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APPENDICES

APPENDIX A

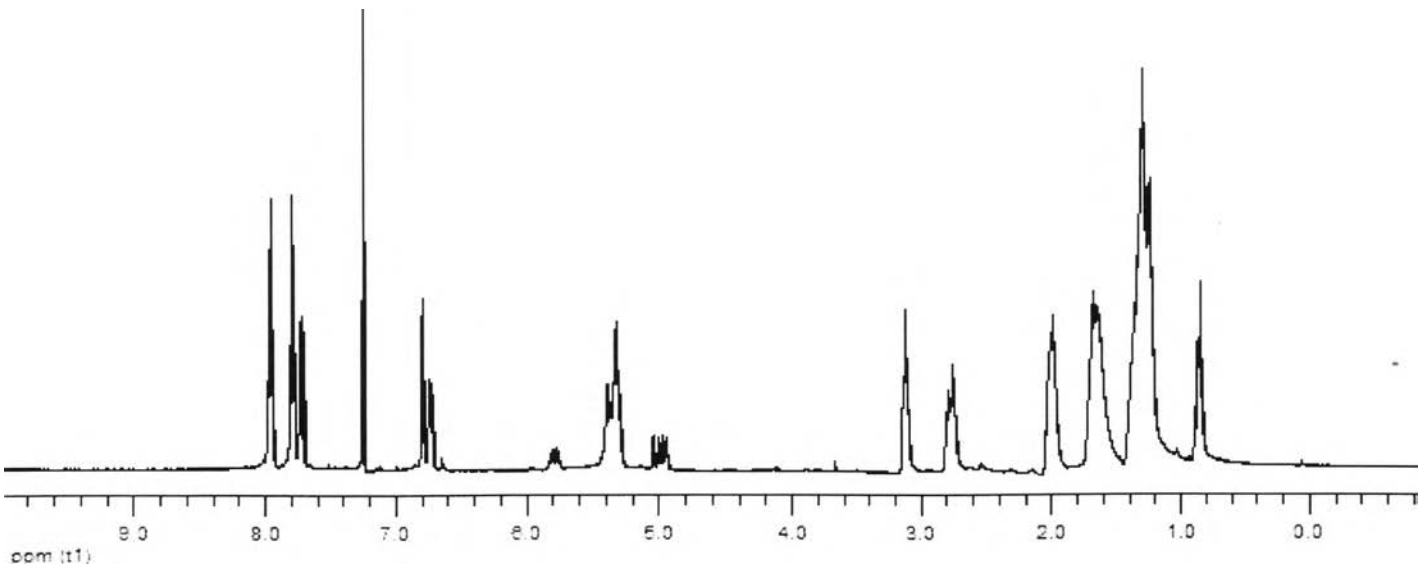

Figure A-1 ^{1}H-NMR spectrum of Compound **6**.

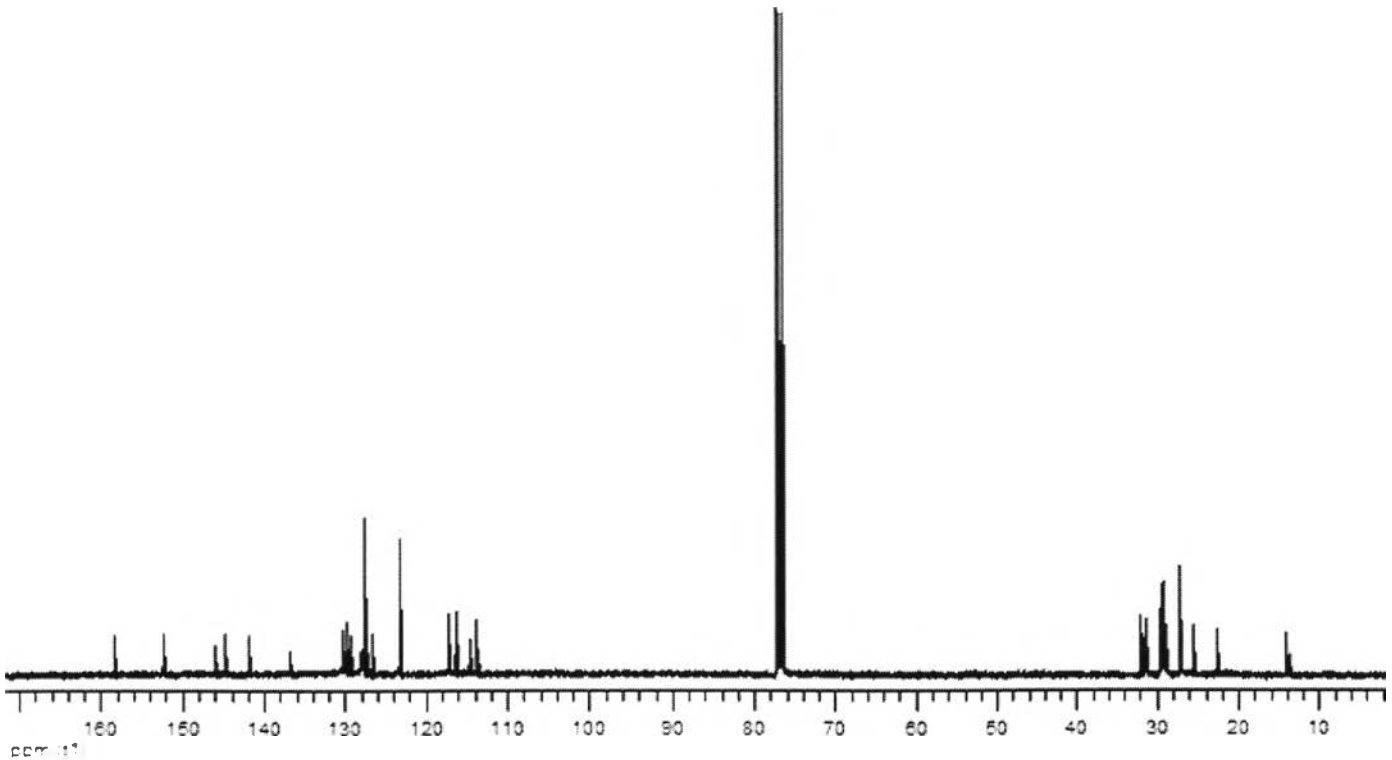

Figure A-2 ^{13}C-NMR spectrum of Compound **6**.

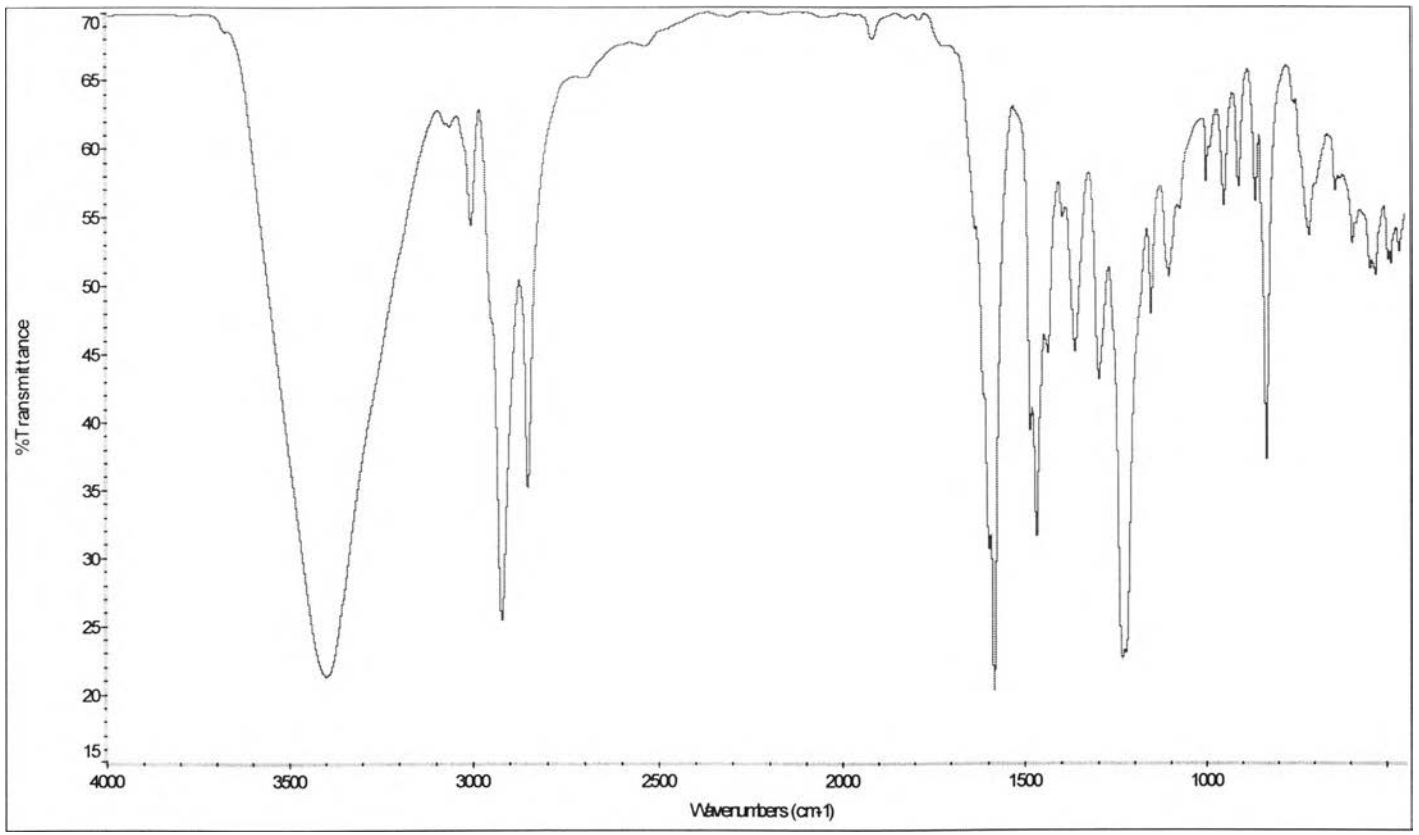

Figure A-3 IR spectrum of Compound **6**.

