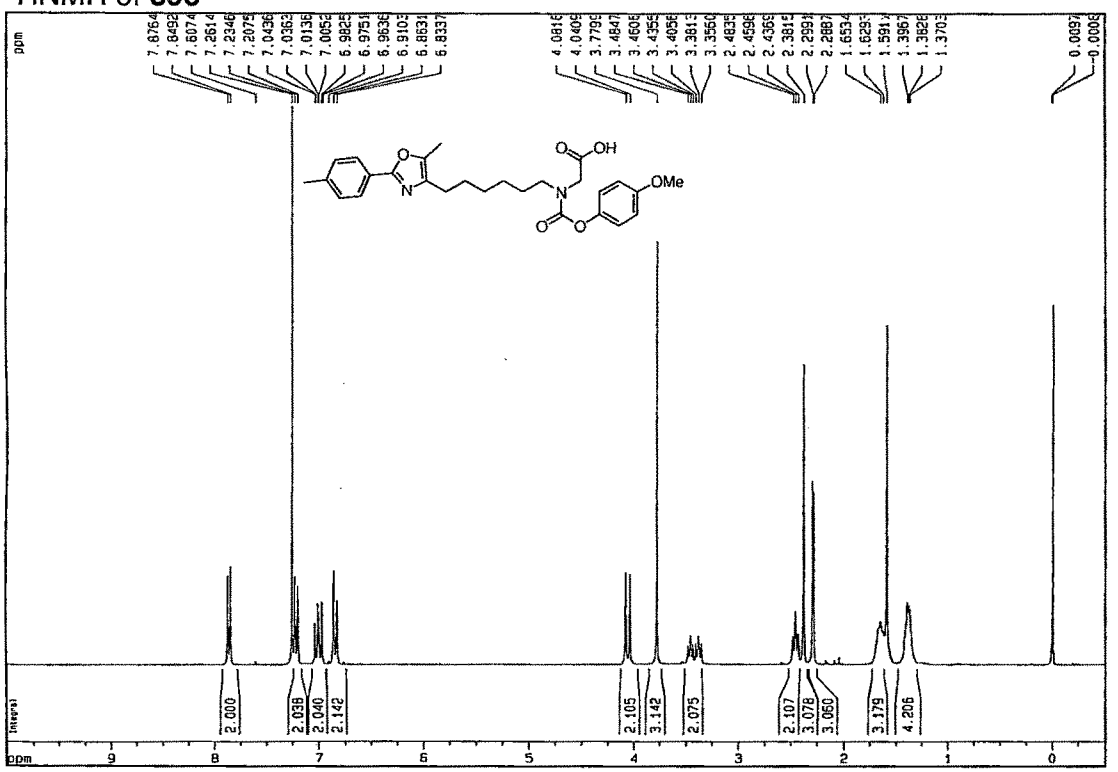
^{1}HNMR of **39b**



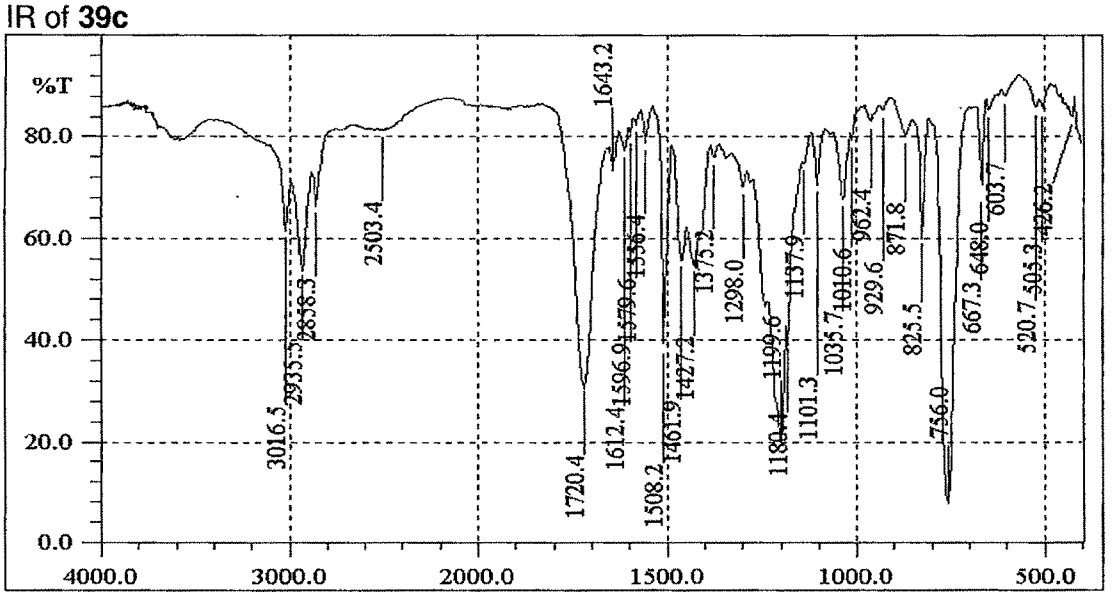
IR of **39b**



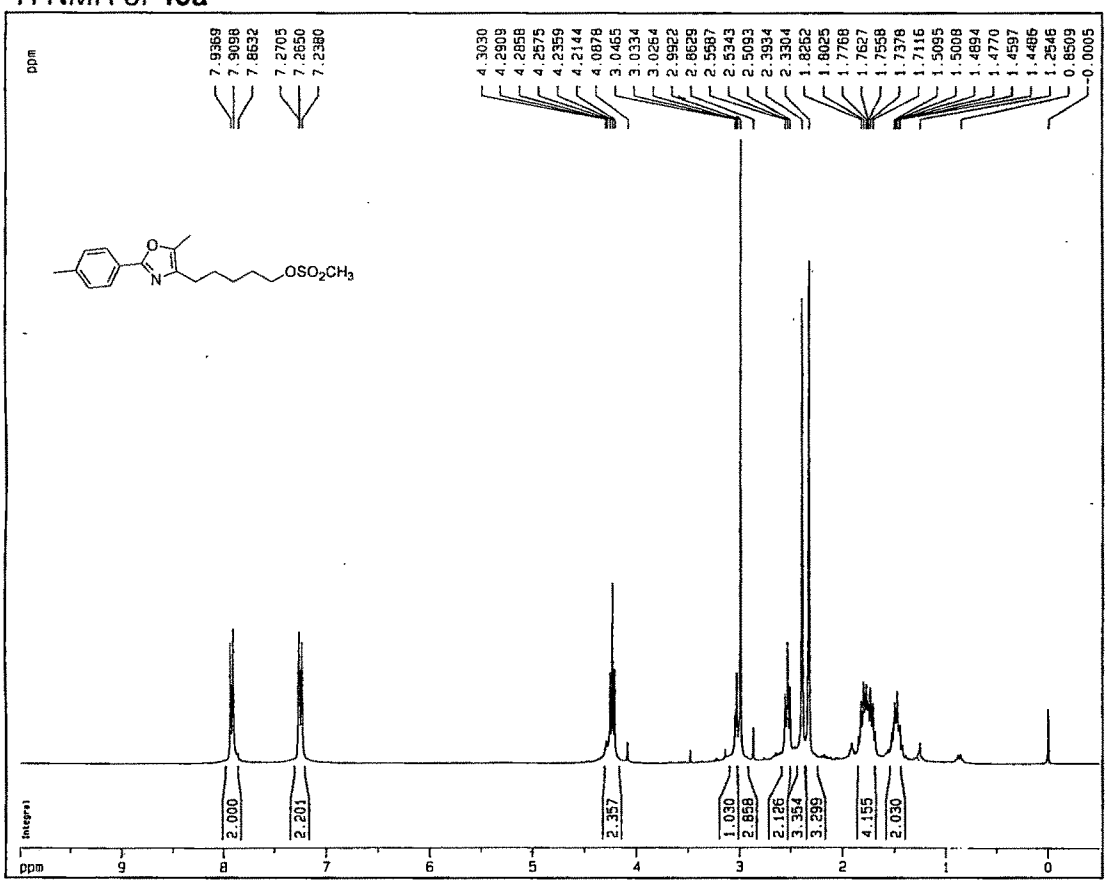
^{1}HNMR of **39c**



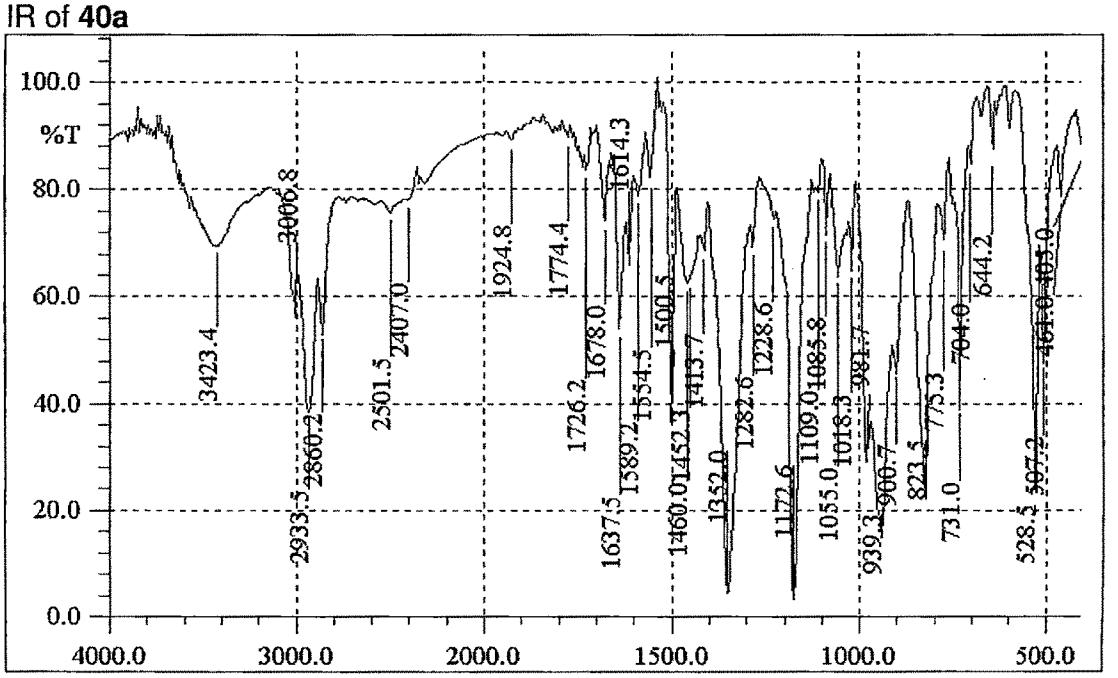
IR of **39c**



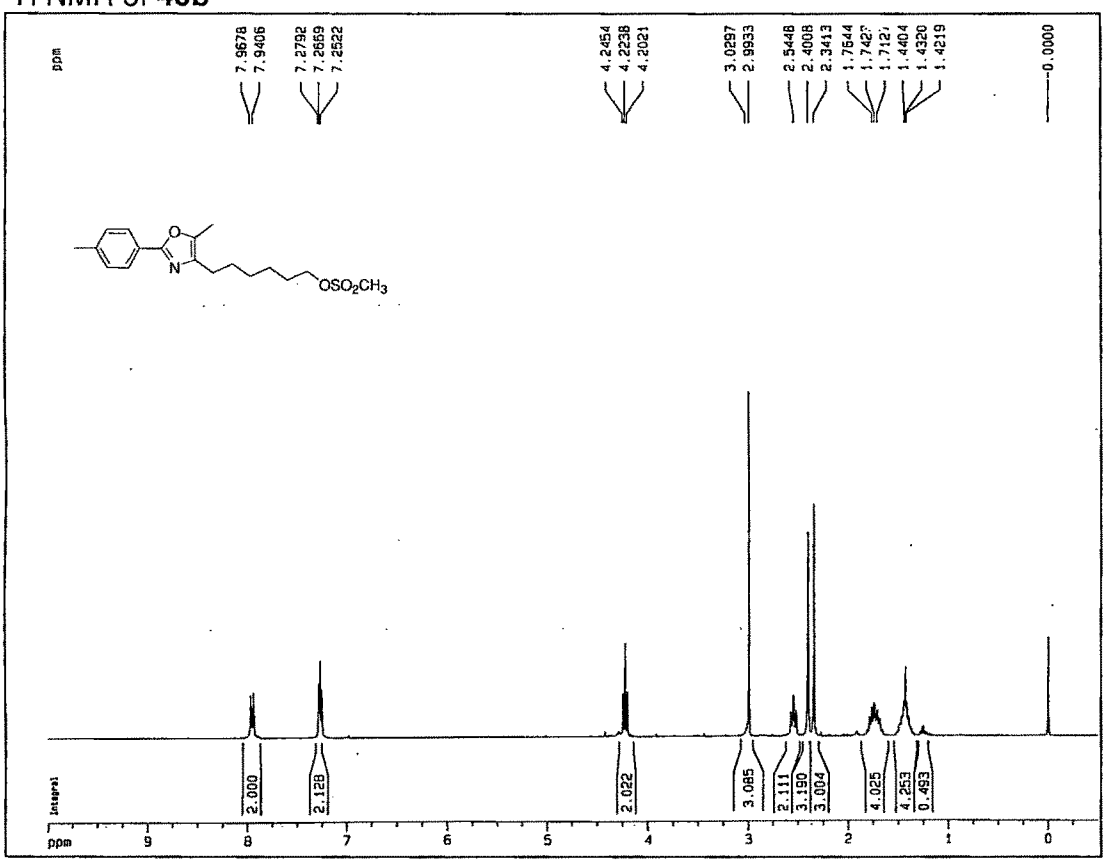
^{1}H NMR of **40a**



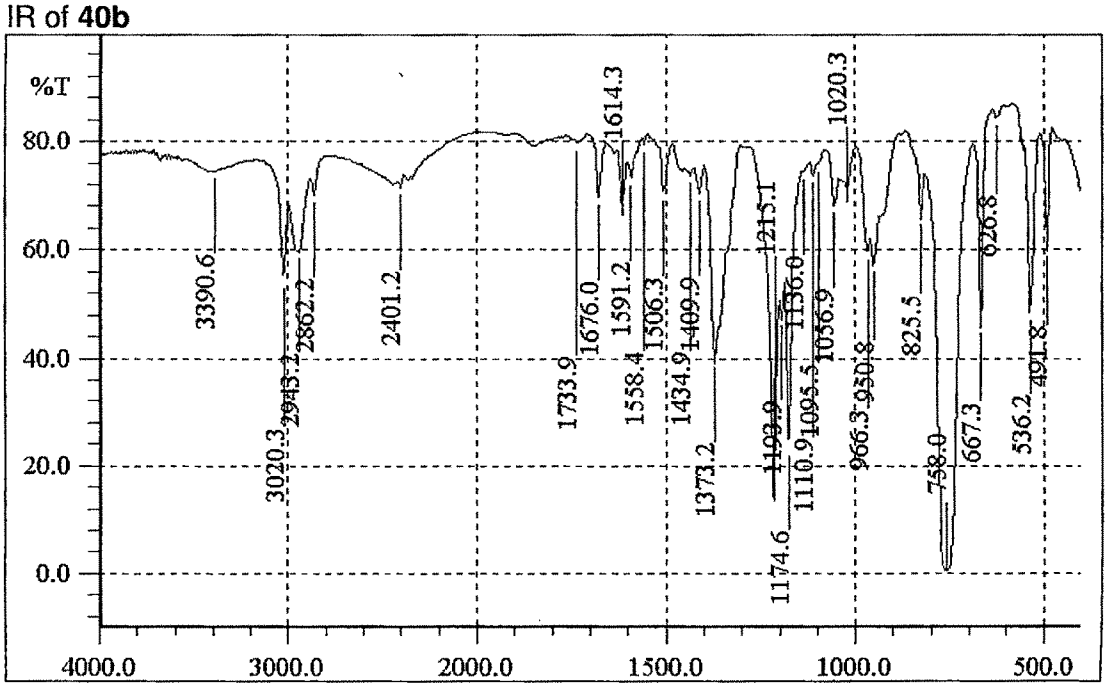
IR of **40a**



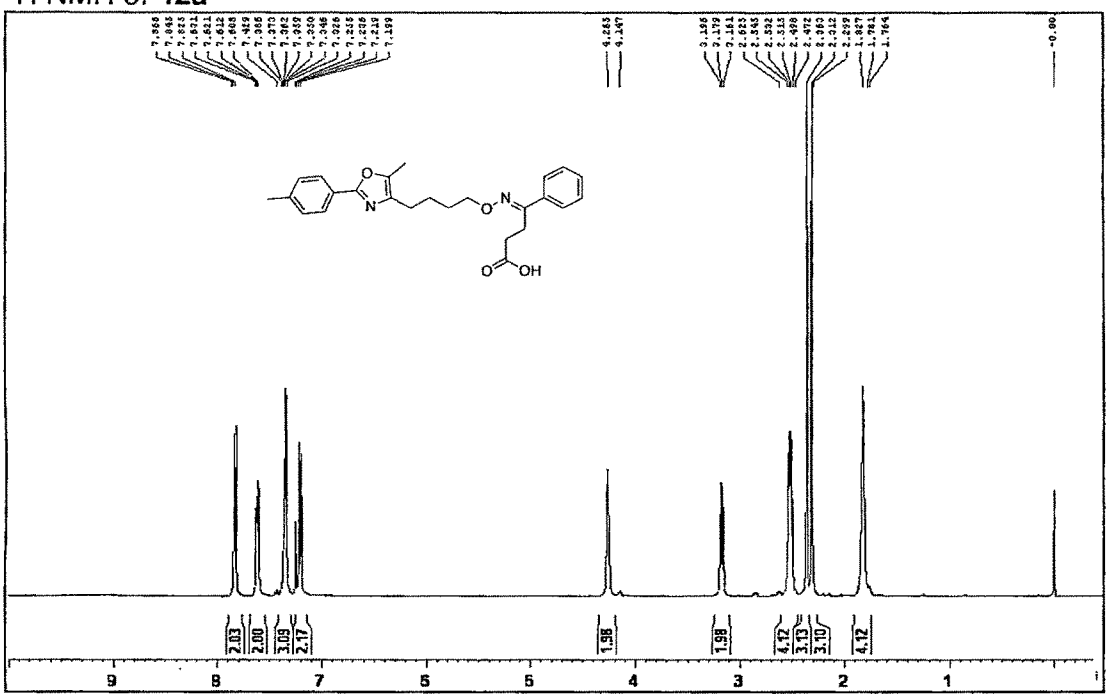
^{1}H NMR of **40b**



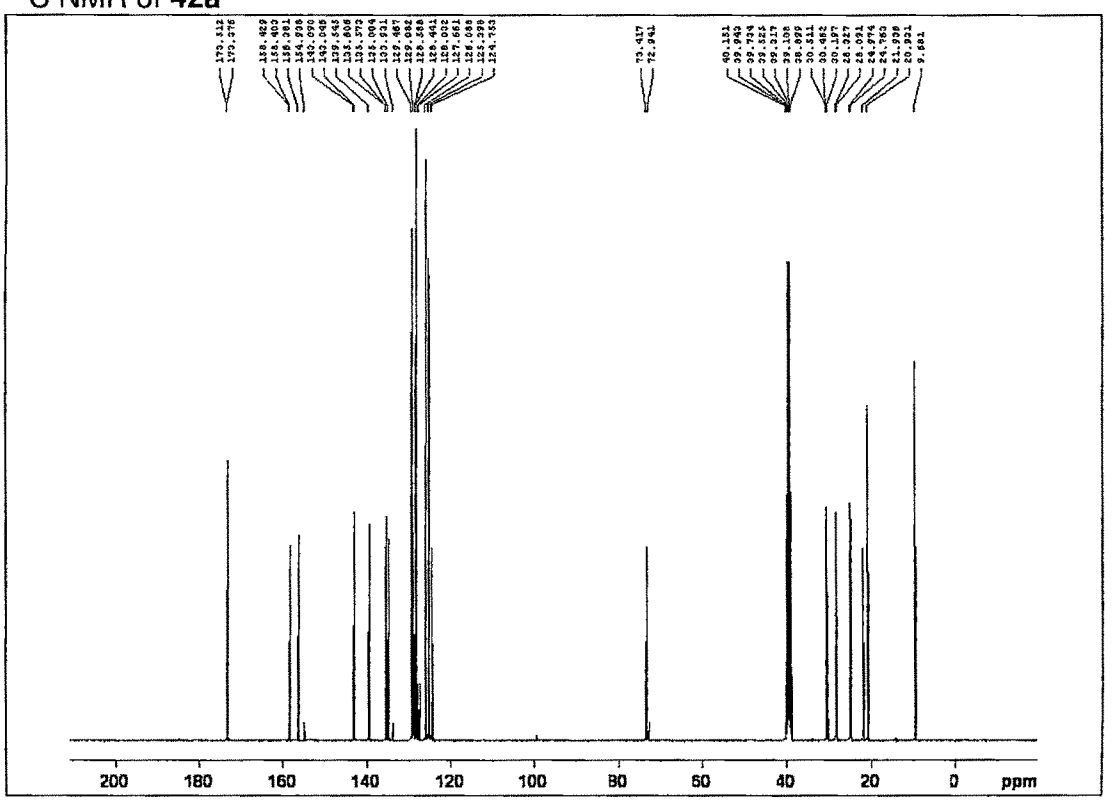
IR of **40b**



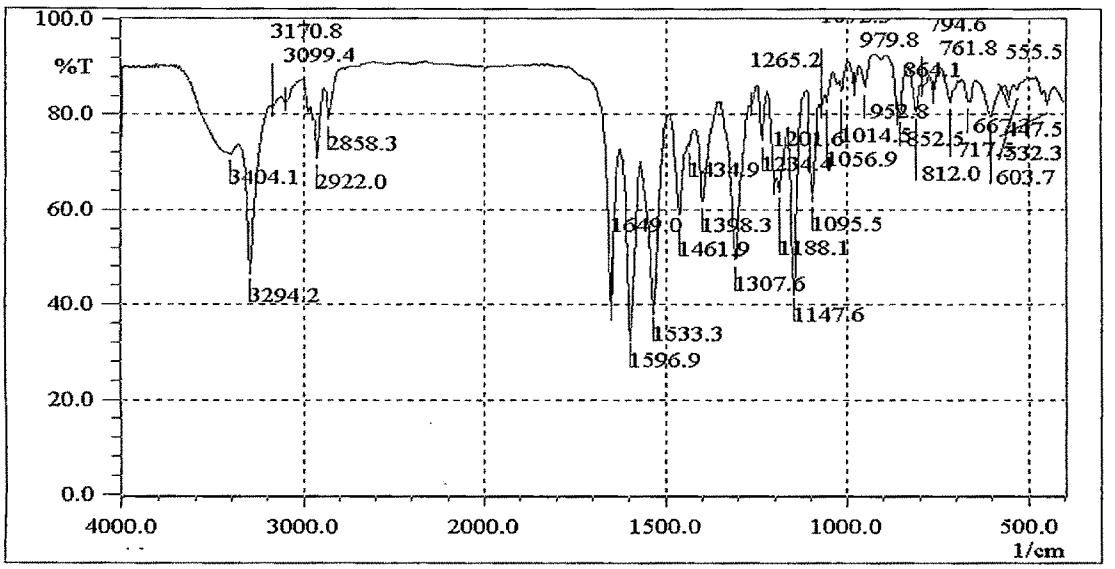
^{1}H NMR of **42a**



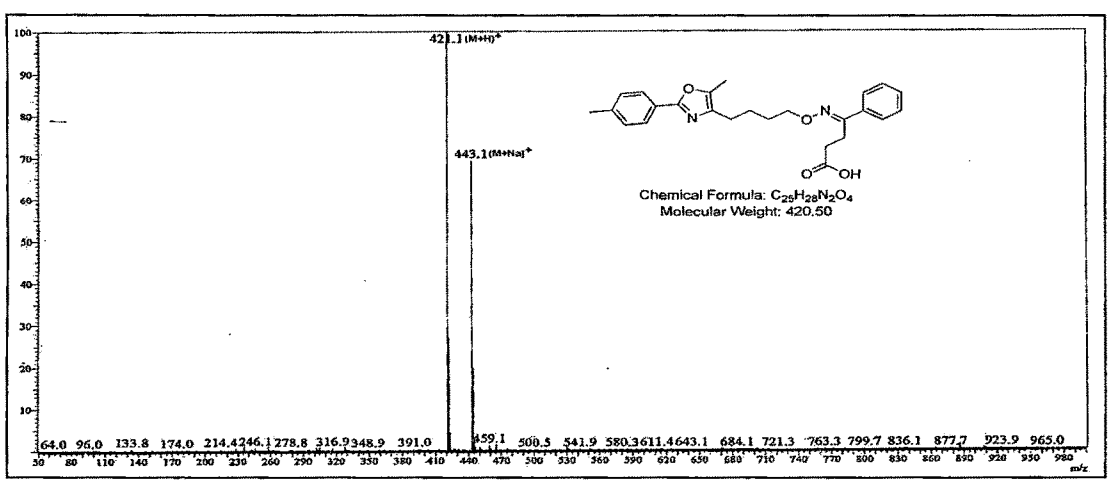
^{13}C NMR of **42a**



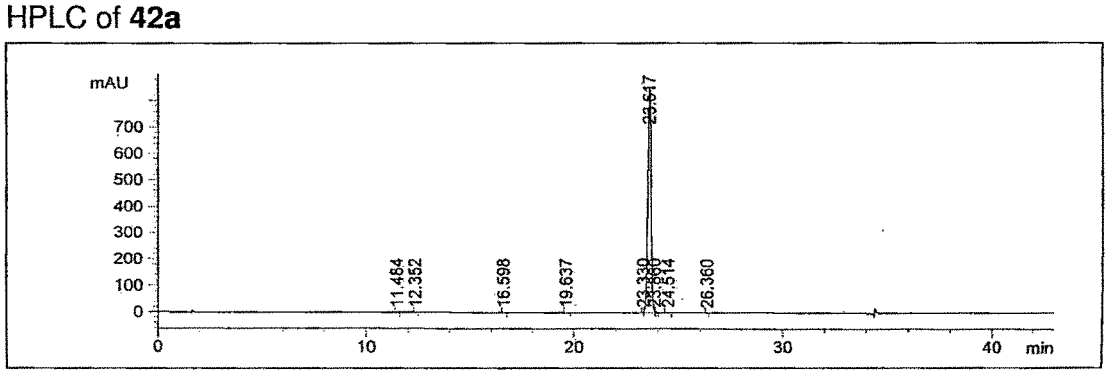
IR of **42a**



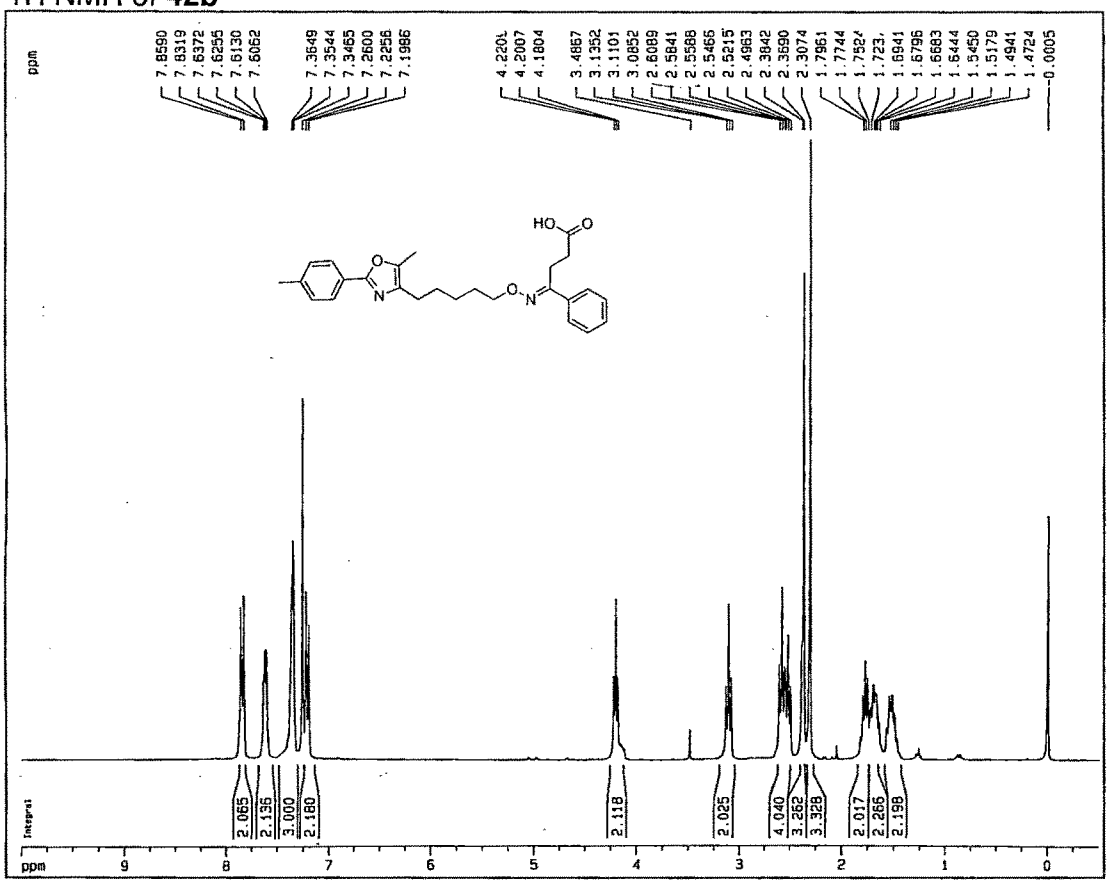
ESI-MS of **42a**



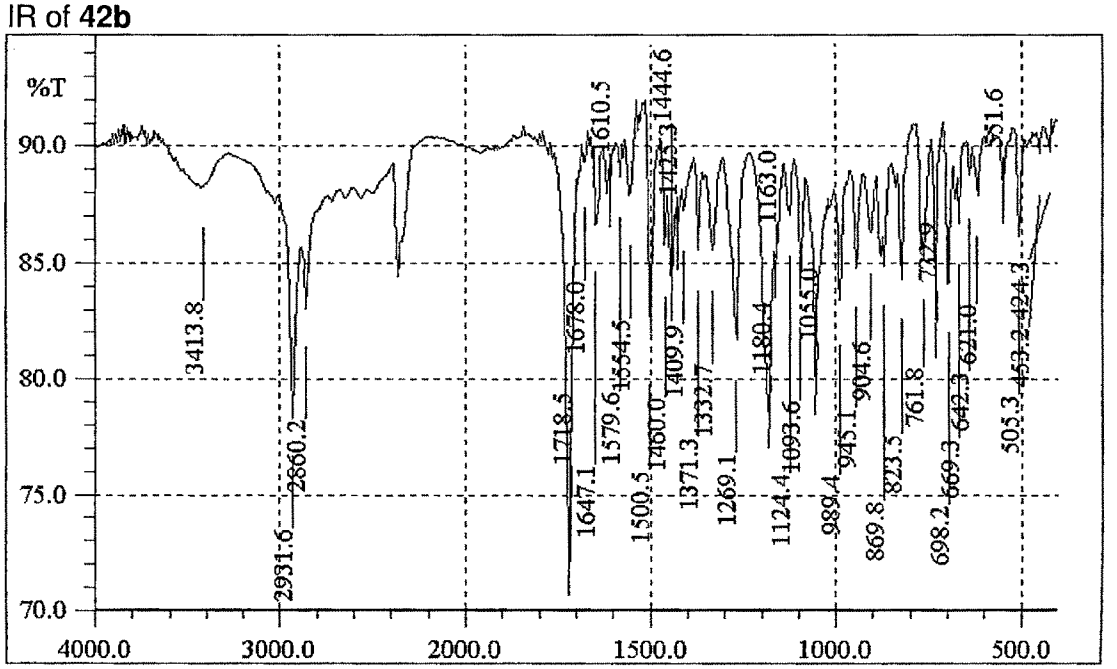