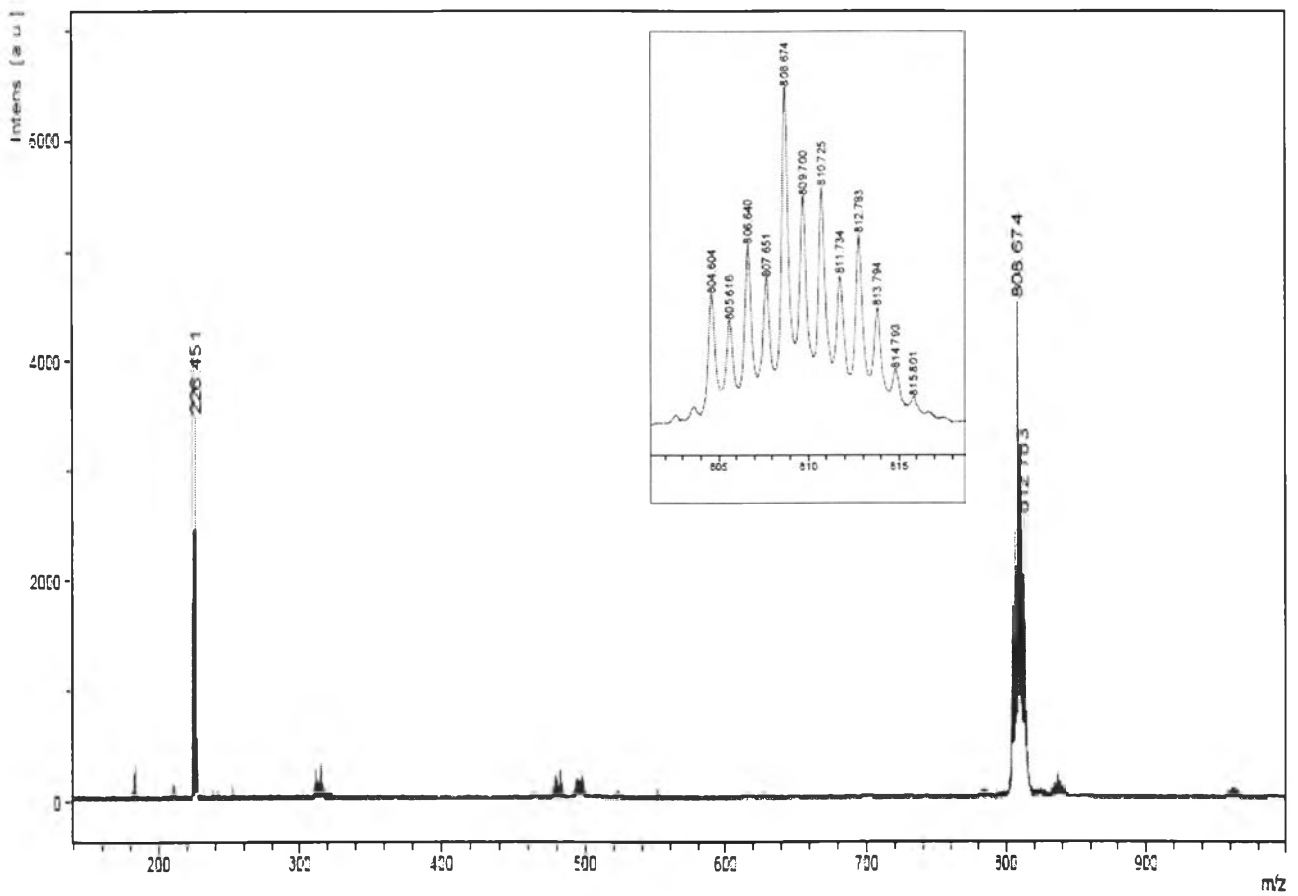

Figure A-4 Mass spectrum of Compound **6**.

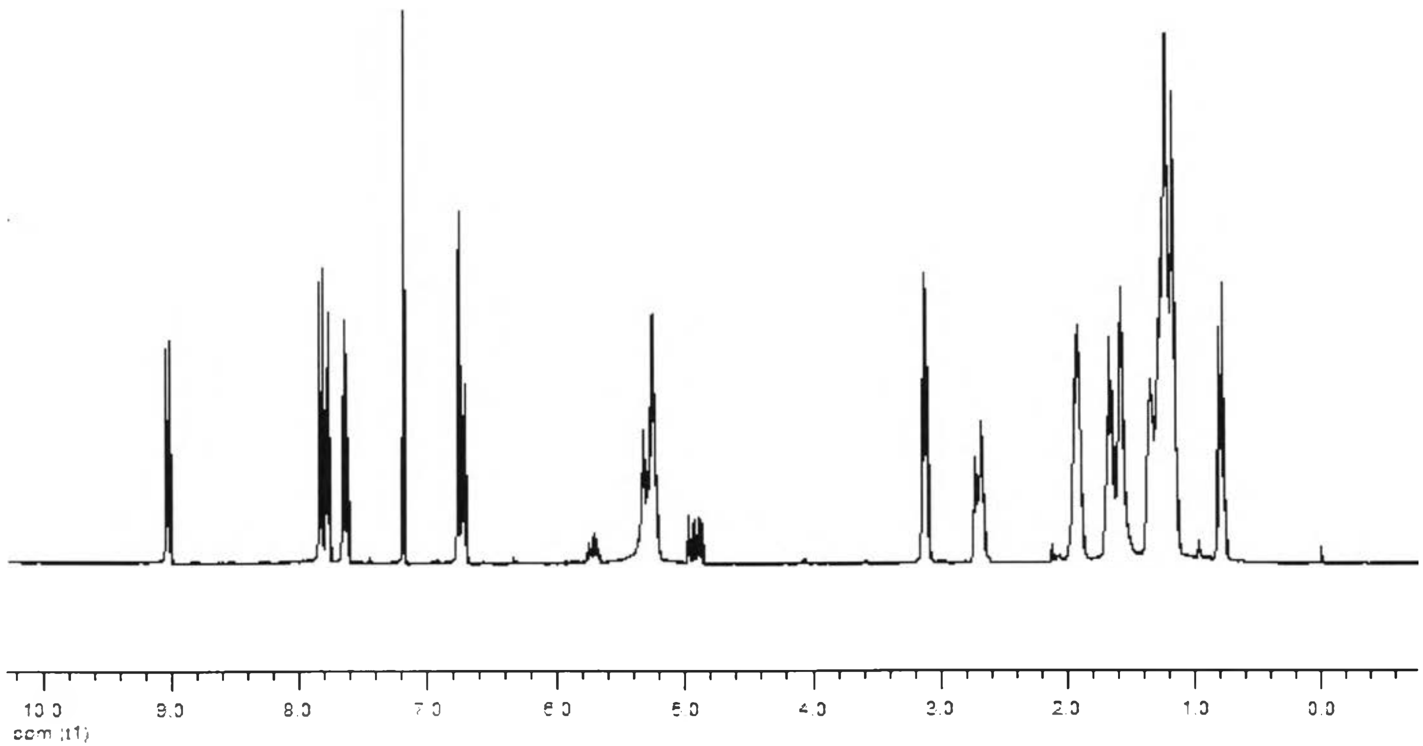

Figure A-5 ^{1}H-NMR spectrum of Compound **7**.

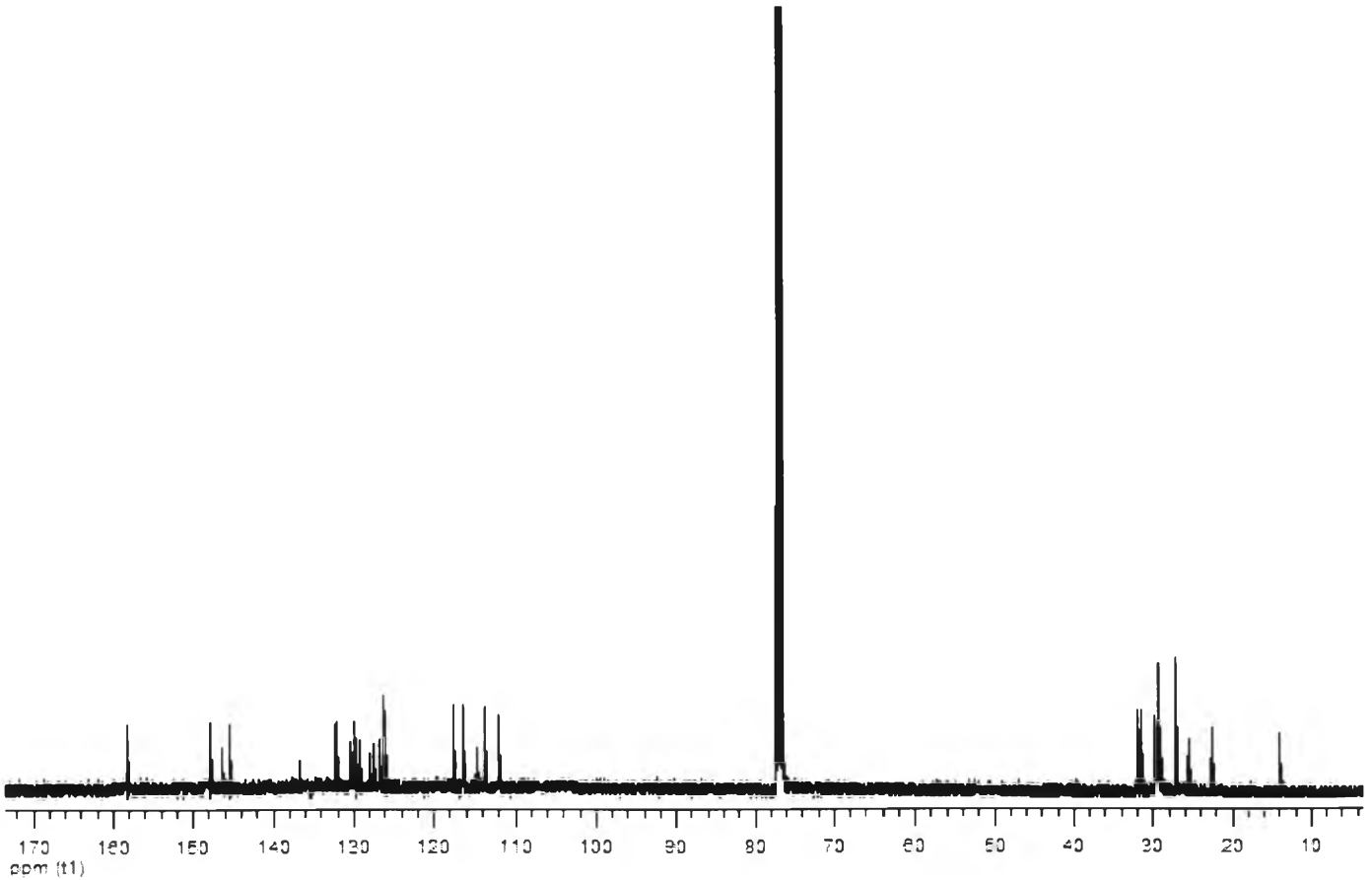

Figure A-6 ^{13}C-NMR spectrum of Compound **7**.