HPLC of **42a**



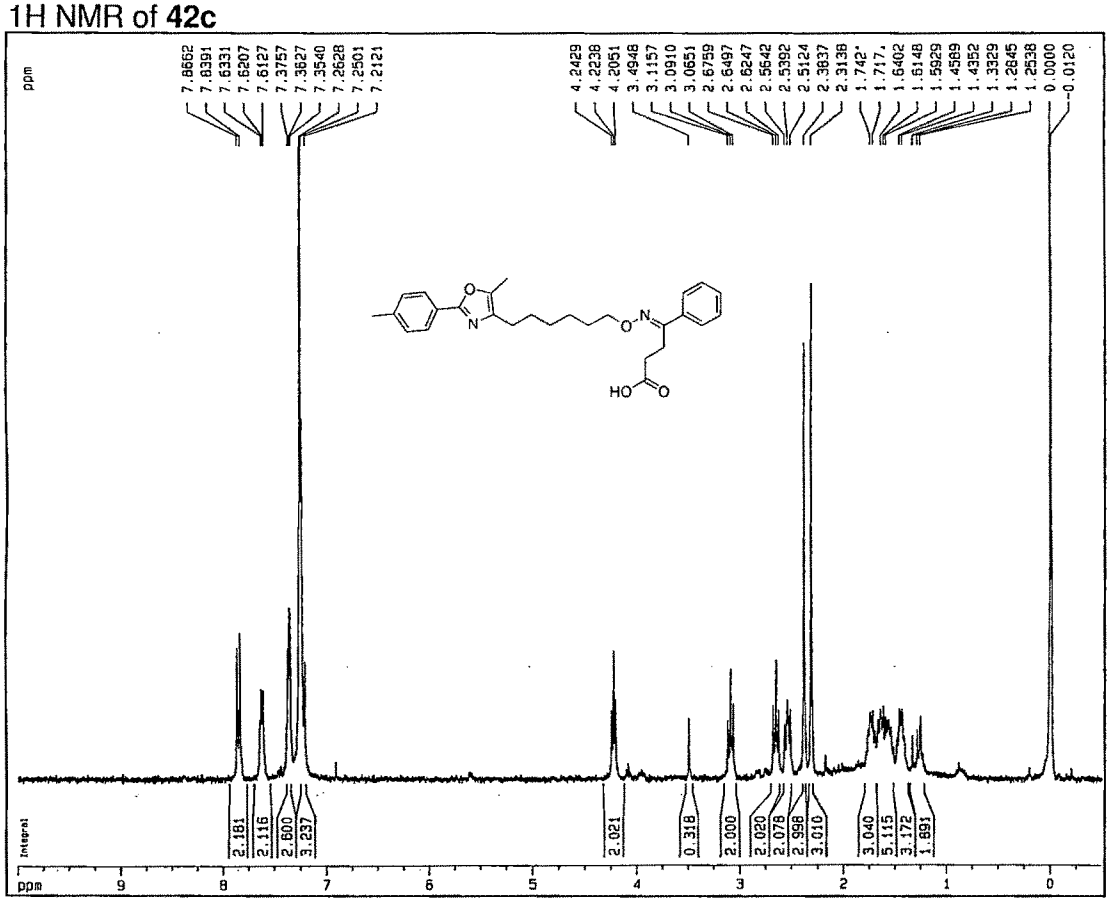
1H NMR of **42b**



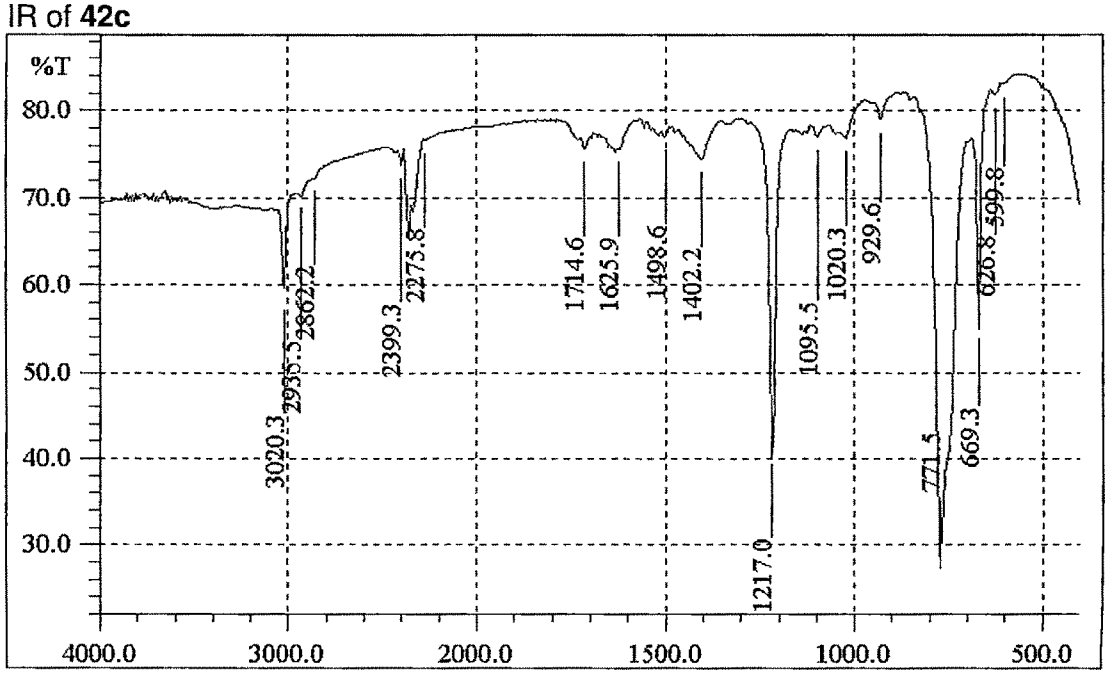
IR of **42b**



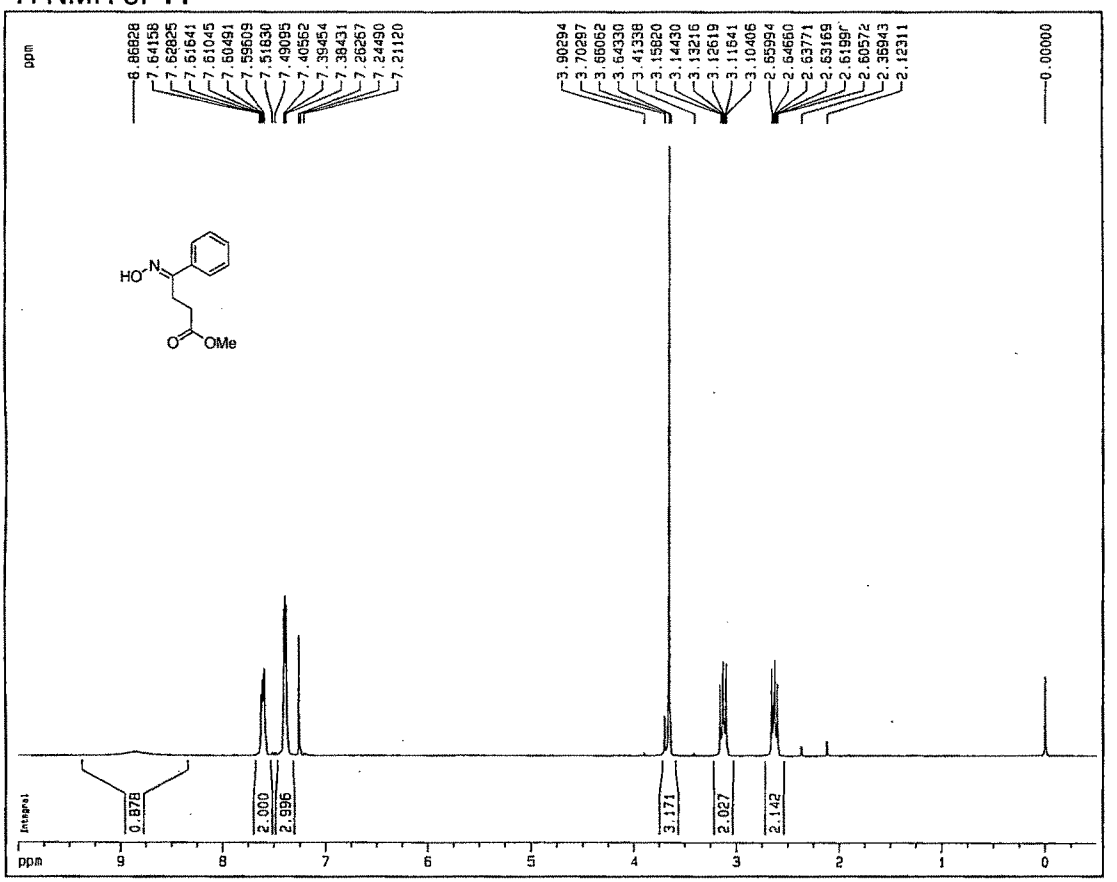
1H NMR of **42c**



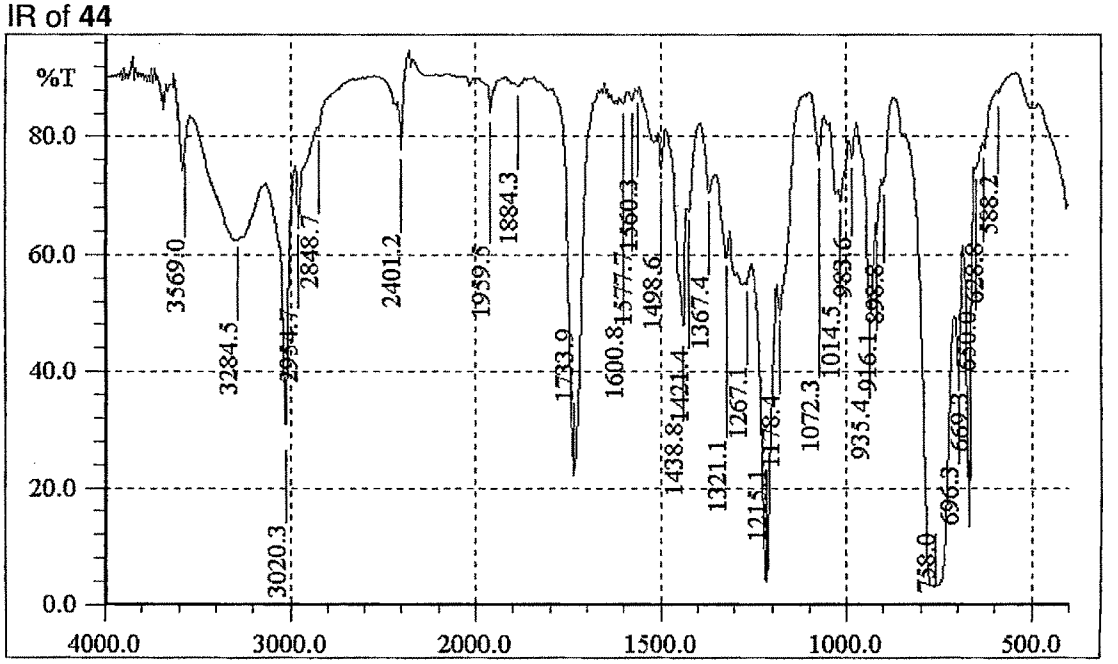
IR of **42c**



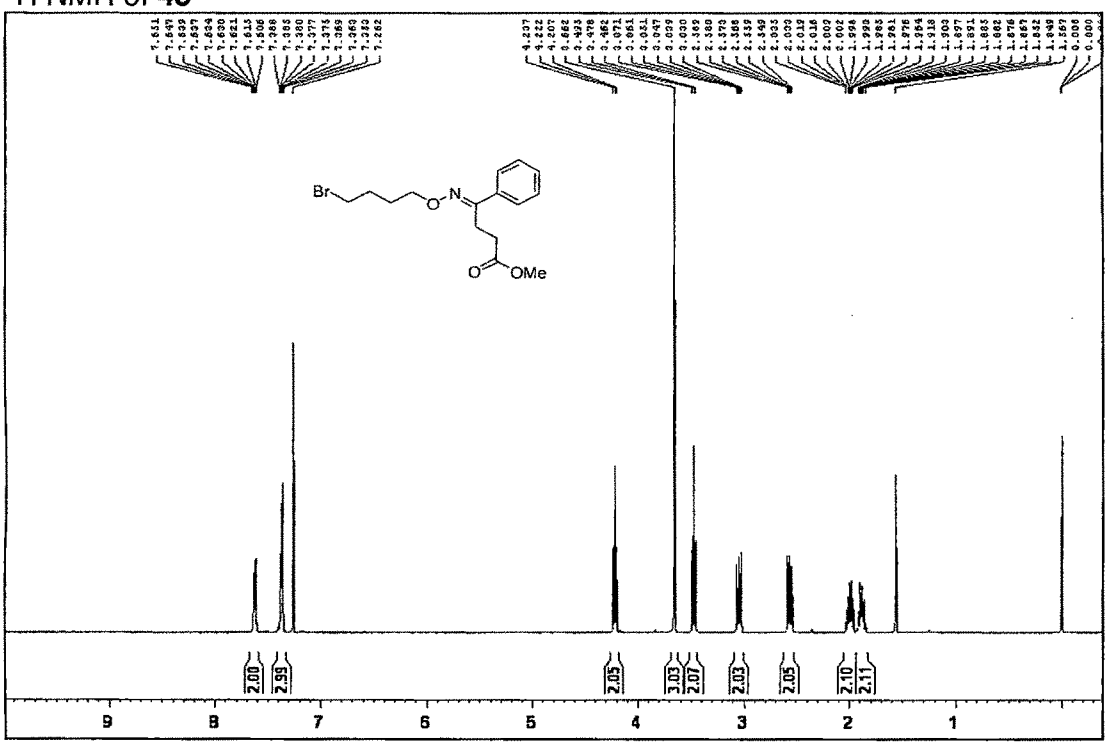
^{1}H NMR of **44**



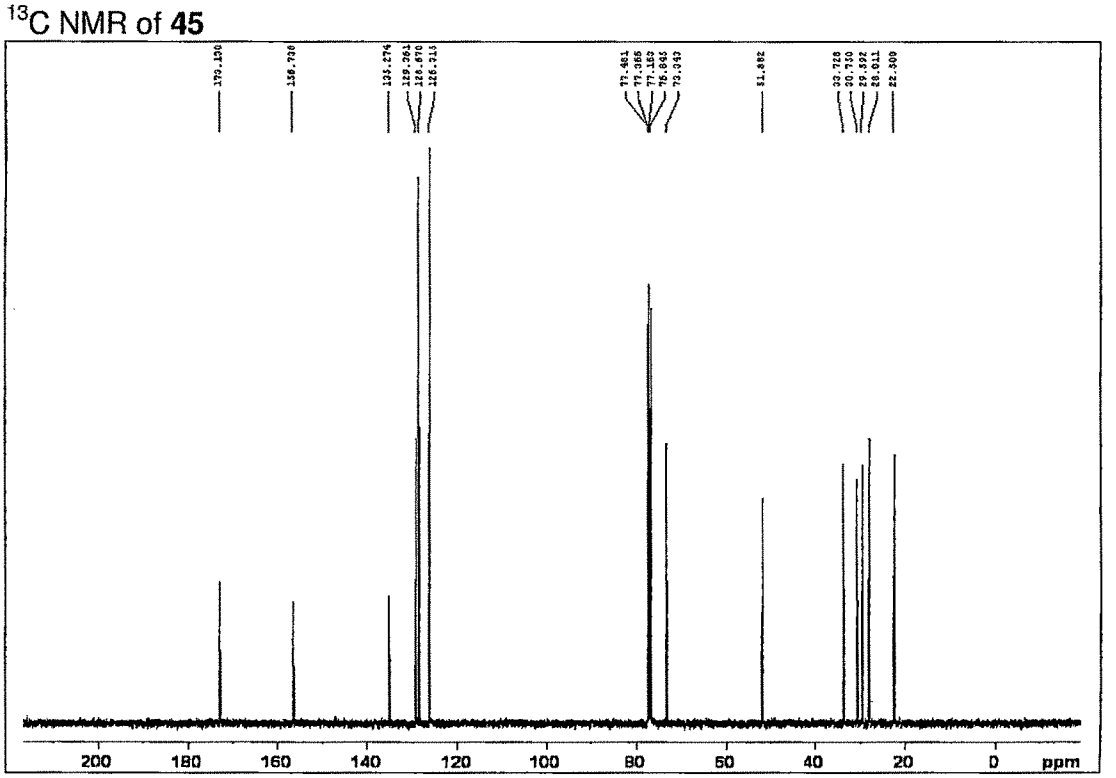
IR of **44**



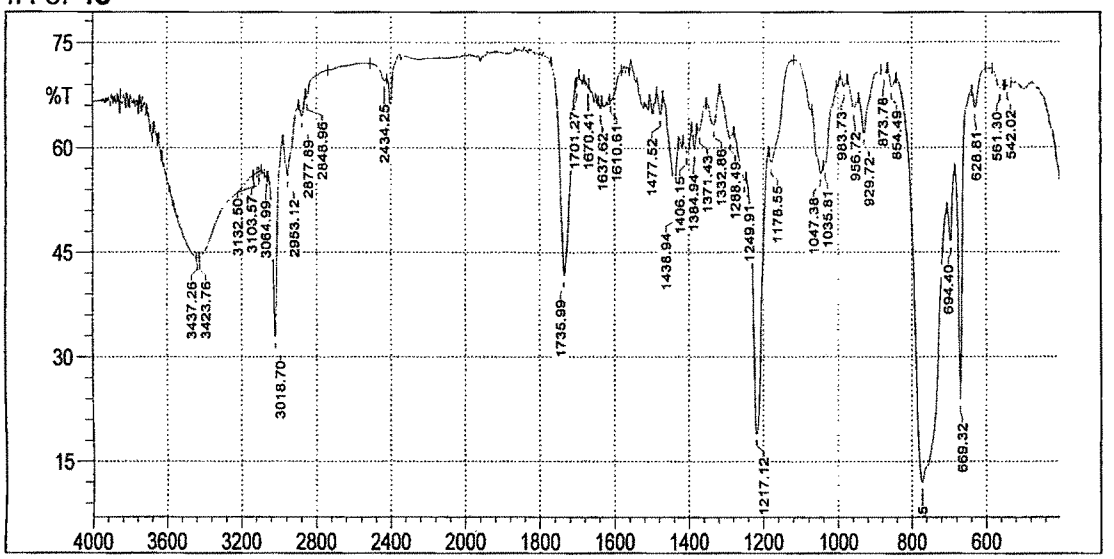
^{1}H NMR of **45**



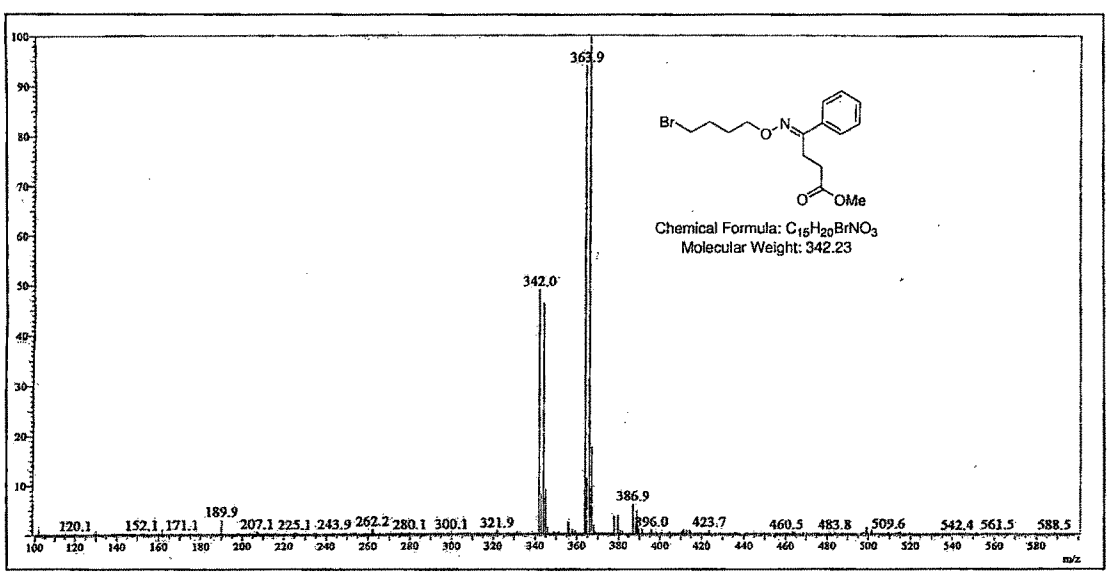
^{13}C NMR of **45**



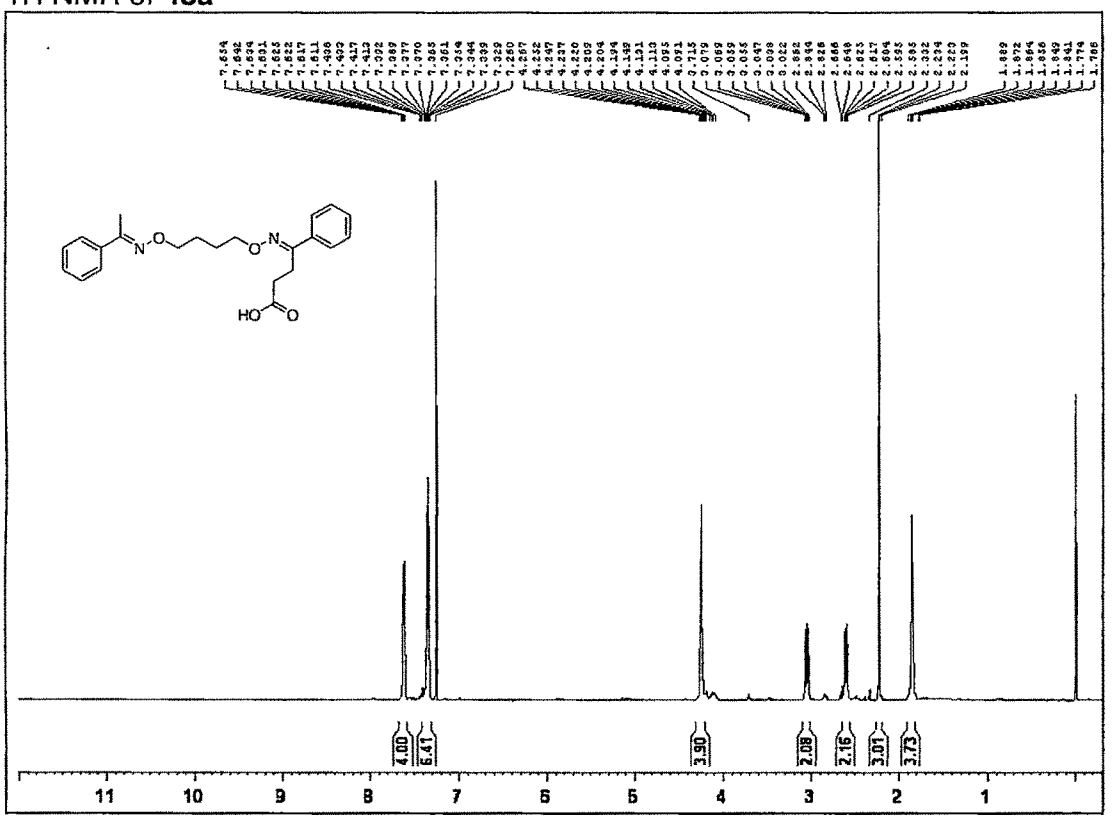
IR of **45**



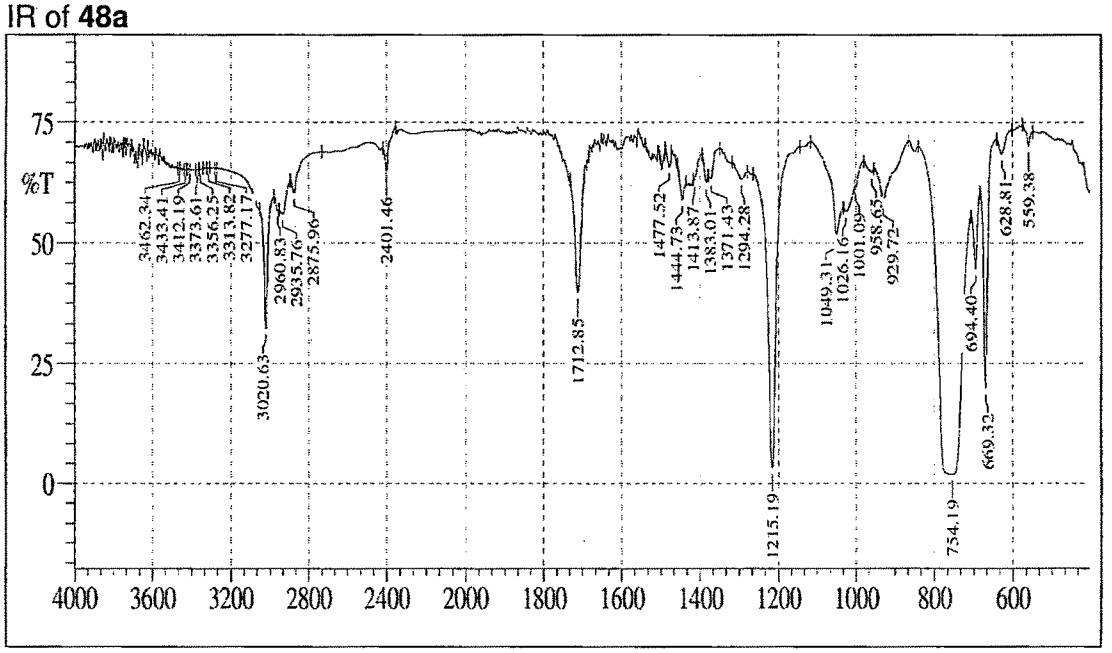
ESI-MS of **45**



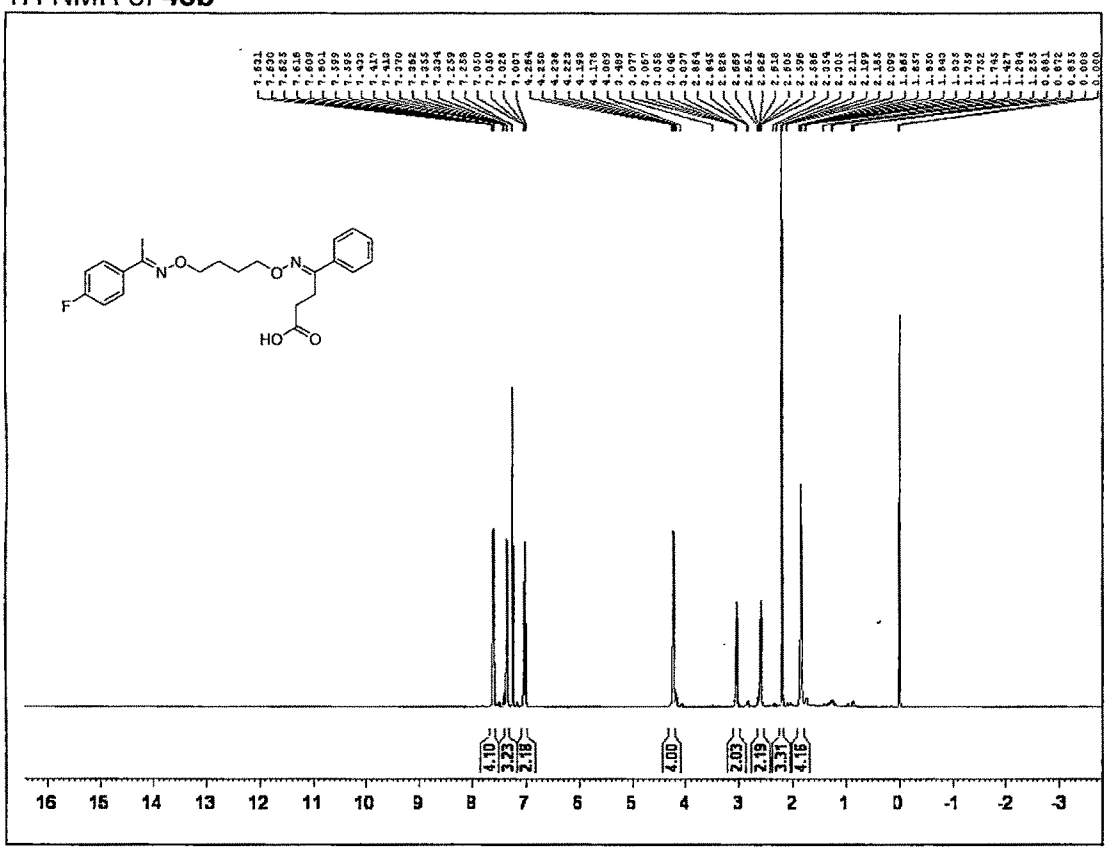
1H NMR of **48a**



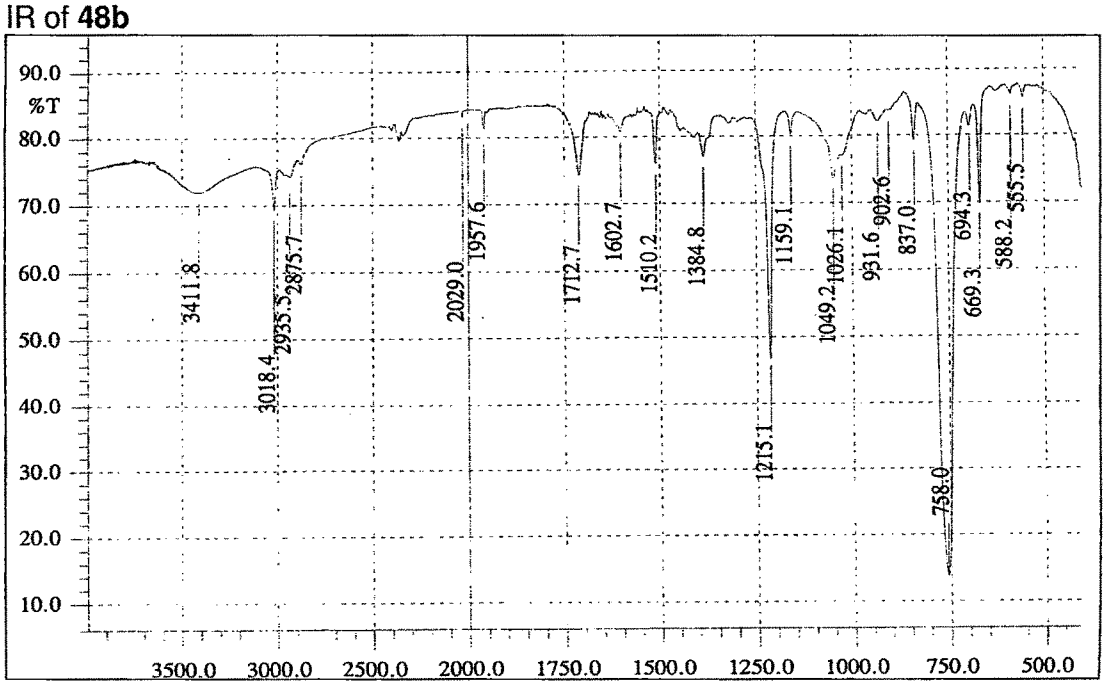
IR of **48a**



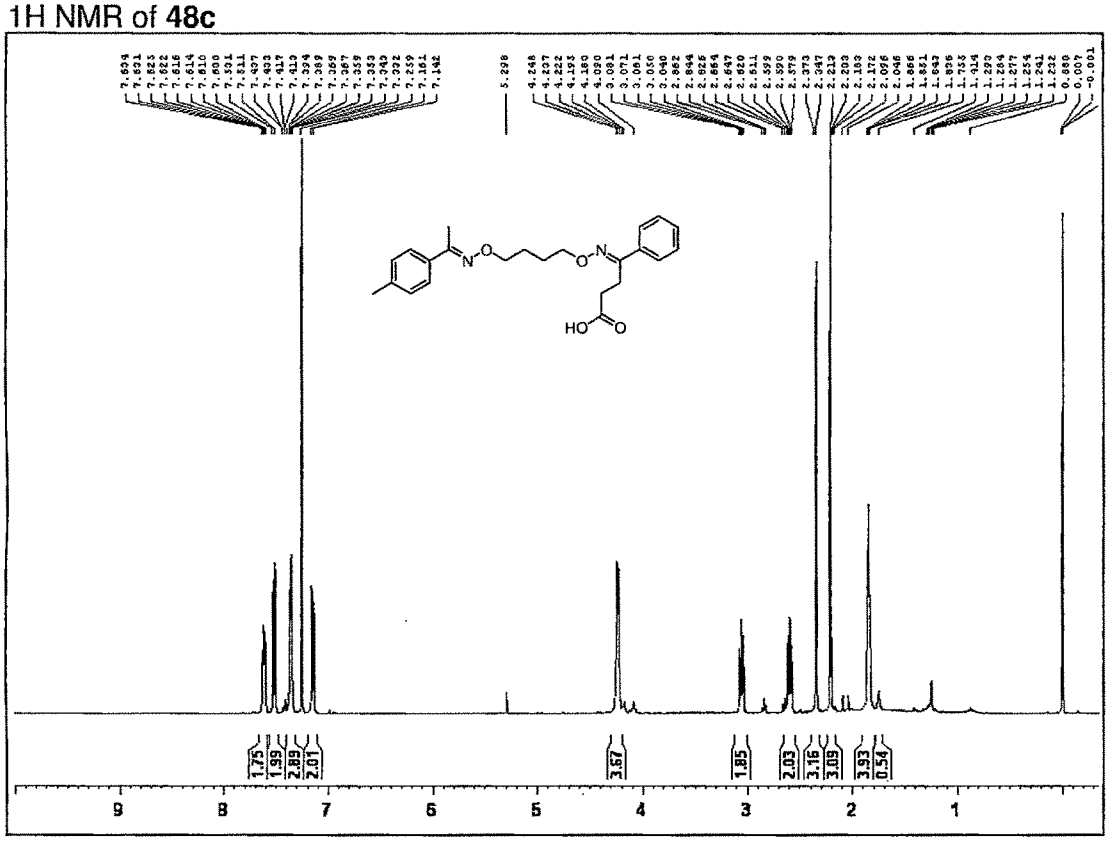