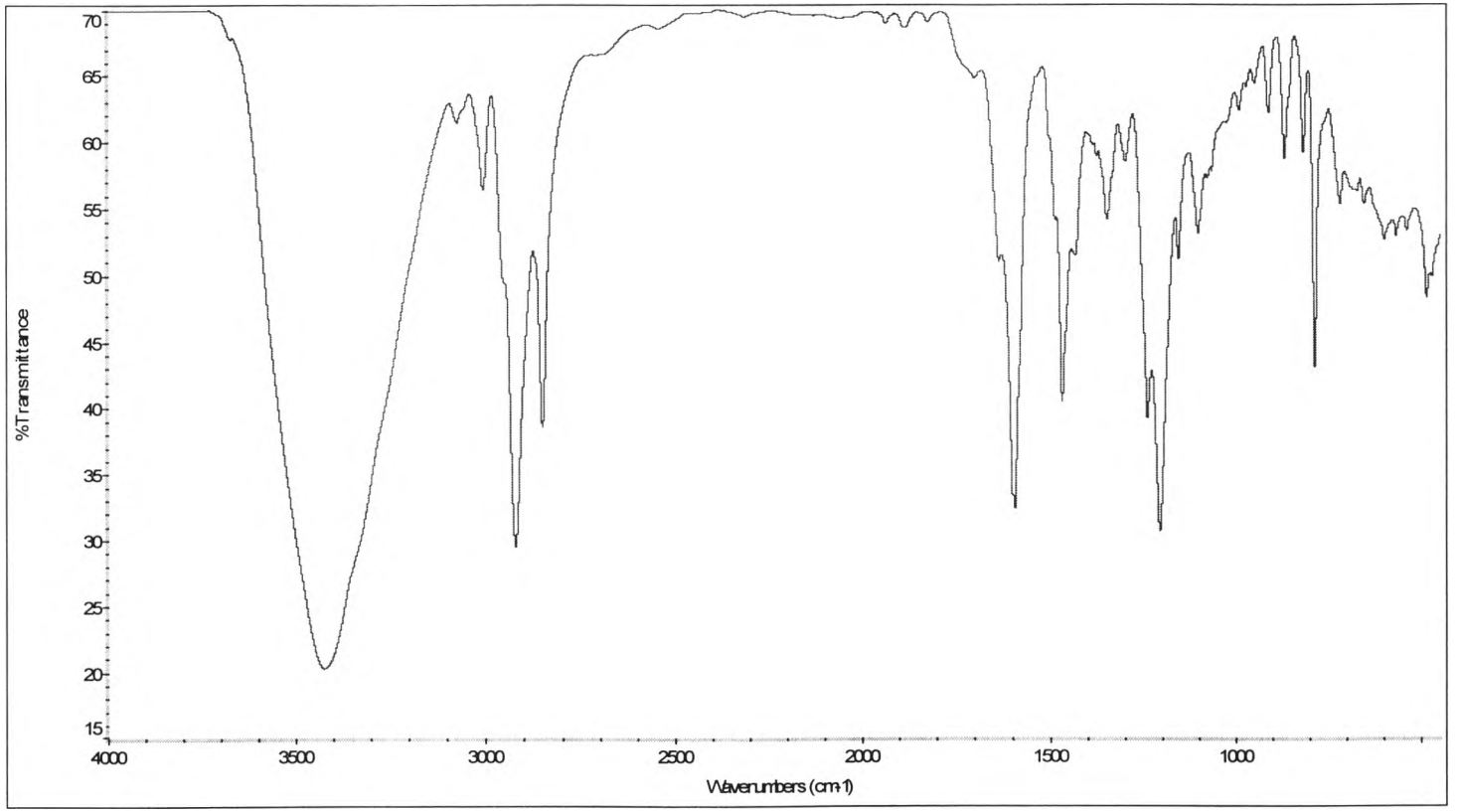

Figure A-7 IR spectrum of Compound 7.

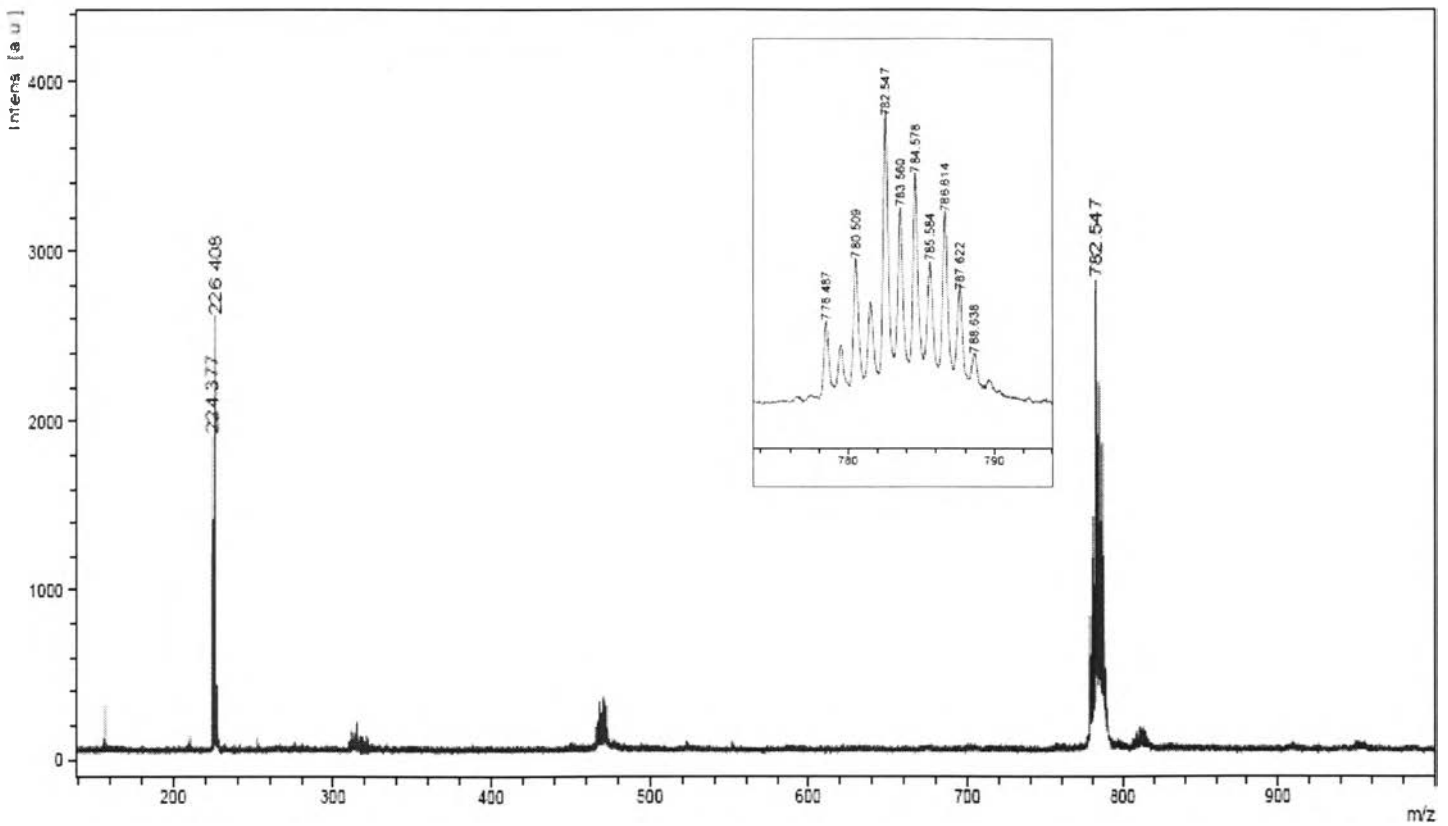

Figure A-8 Mass spectrum of Compound **7**.

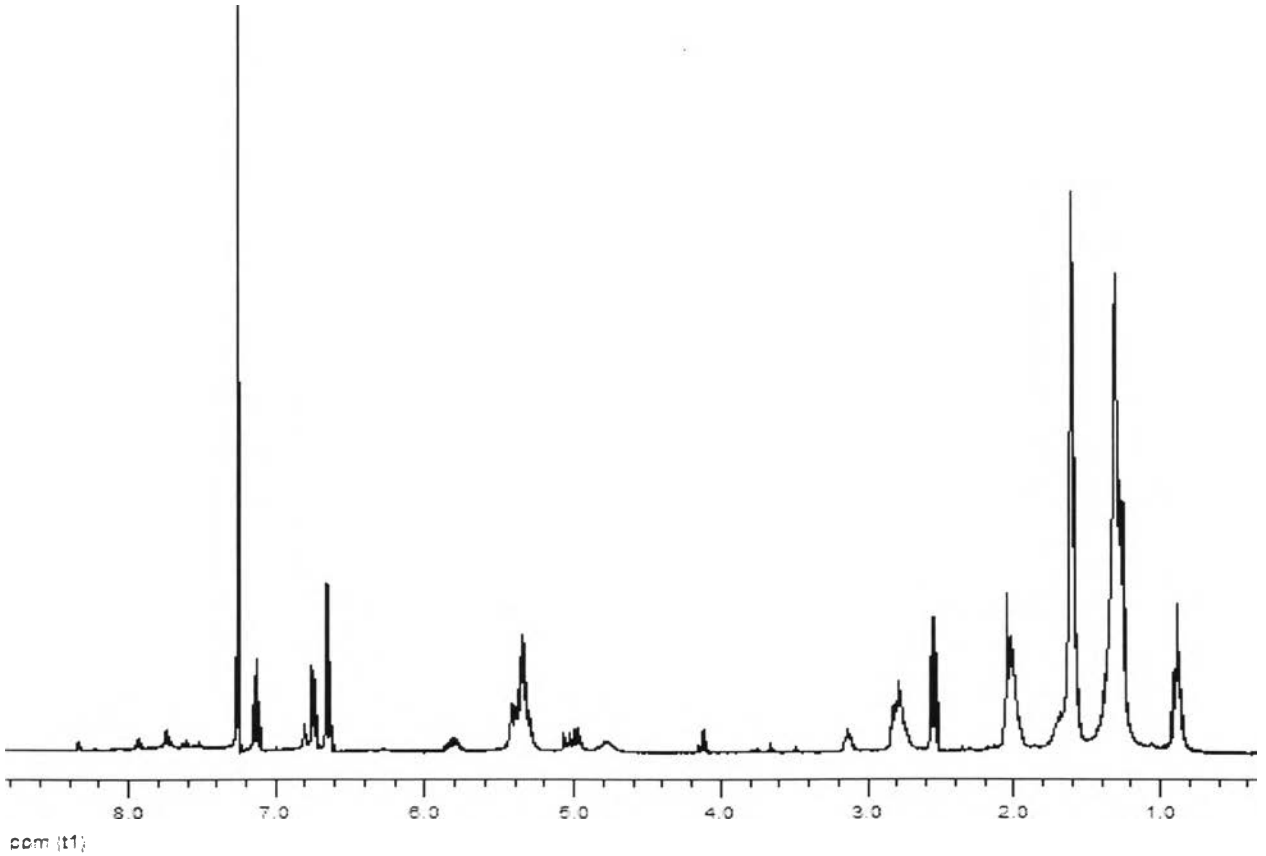

Figure A-9 ^{1}H-NMR spectrum of crude of Compound **9**.