1H NMR of **48b**



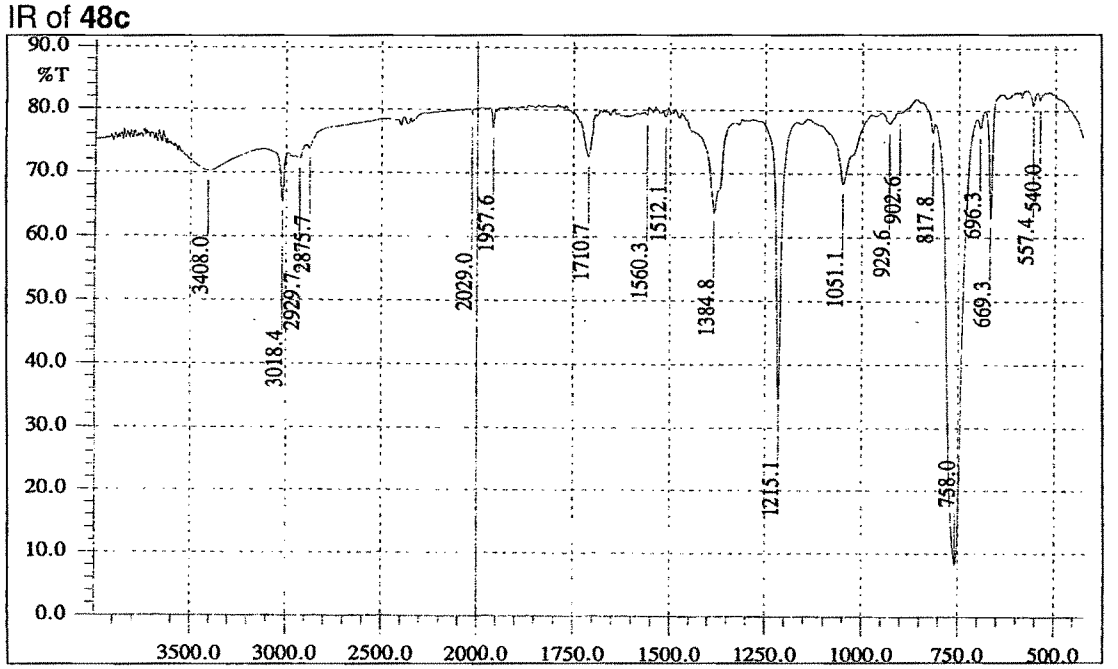
IR of **48b**



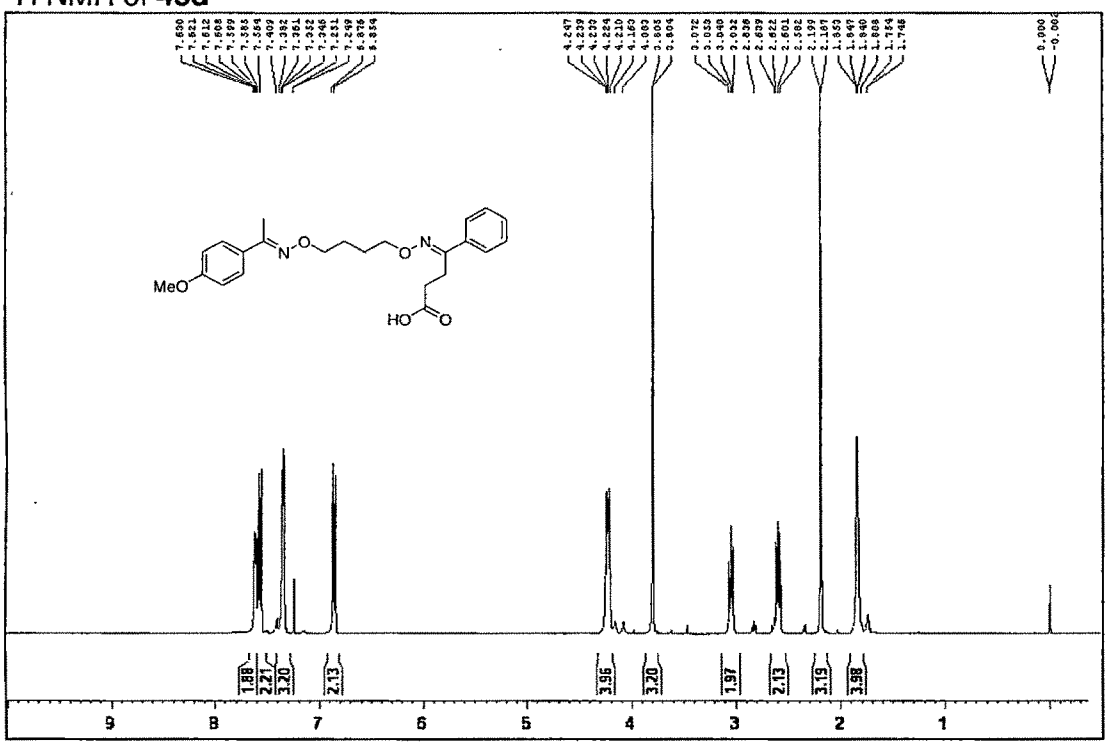
1H NMR of **48c**



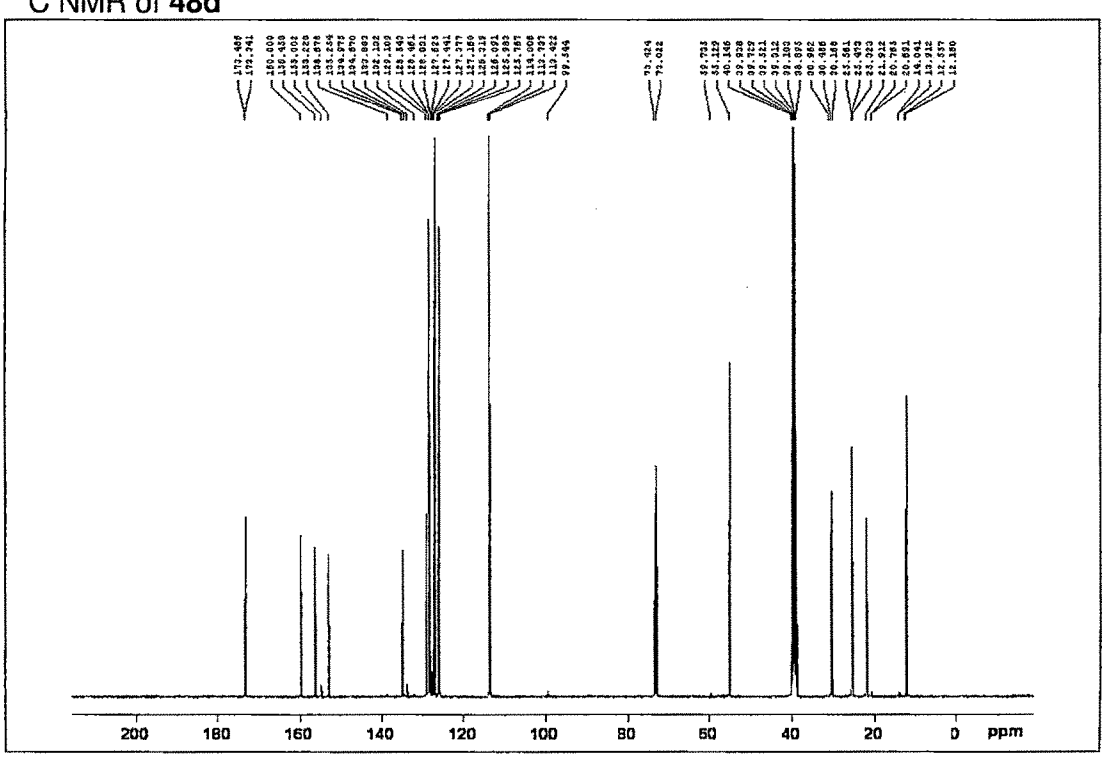
IR of **48c**



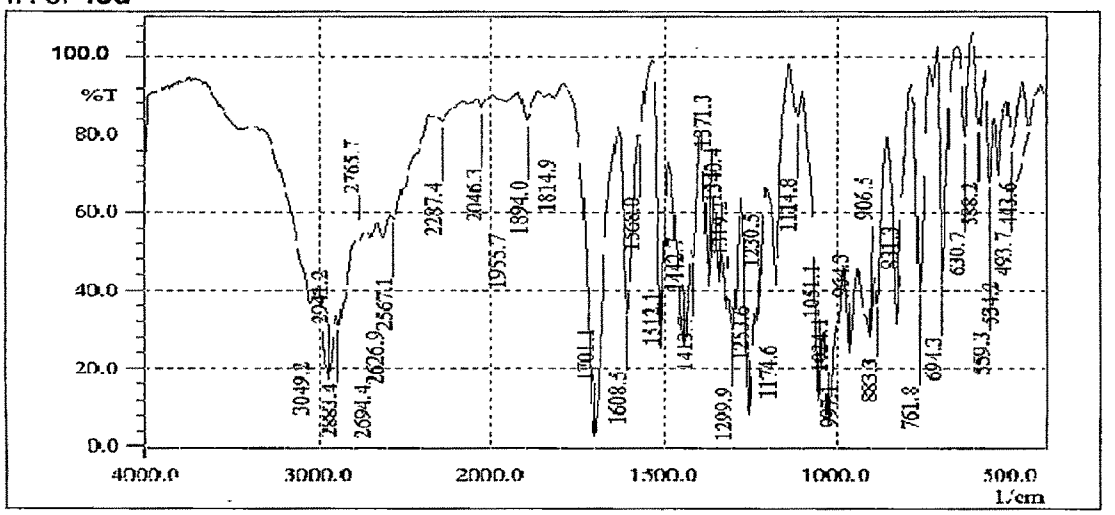
^{1}H NMR of **48d**



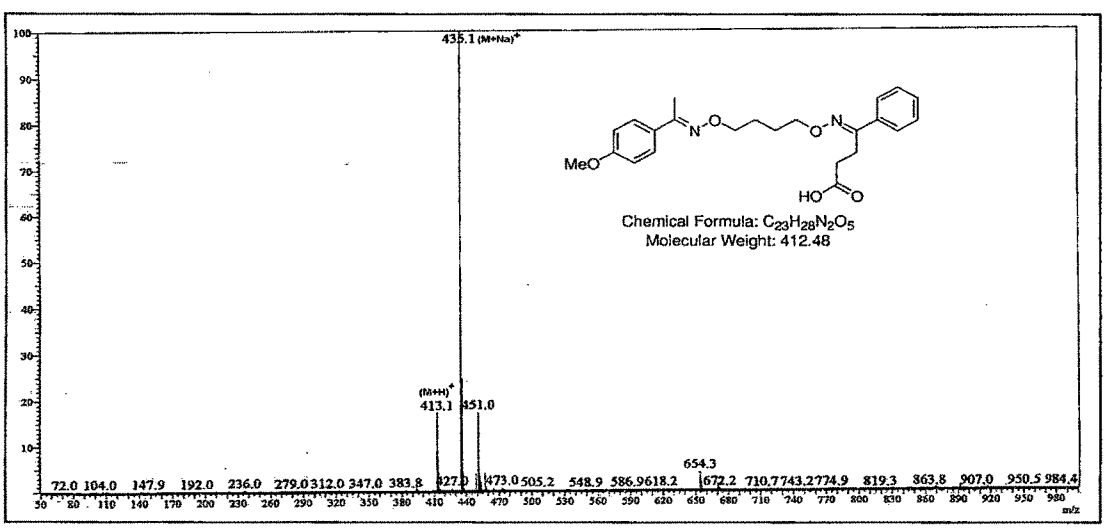
^{13}C NMR of **48d**



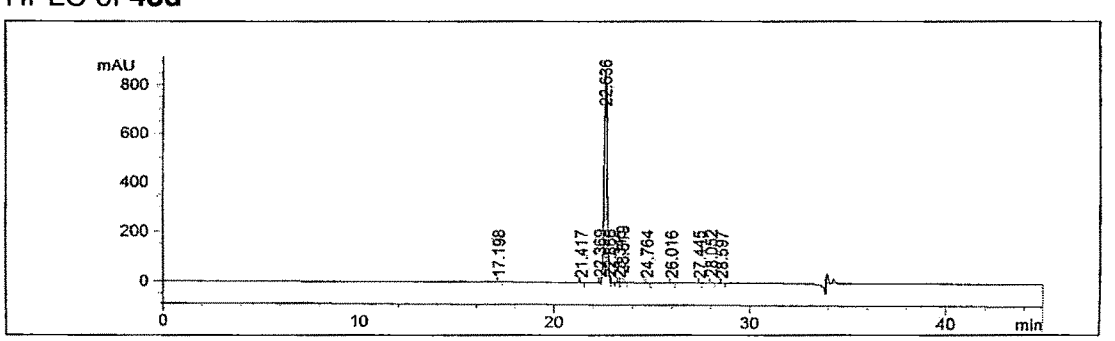
IR of **48d**



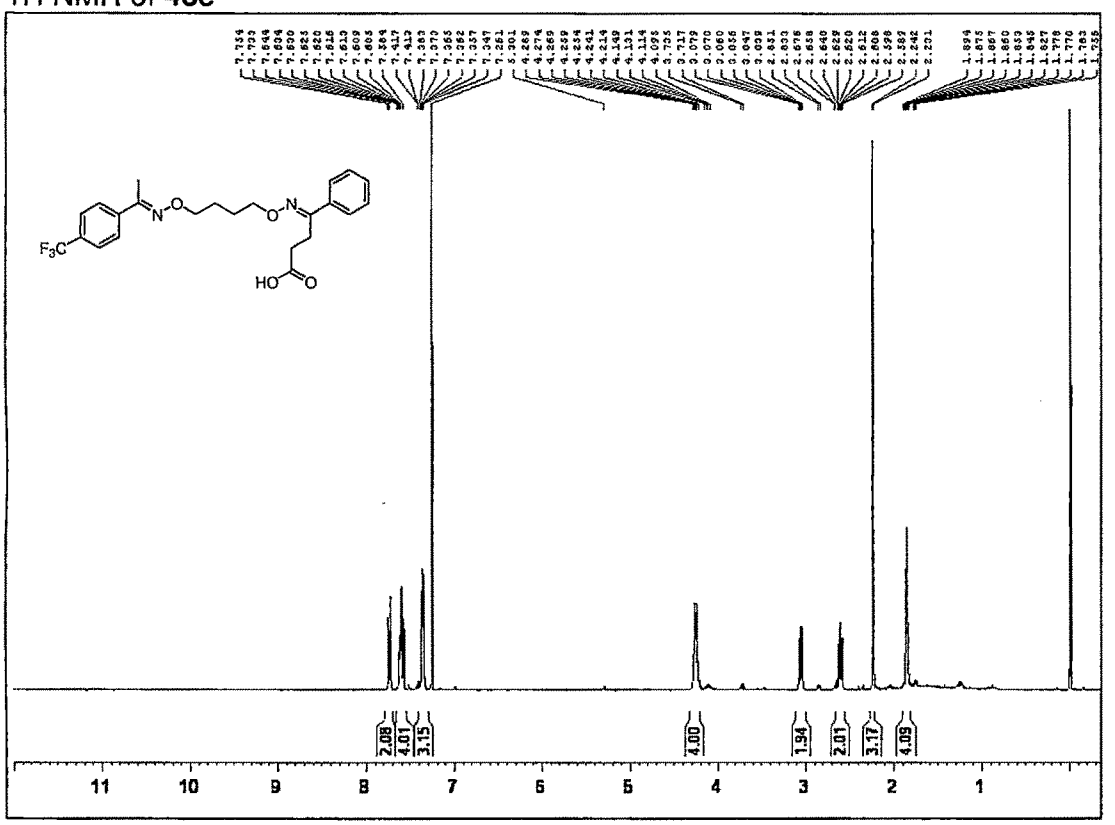
ESI-MS of **48d**



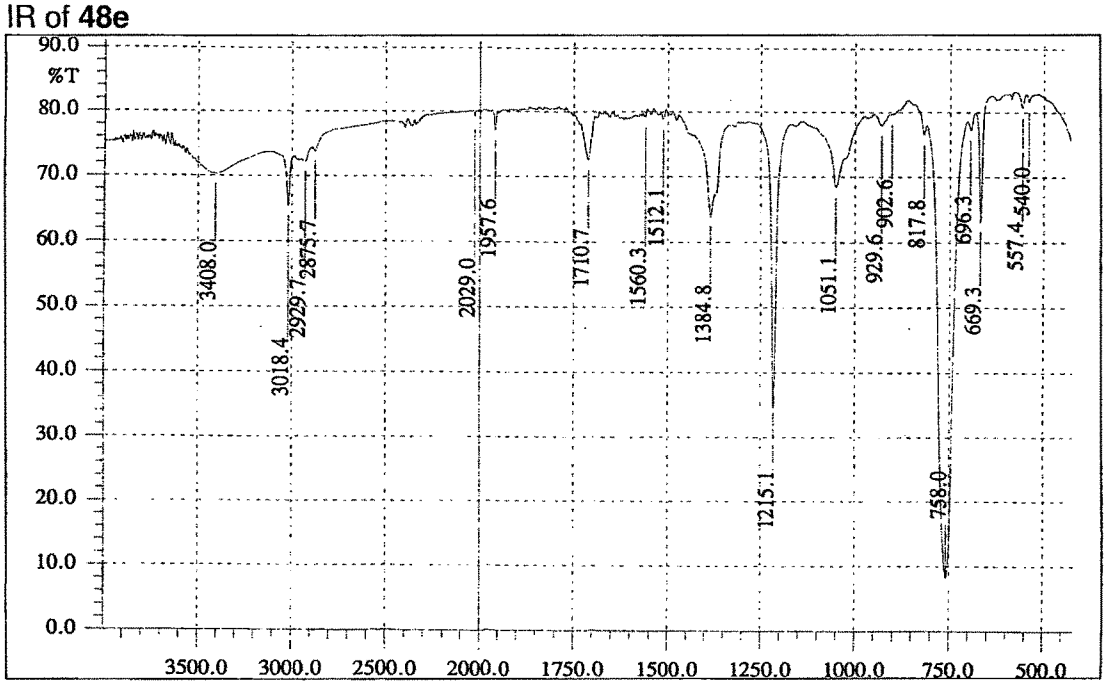
HPLC of **48d**



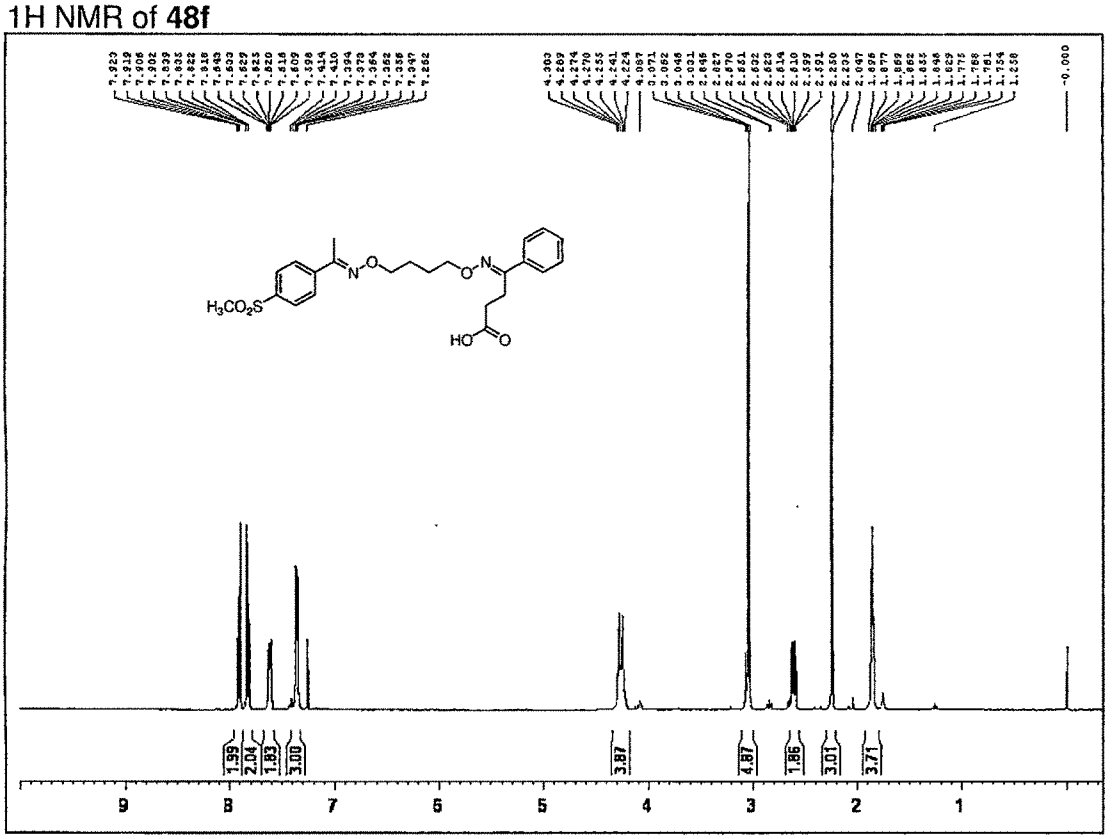
1H NMR of **48e**



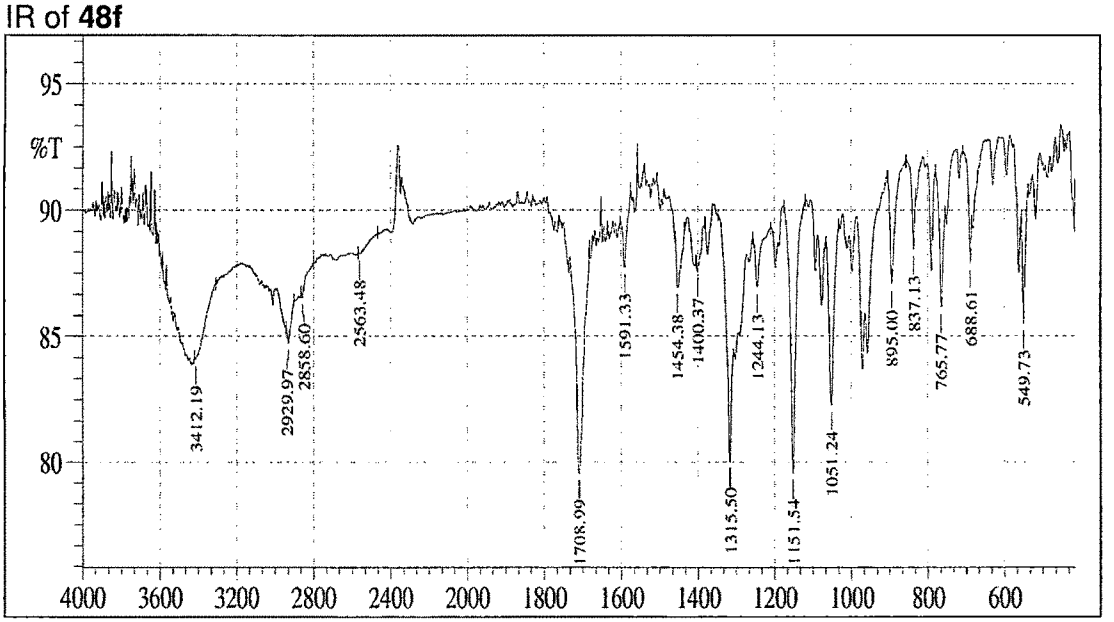
IR of **48e**



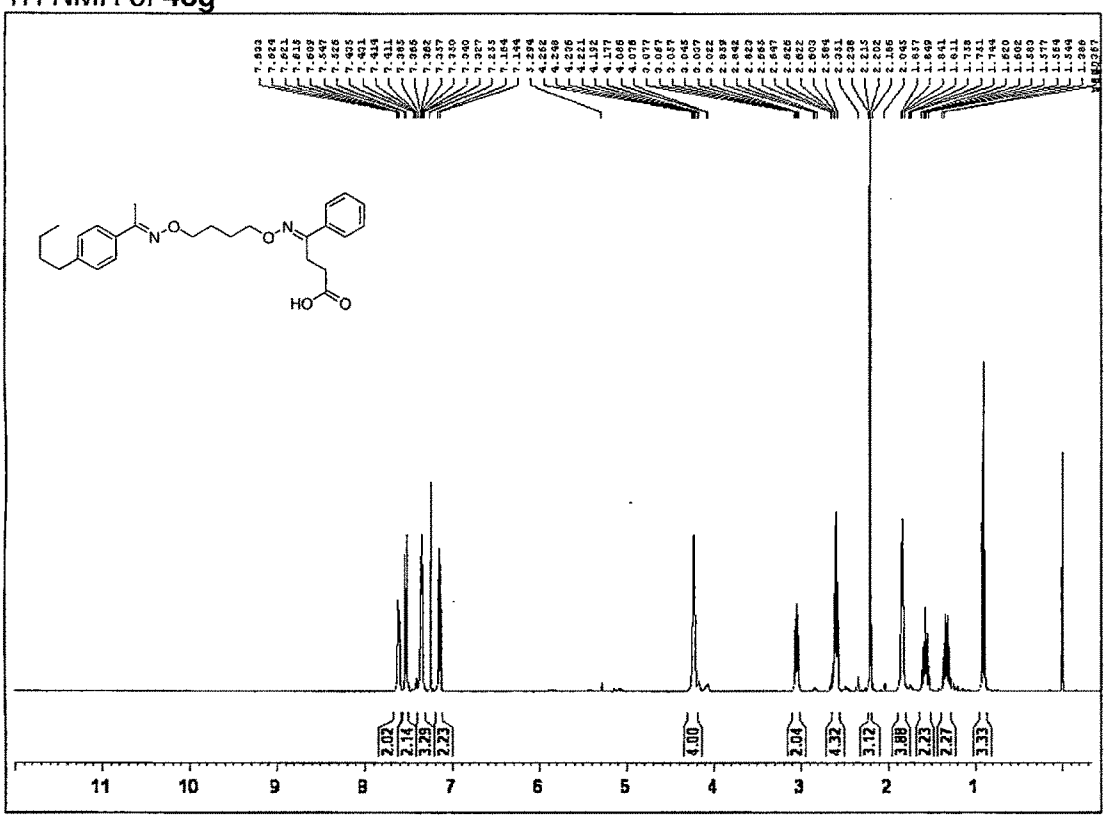
1H NMR of **48f**



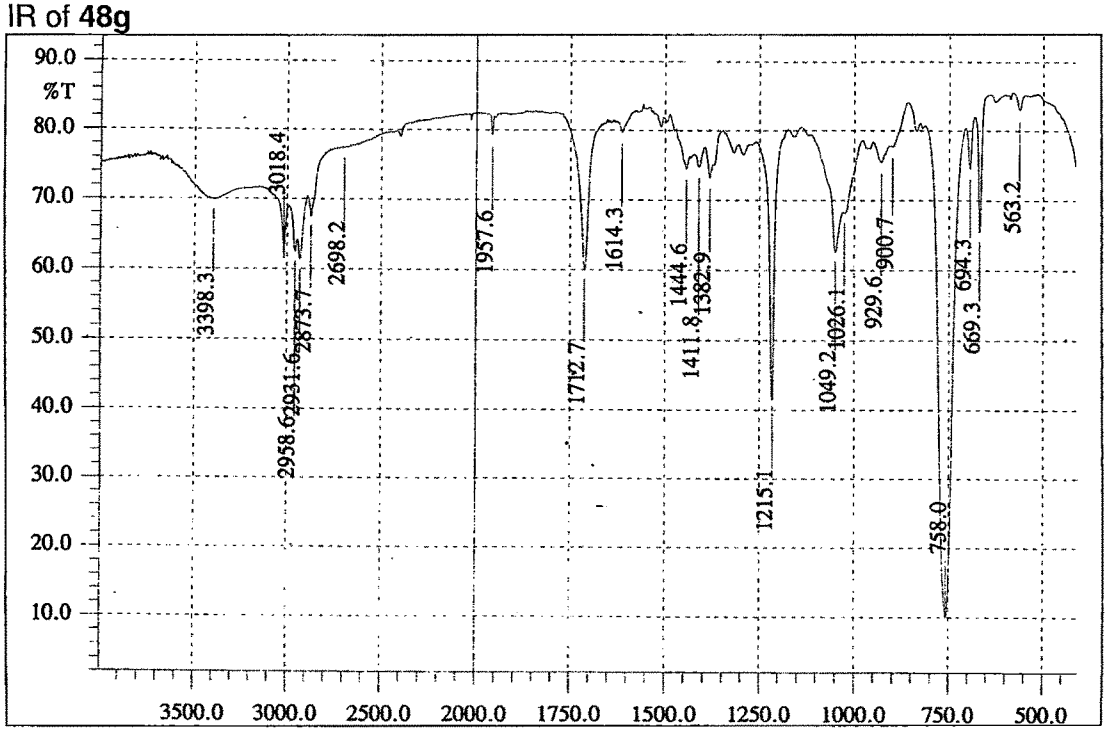
IR of **48f**



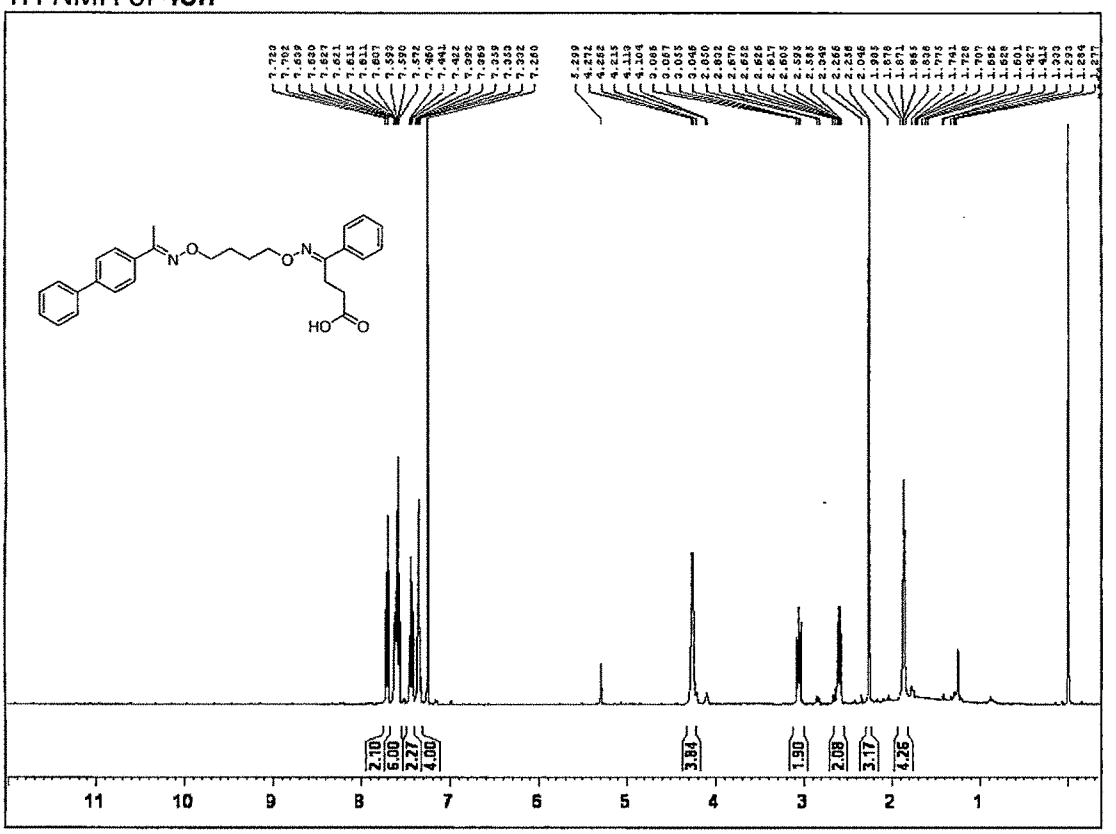