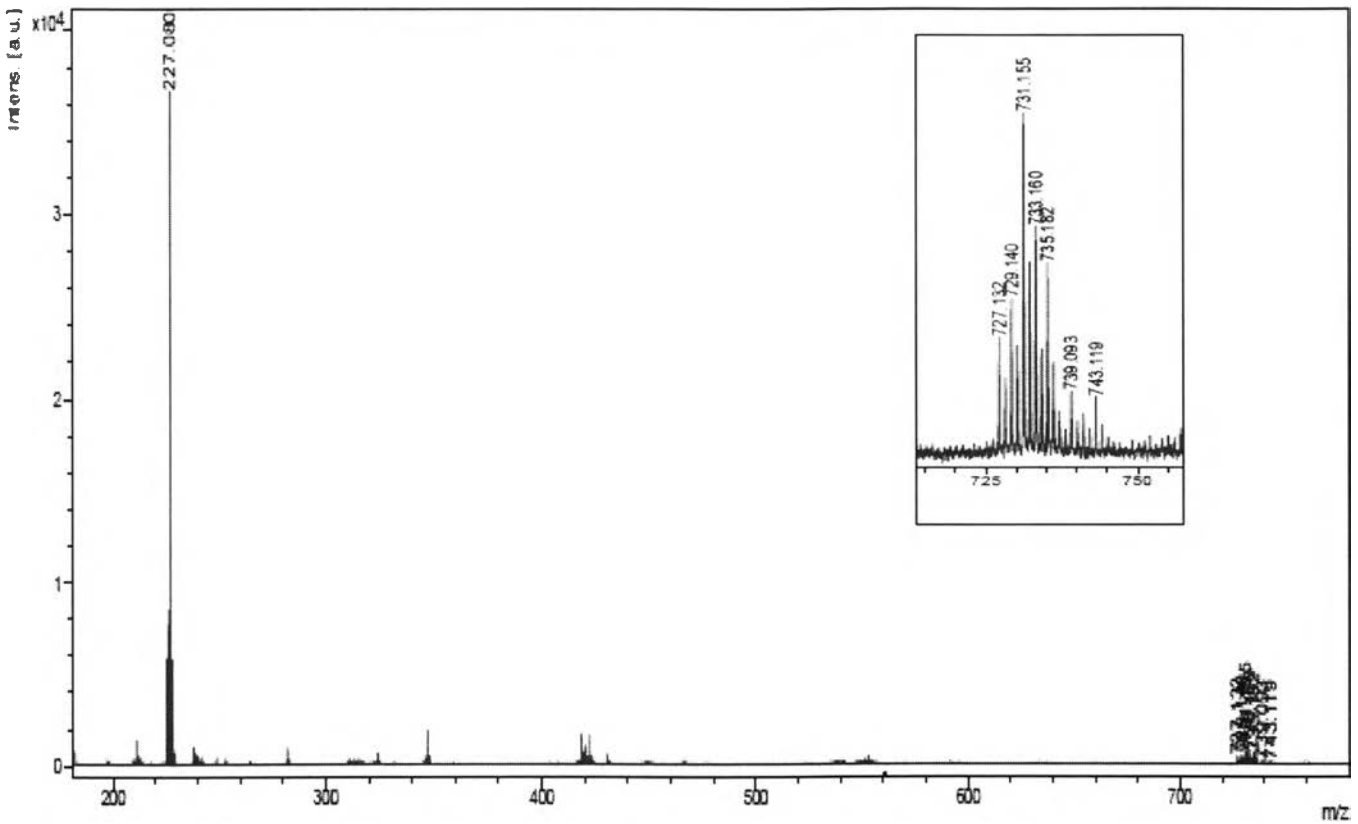

Figure A-10 Mass spectrum of crude of Compound **9**.

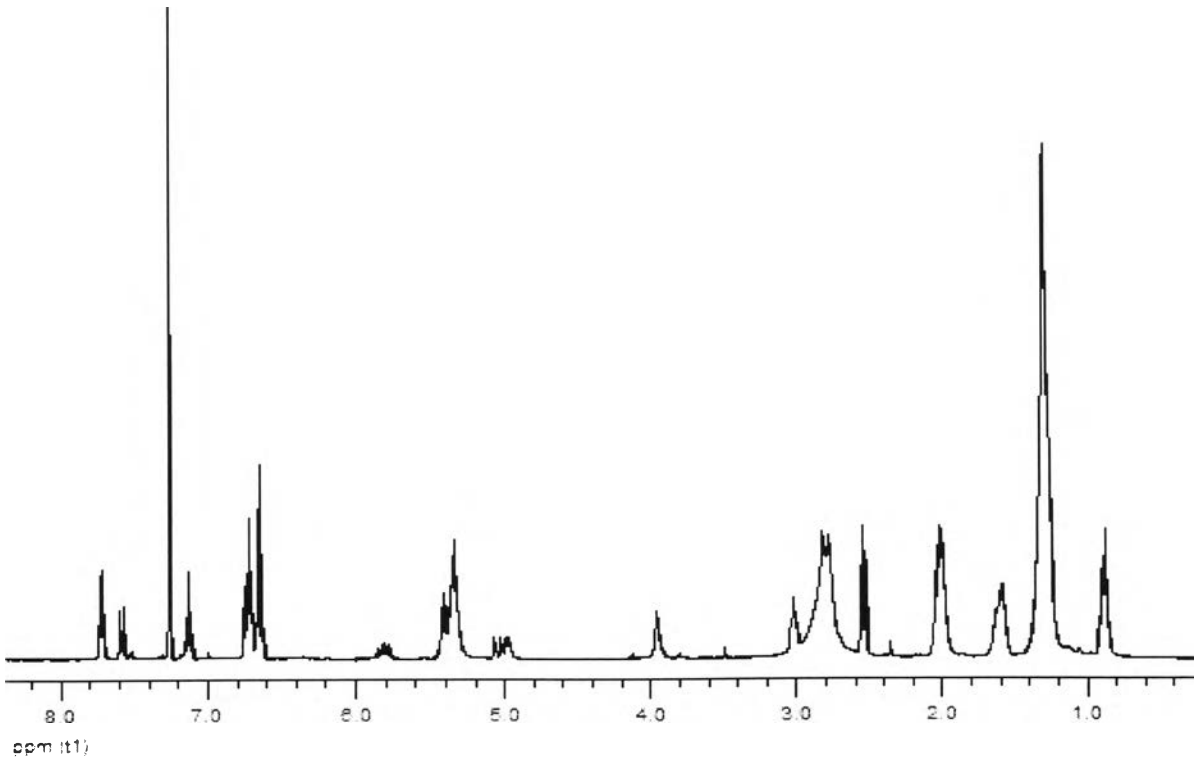

Figure A-11 ^{1}H-NMR spectrum of crude of Compound **10**.

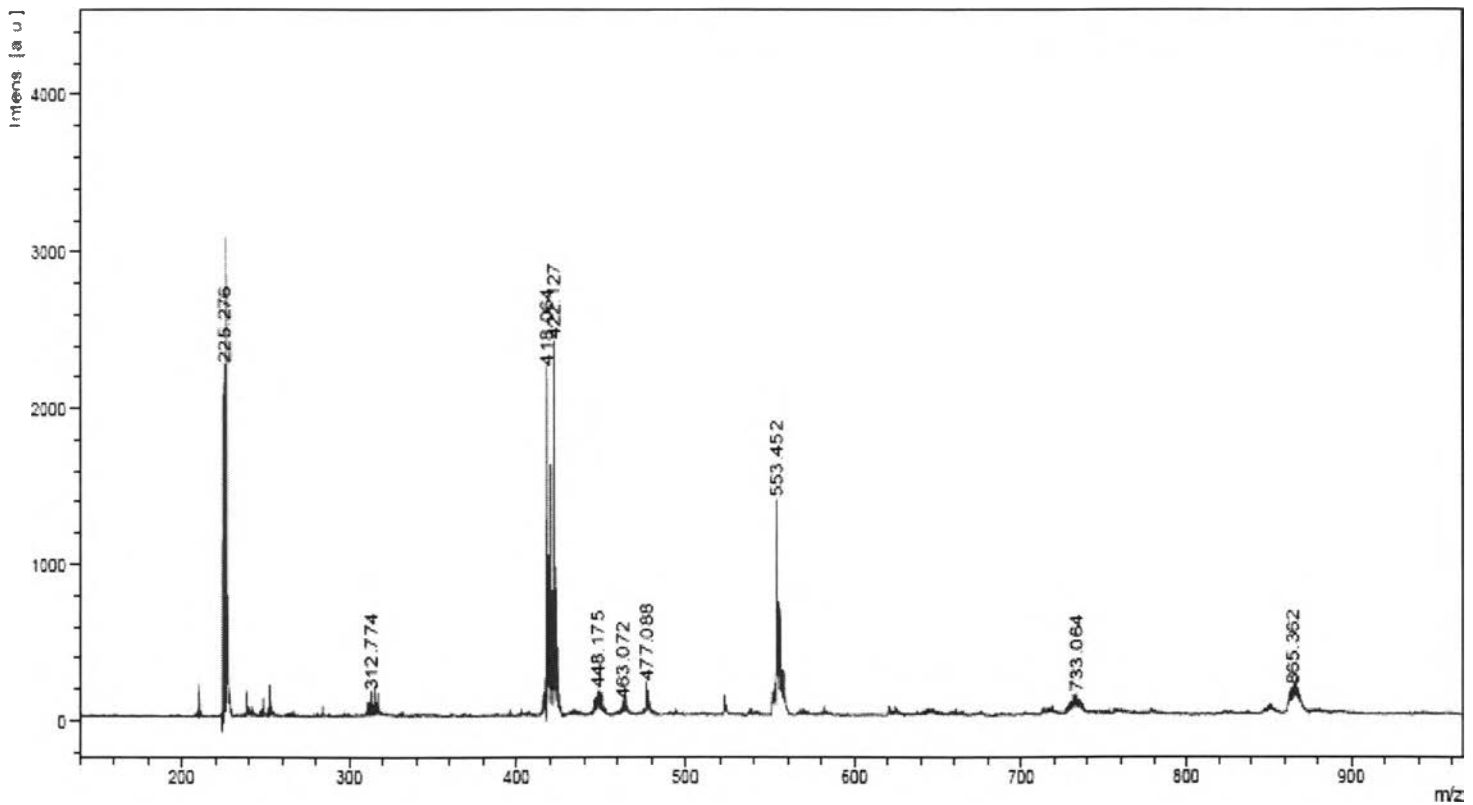

Figure A-12 Mass spectrum of crude of Compound **10**.