1H NMR of **48g**



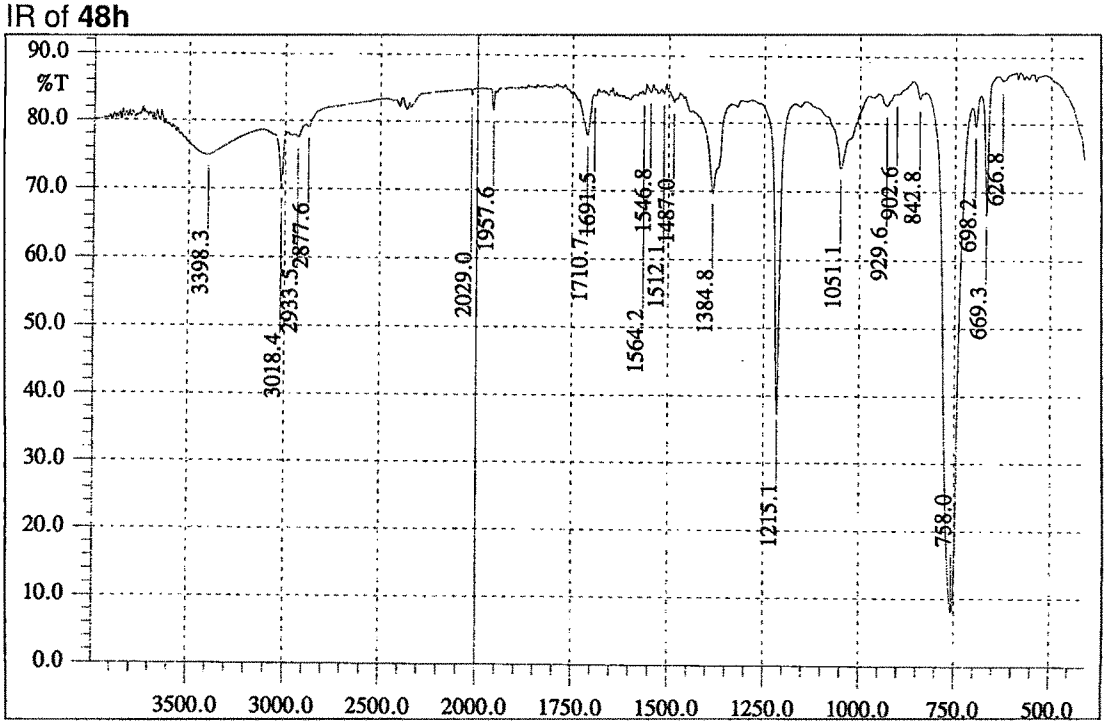
IR of **48g**



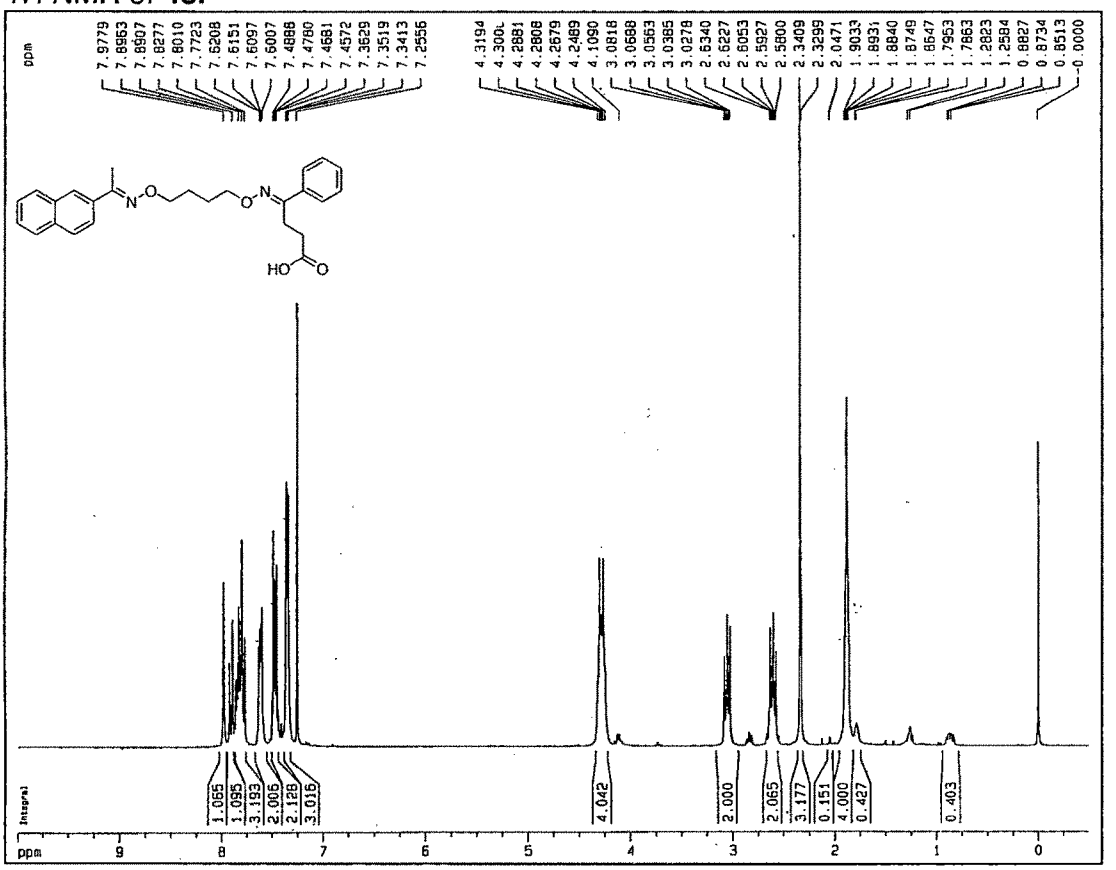
1H NMR of **48h**



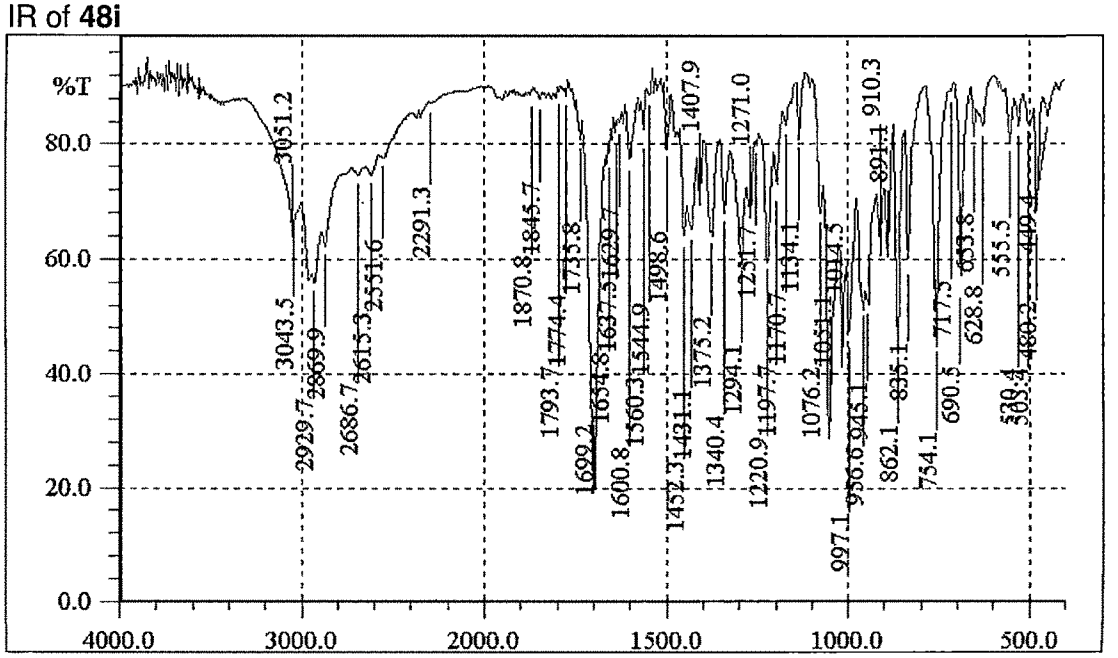
IR of **48h**



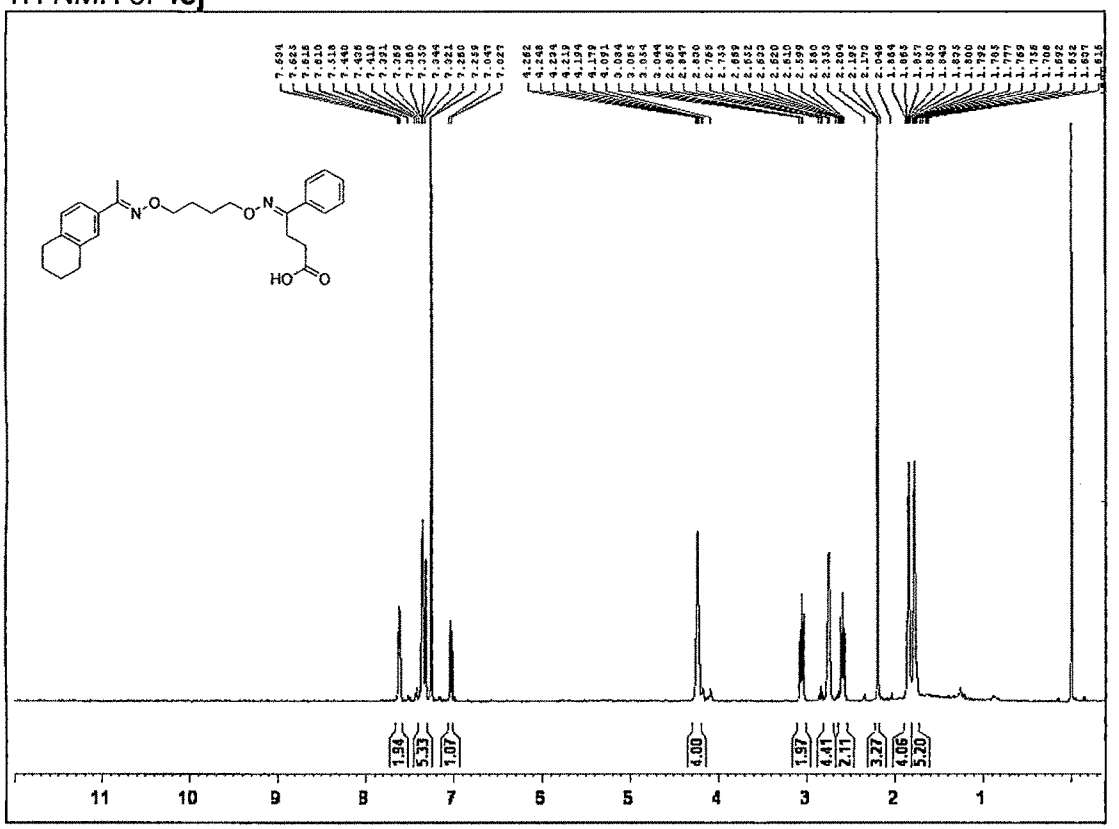
1H NMR of **48i**



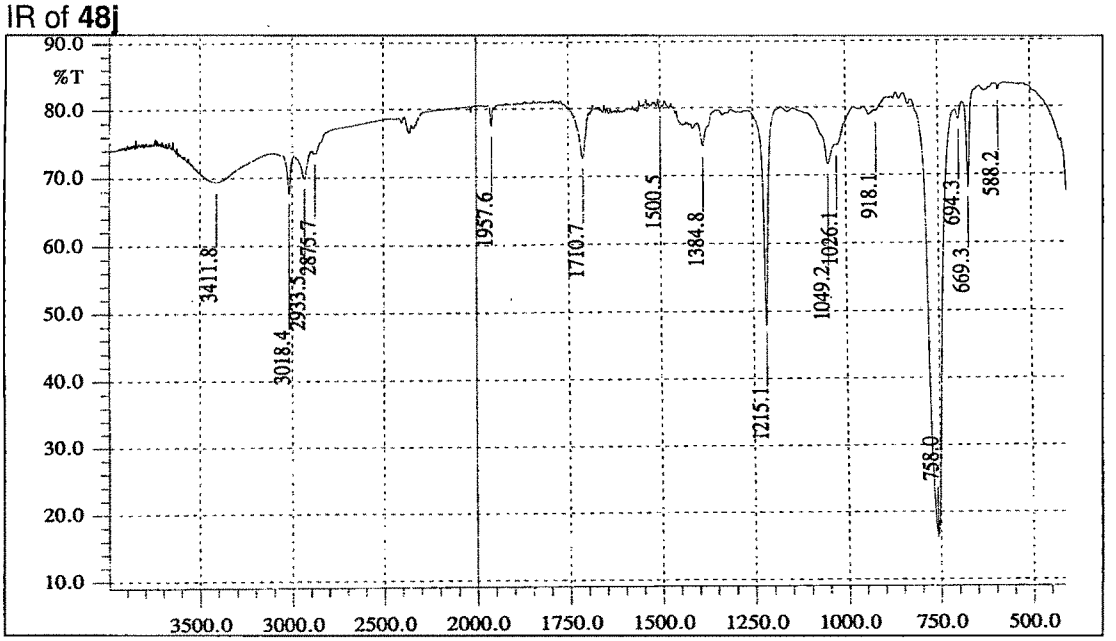
IR of **48i**



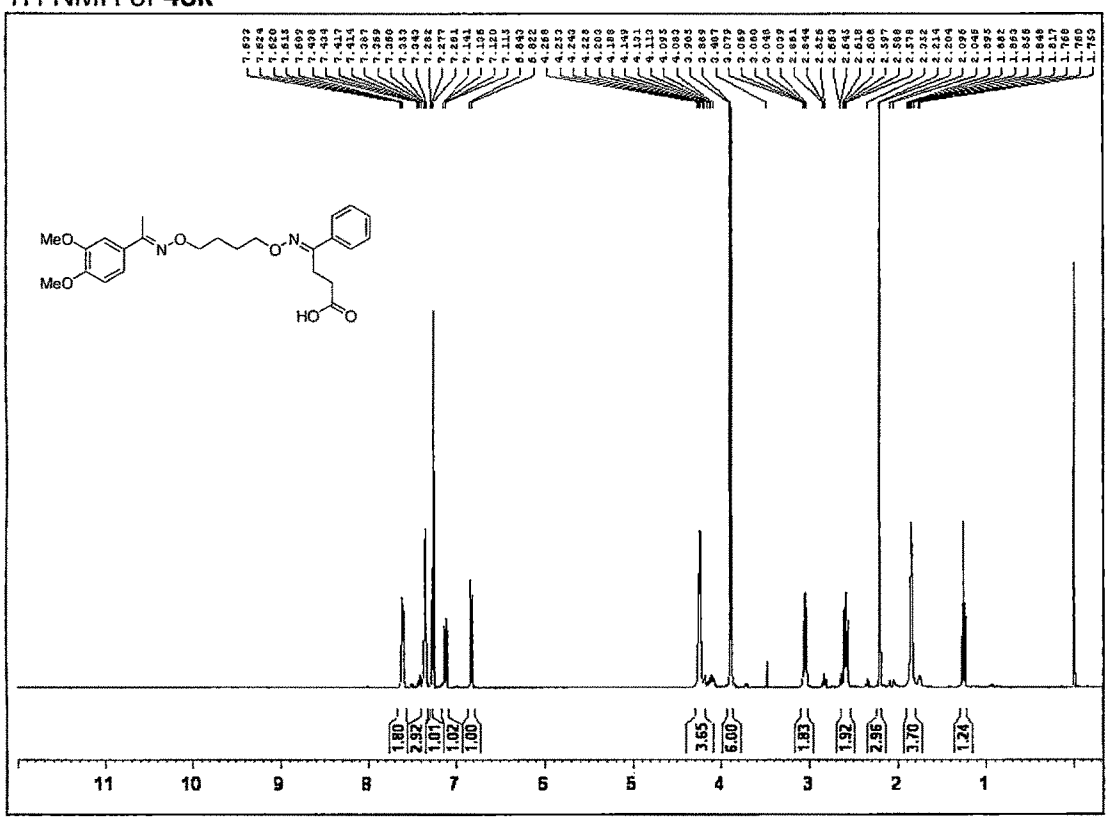
1H NMR of **48j**



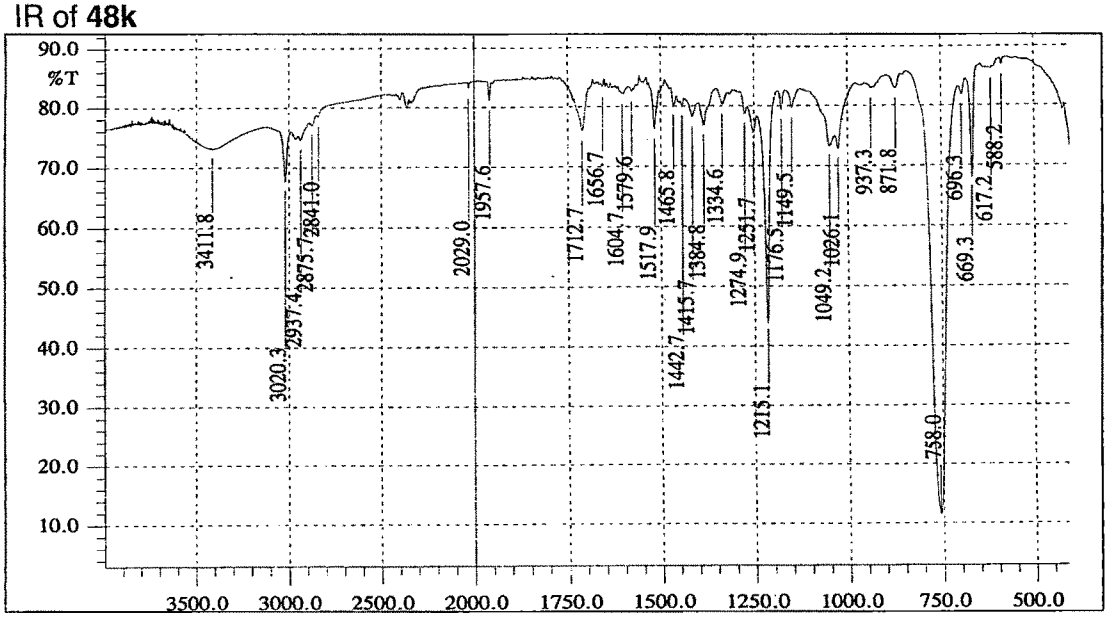
IR of **48j**



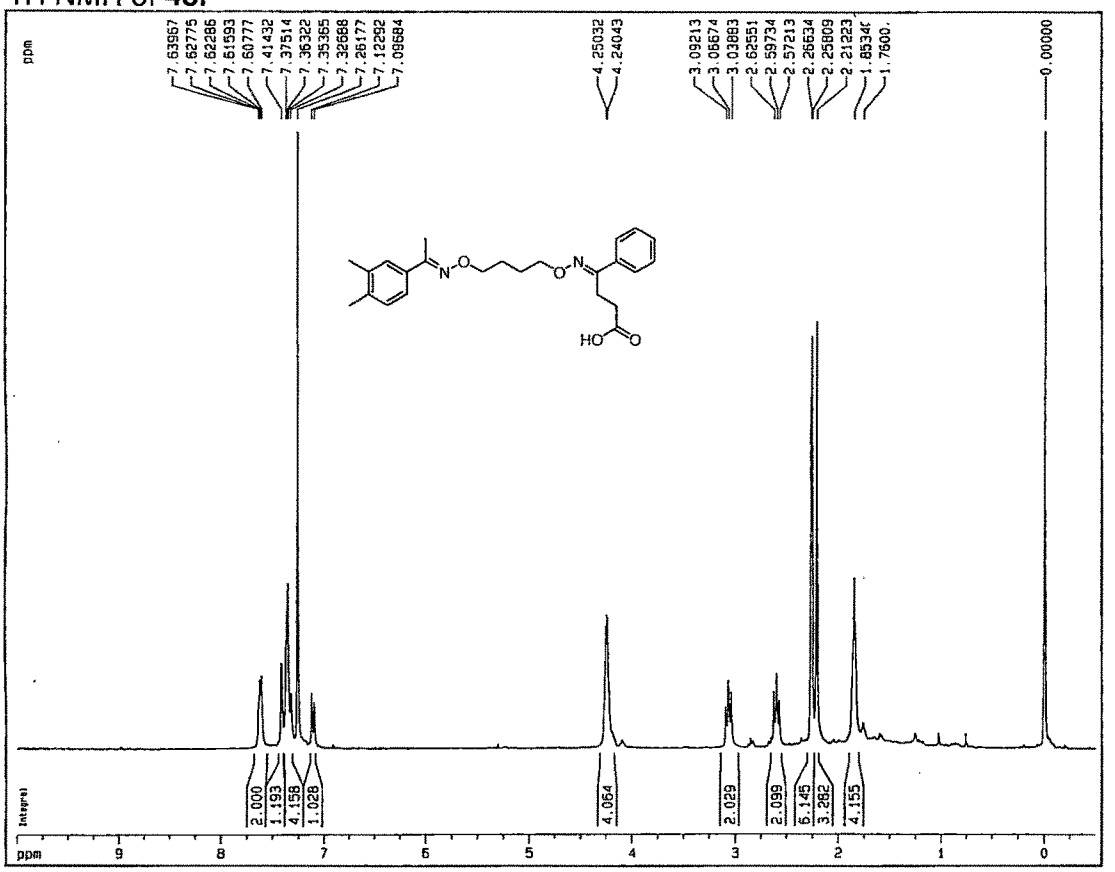
1H NMR of **48k**



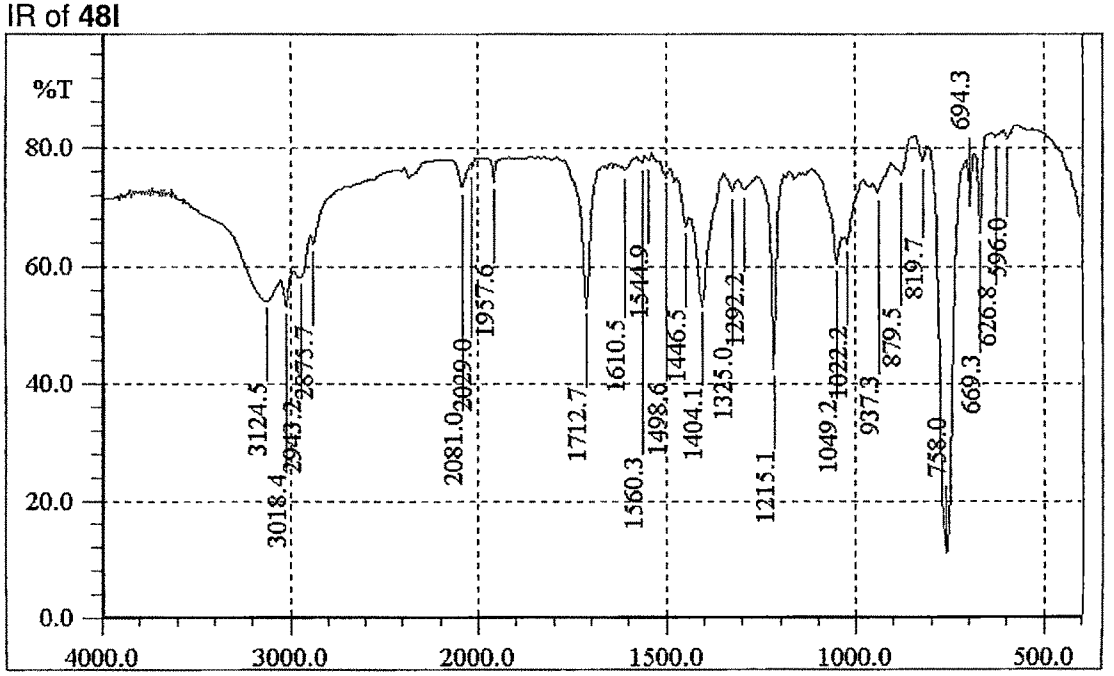
IR of **48k**



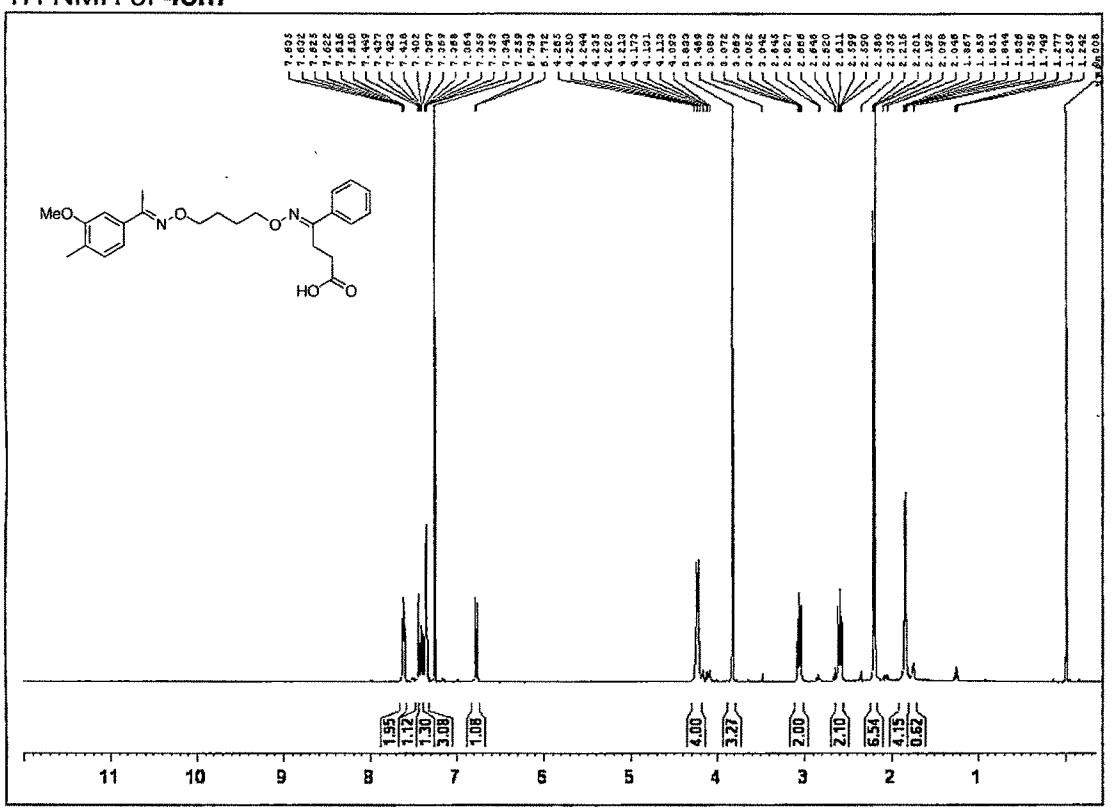
1H NMR of **48l**



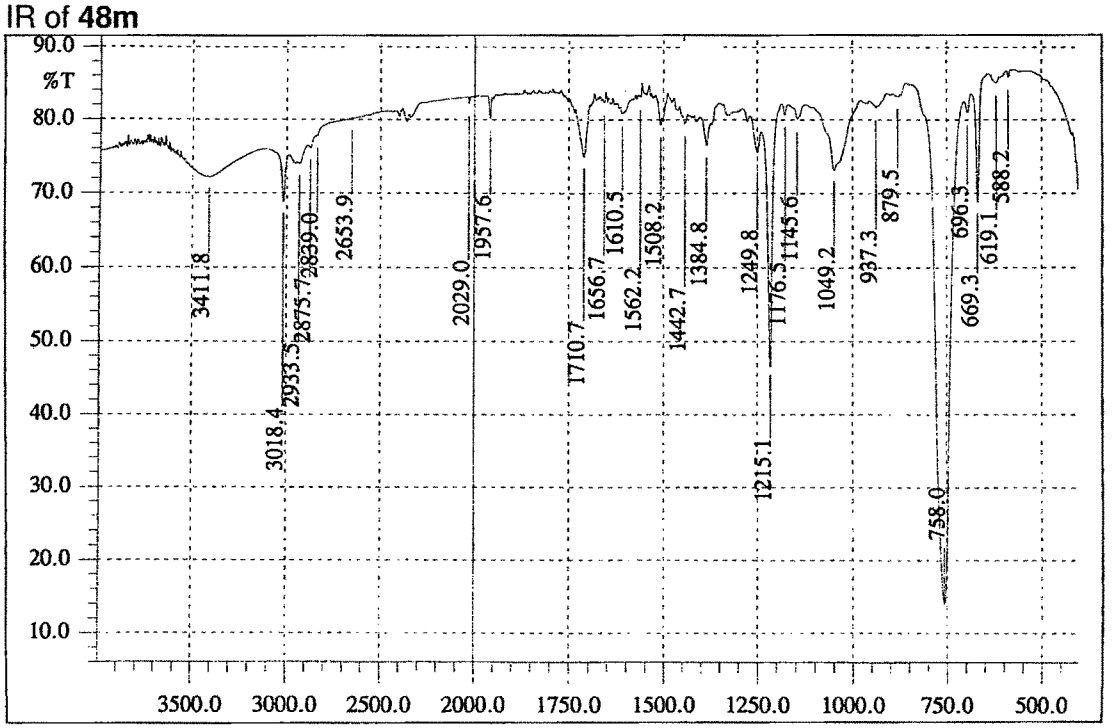
IR of **48l**



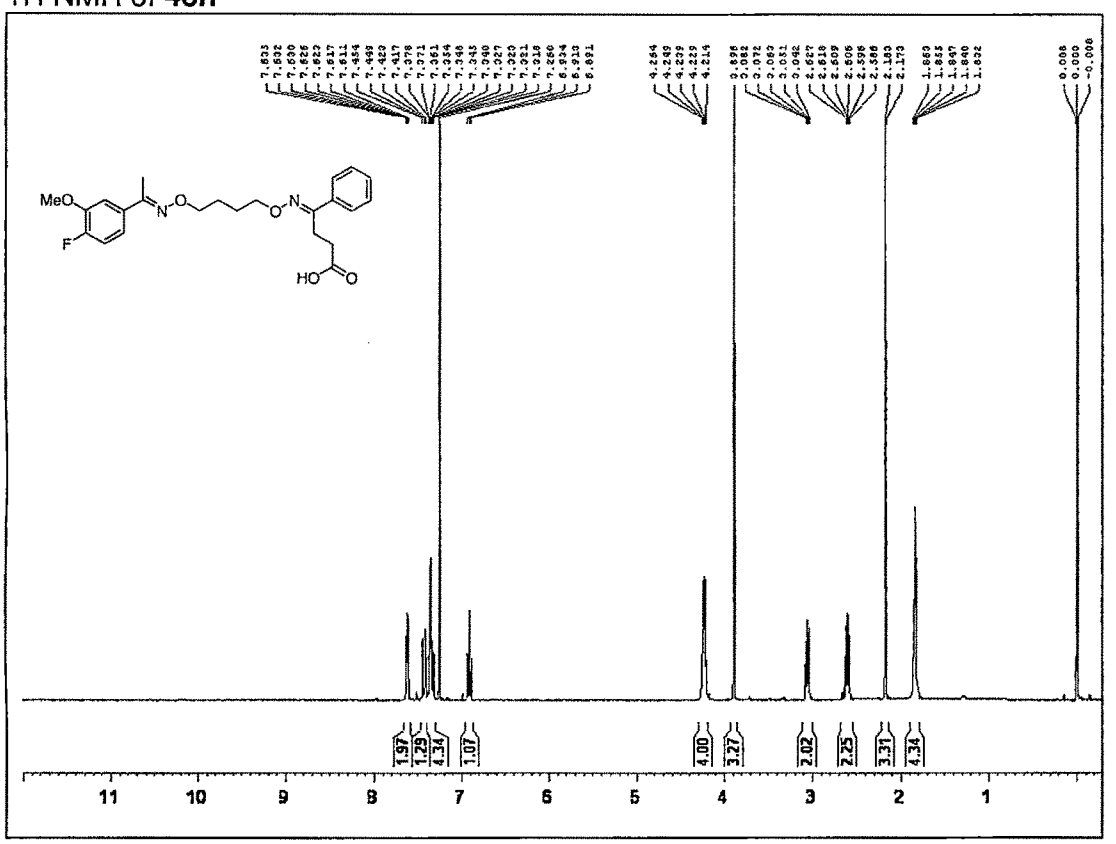
1H NMR of **48m**



IR of **48m**



1H NMR of **48n**



IR of **48n**