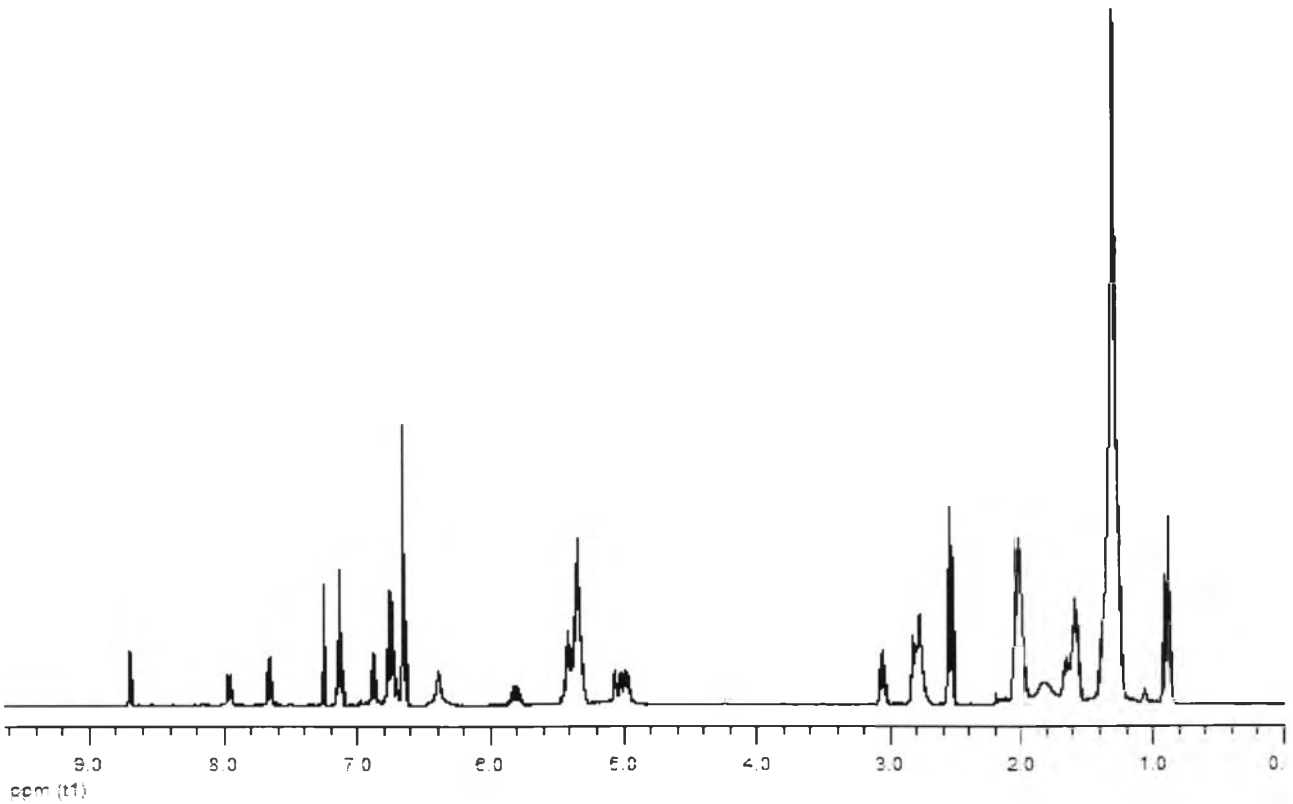

Figure A-13 ^{1}H-NMR spectrum of crude of Compound **11**.

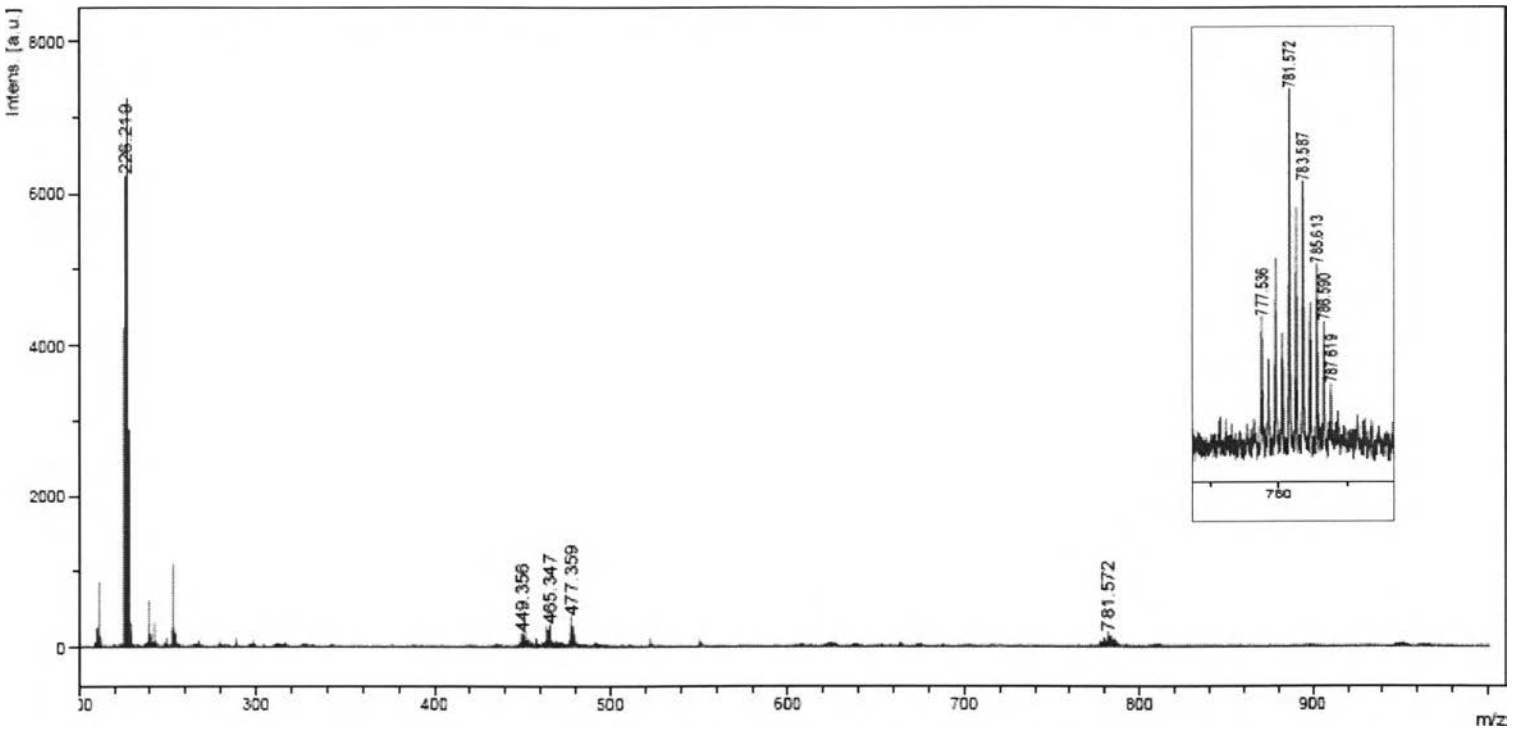

Figure A-14 Mass spectrum of crude of Compound **11**.

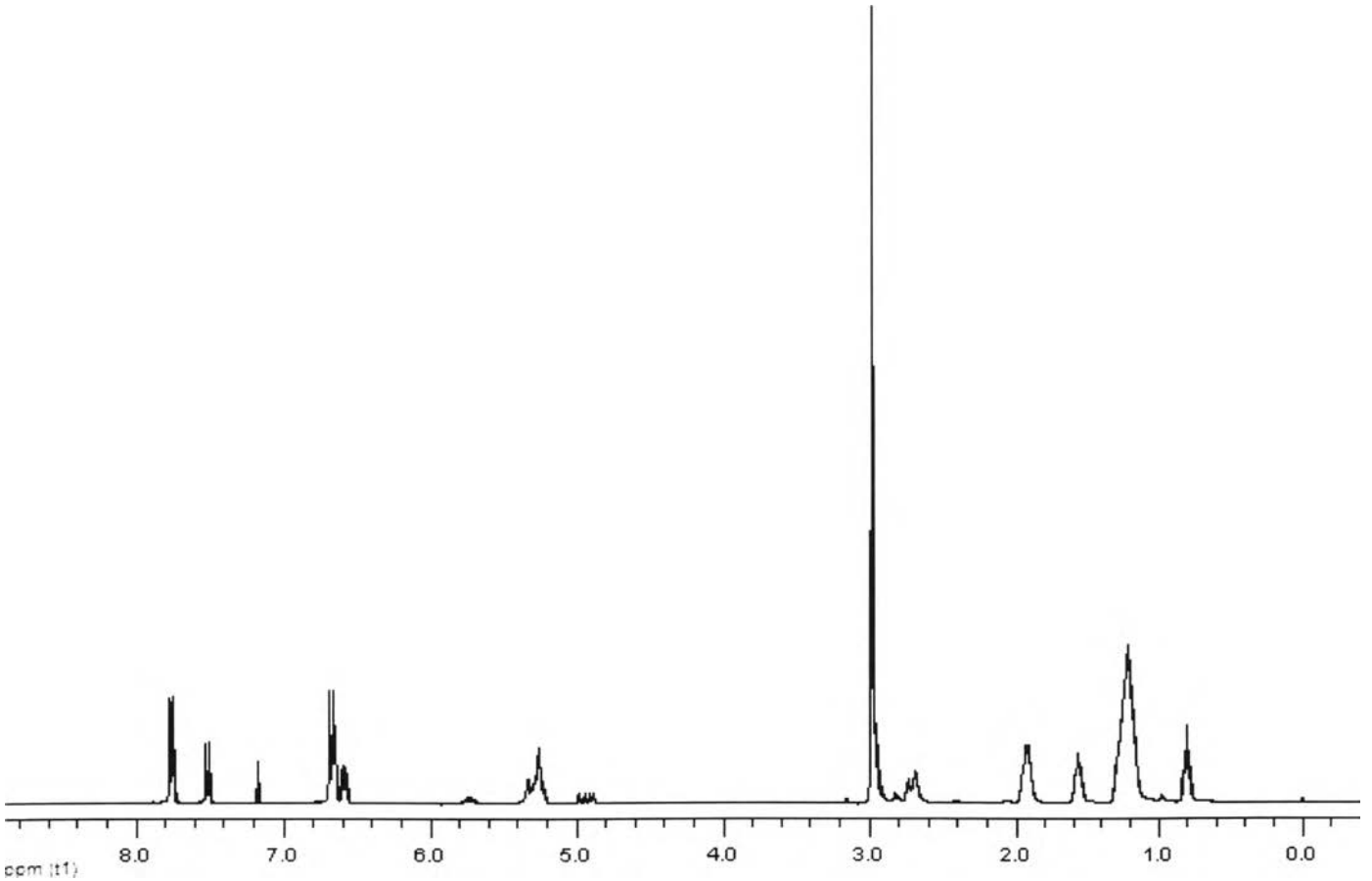

Figure A-15 ^{1}H-NMR spectrum of Compound **12**.

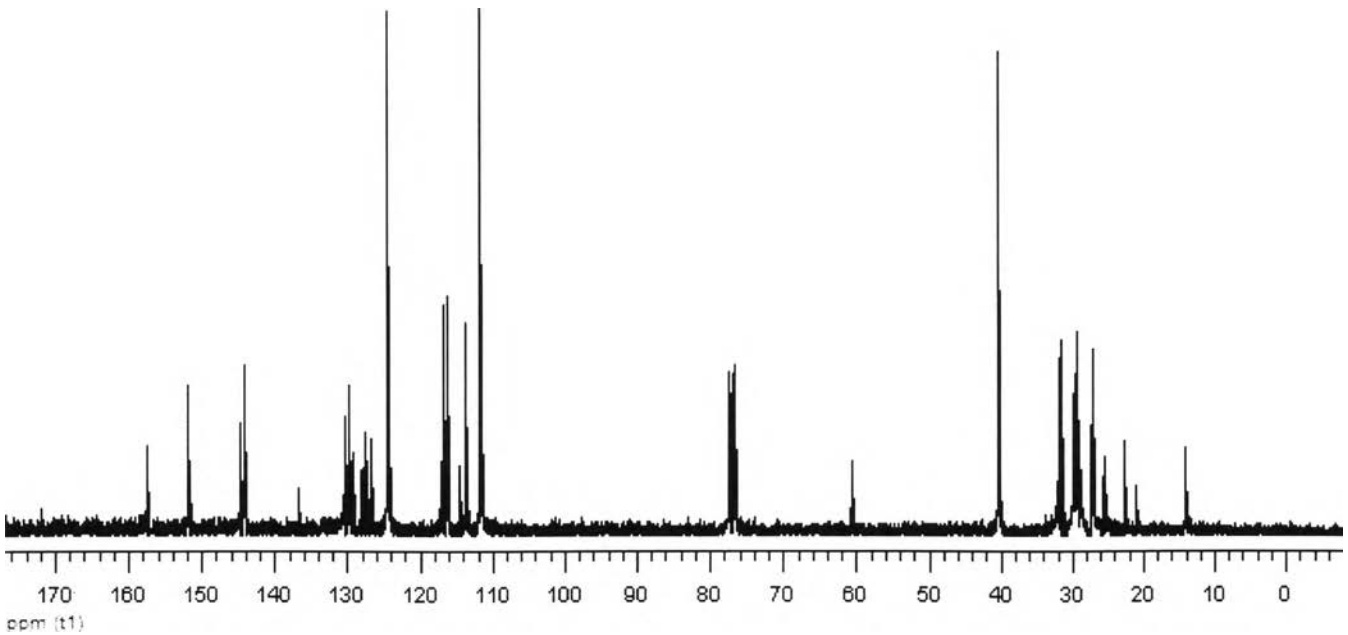

Figure A-16 ^{13}C-NMR spectrum of Compound **12**.

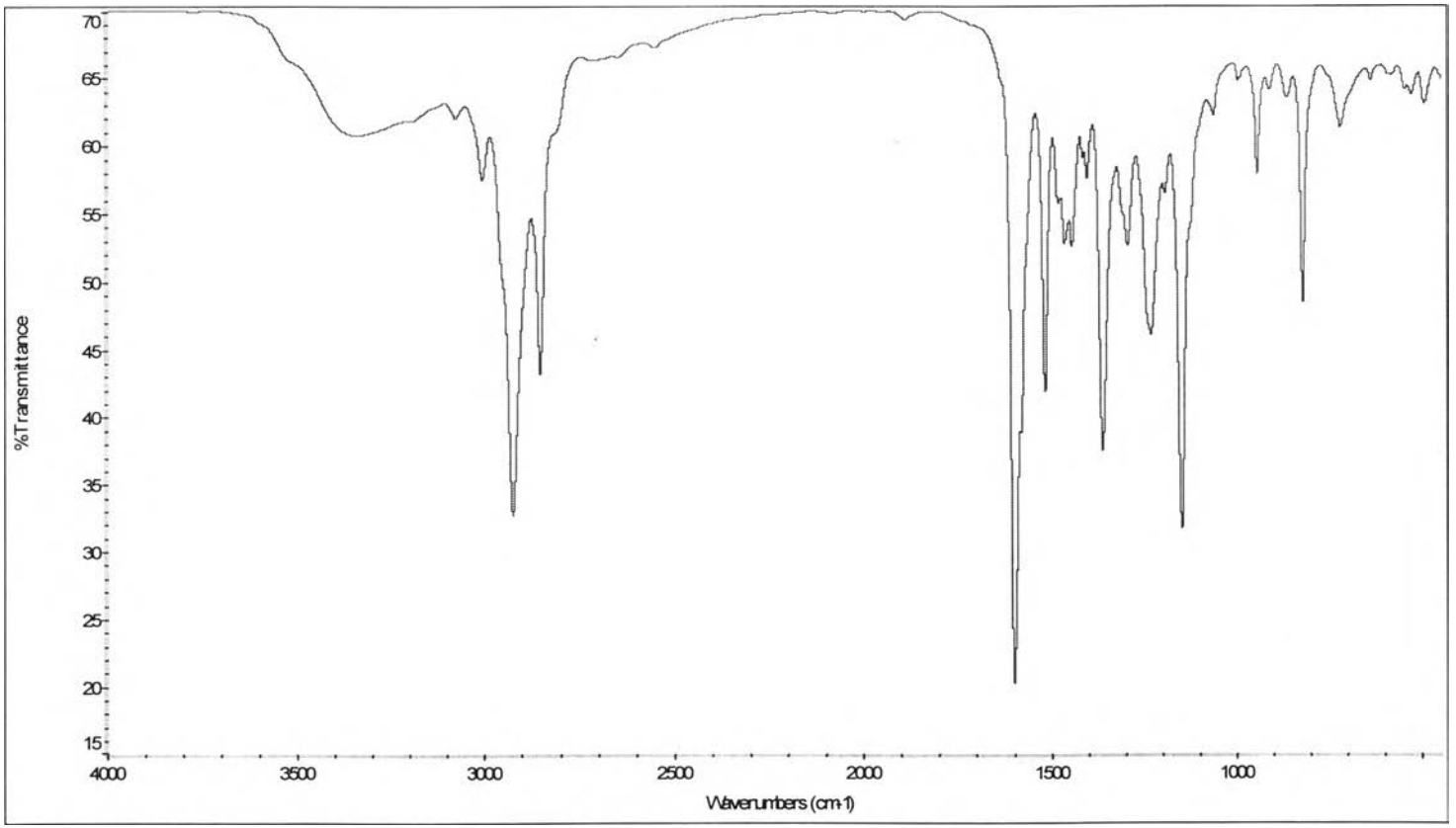

Figure A-17 IR spectrum of Compound **12**.

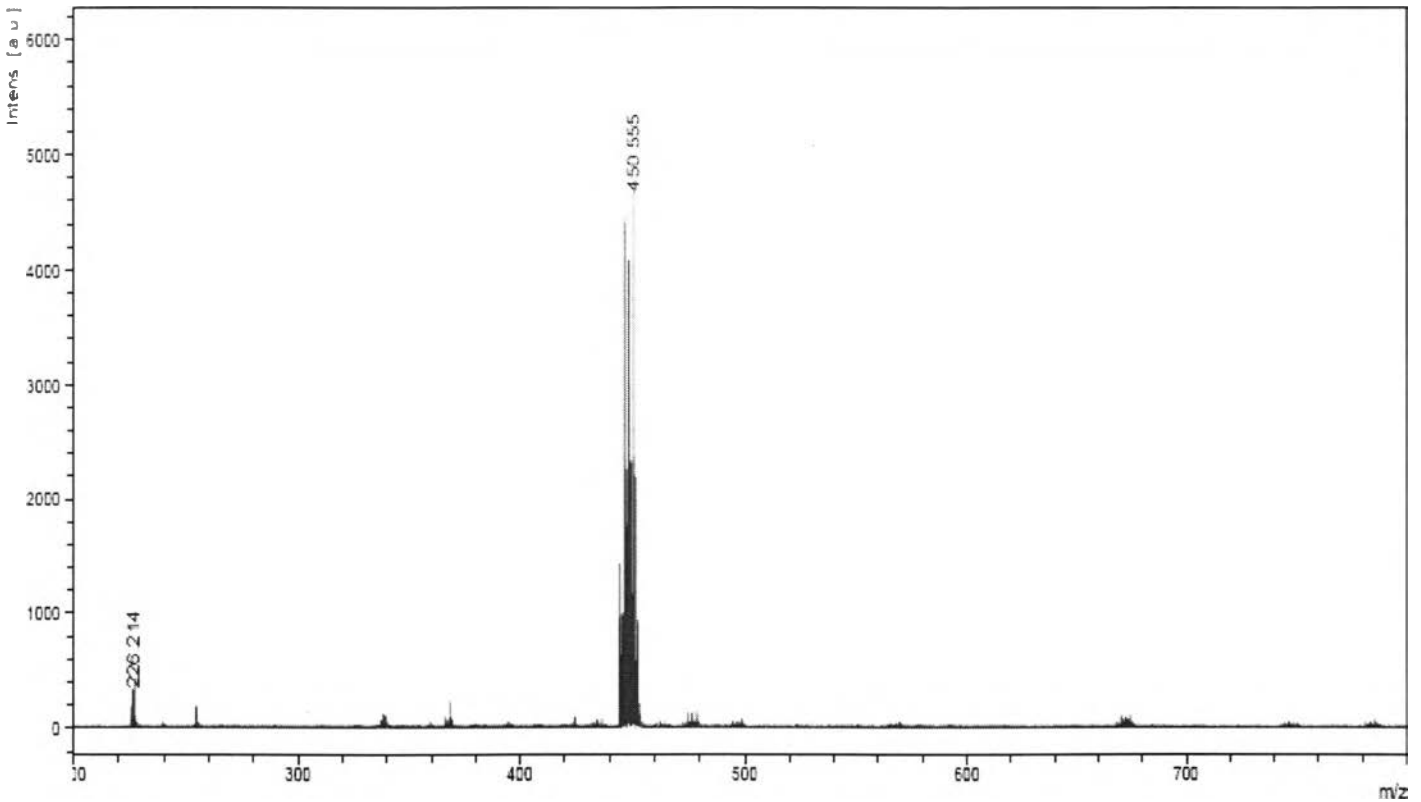

Figure A-18 Mass spectrum of Compound **12**.

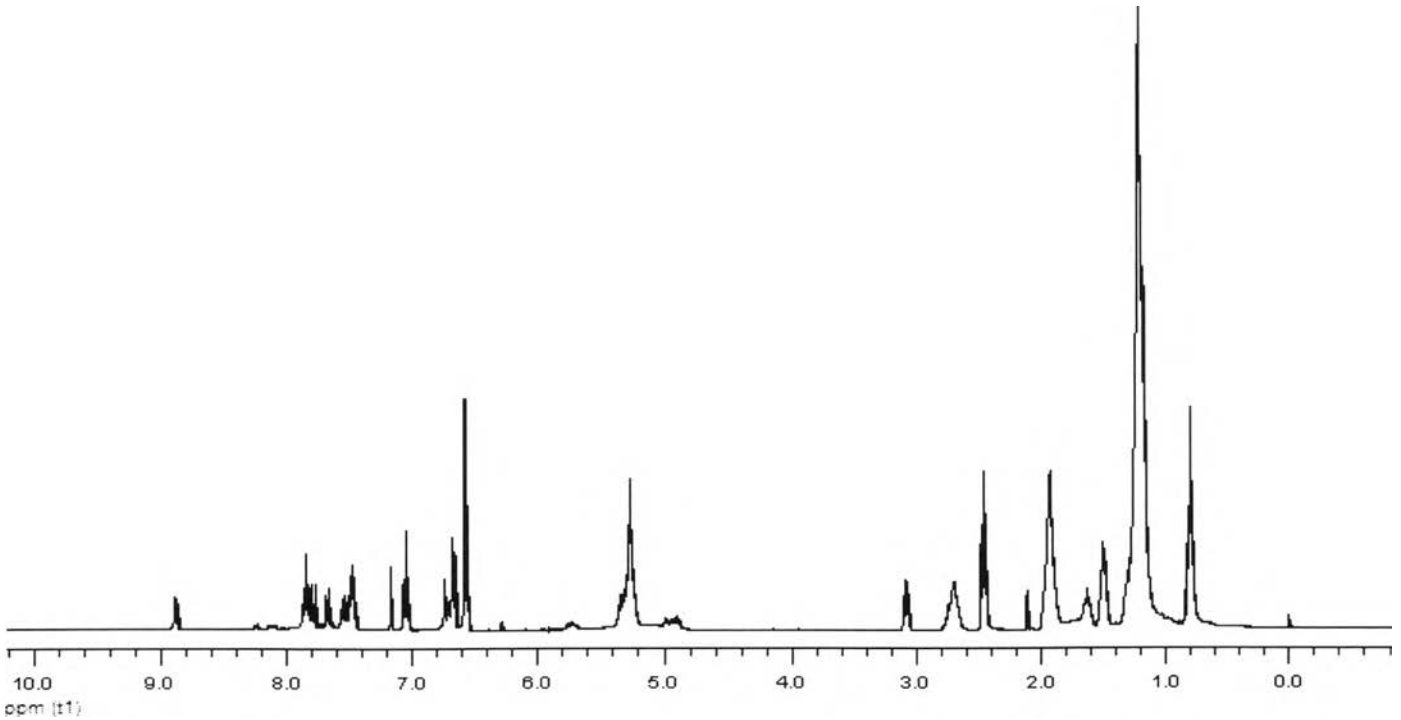

Figure A-19 ^{1}H-NMR spectrum of Compound **13**.

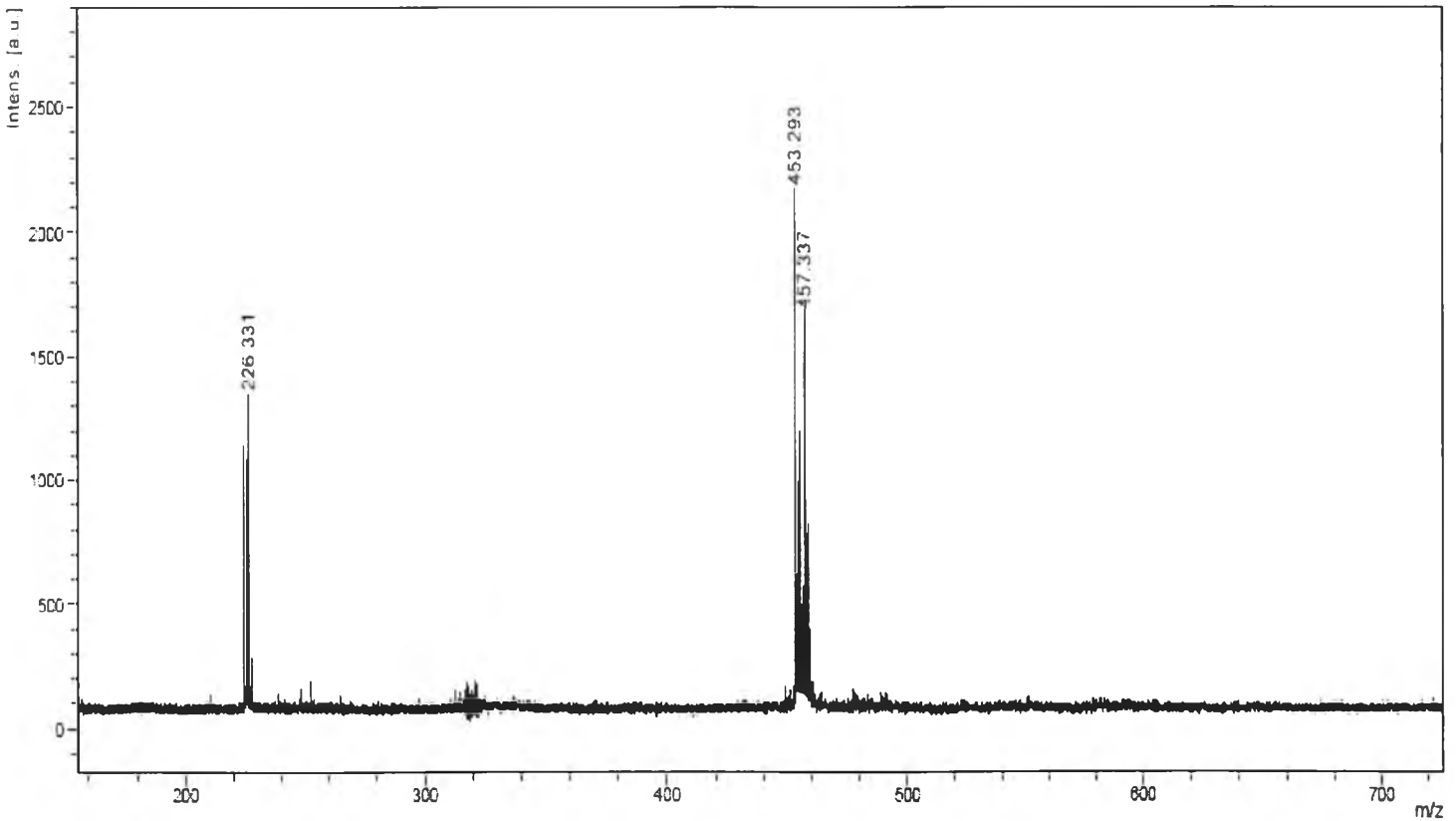

Figure A-20 Mass spectrum of Compound **13**.

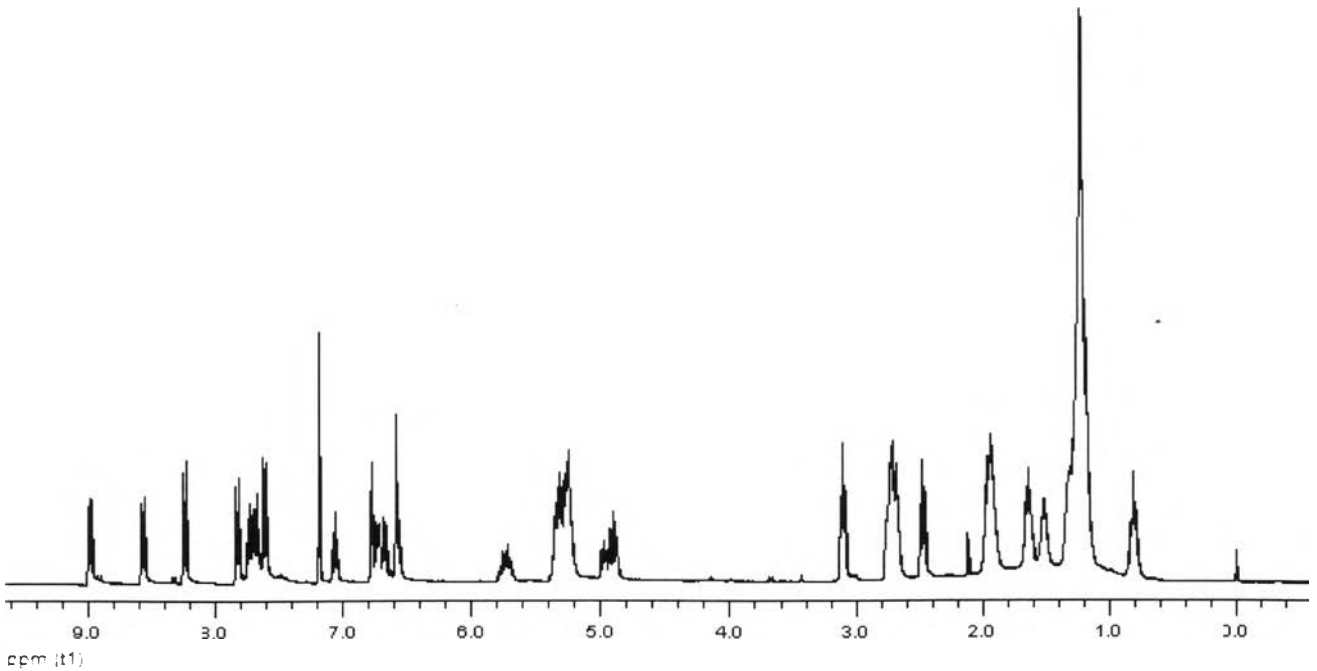

Figure A-21 ^{1}H-NMR spectrum of Compound **14**.

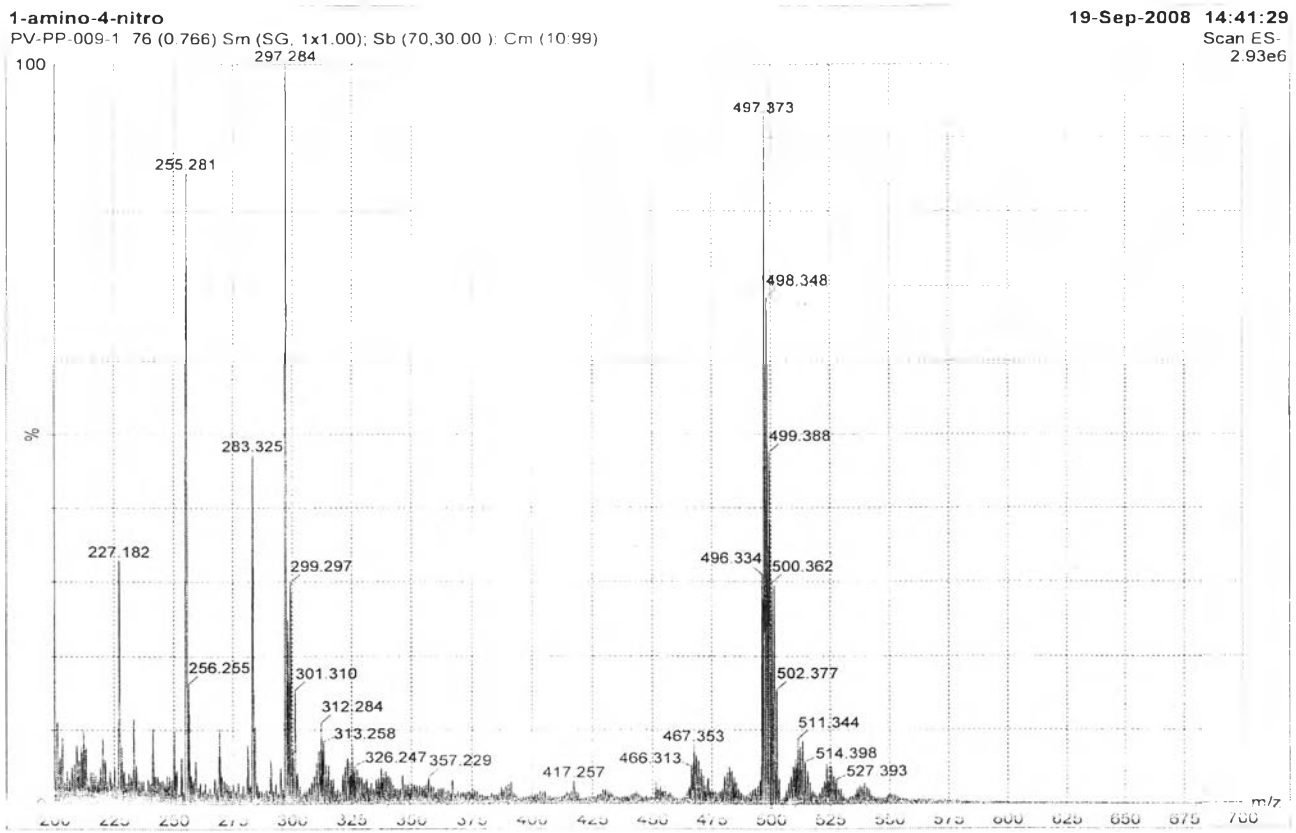

Figure A-22 Mass spectrum of Compound **14**.

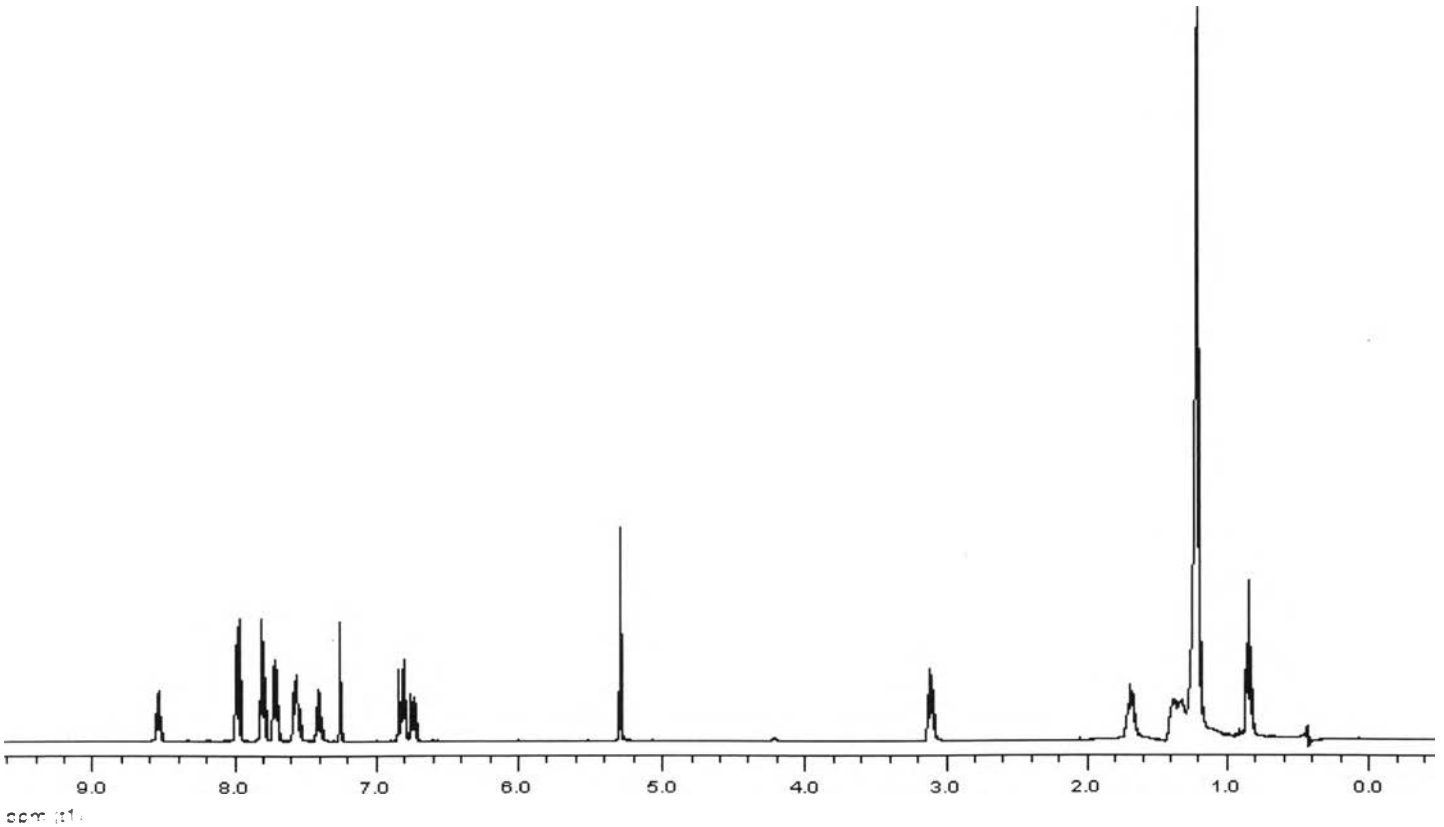

Figure A-23 ^{1}H-NMR spectrum of Compound **17**.

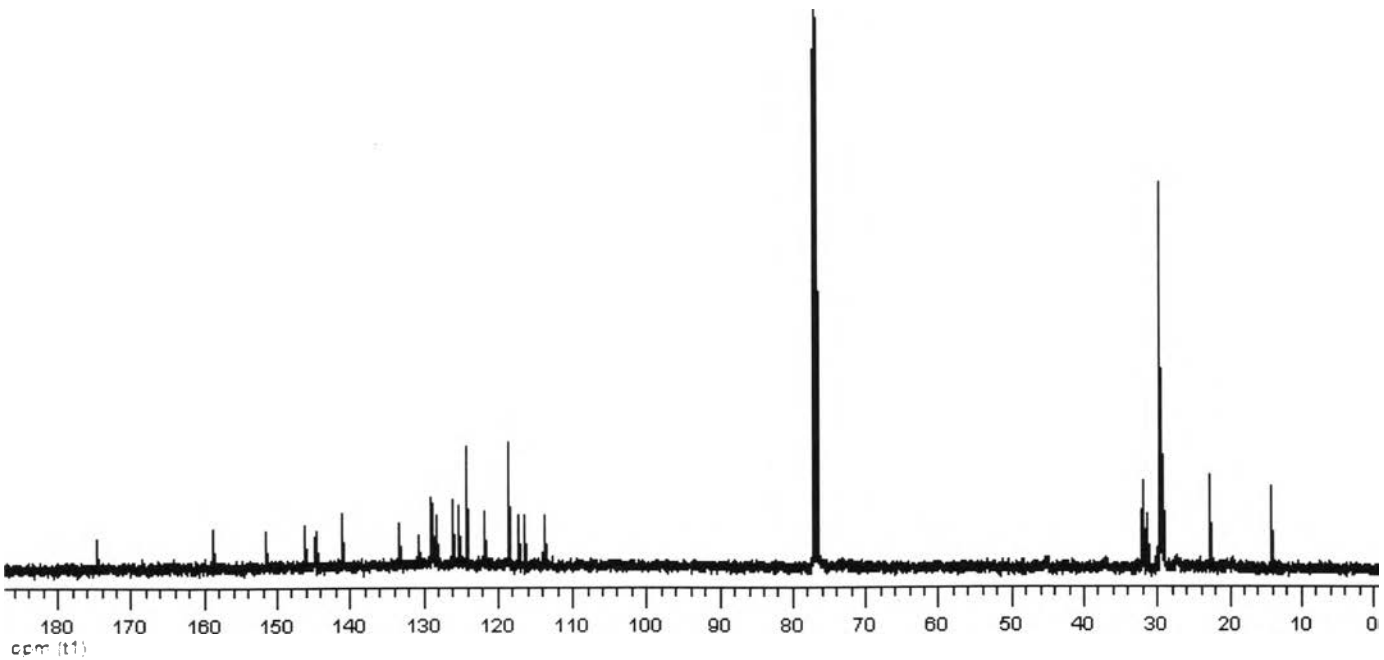

Figure A-24 ^{13}C-NMR spectrum of Compound **17**.

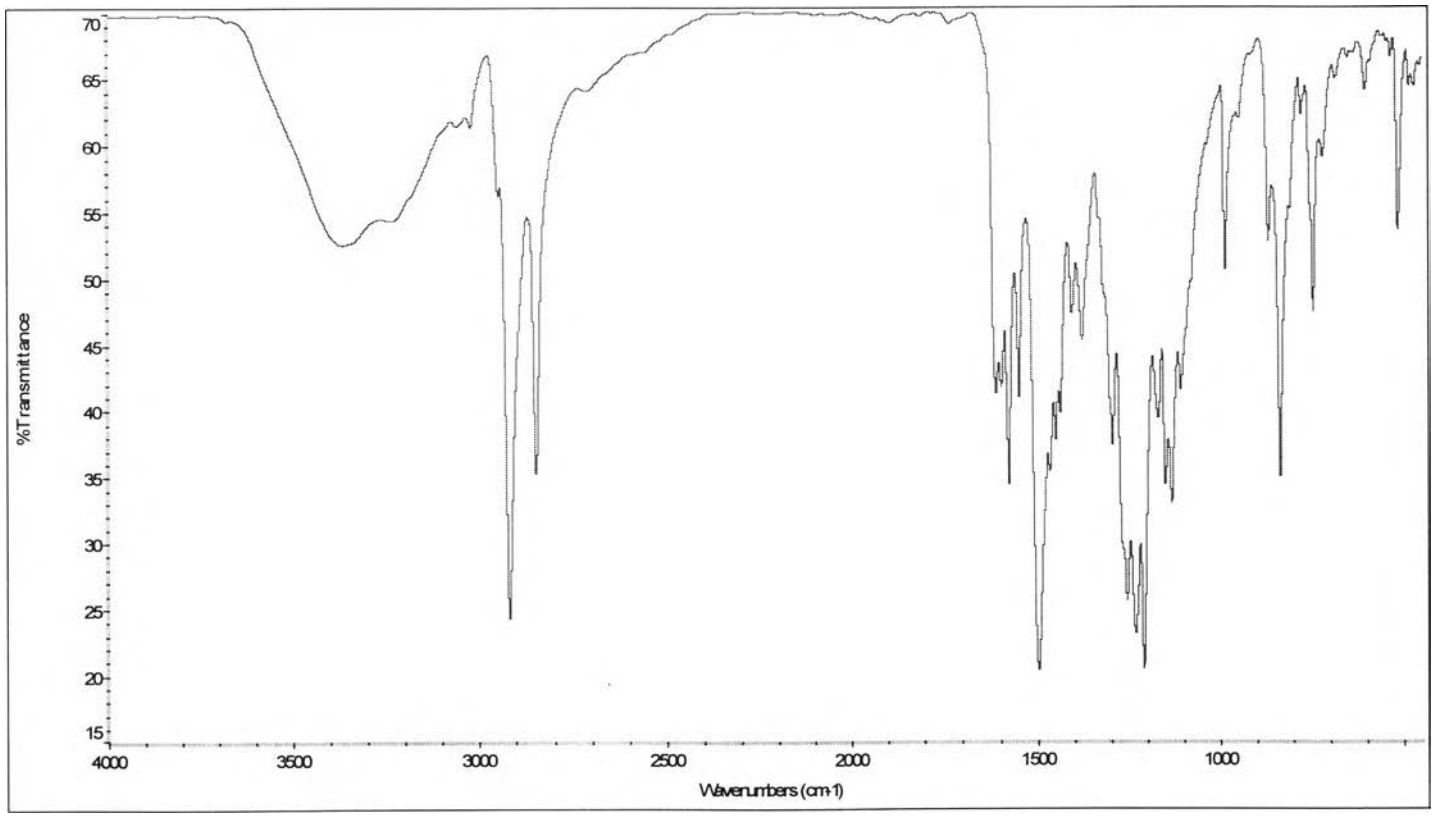

Figure A-25 IR spectrum of Compound **17**.

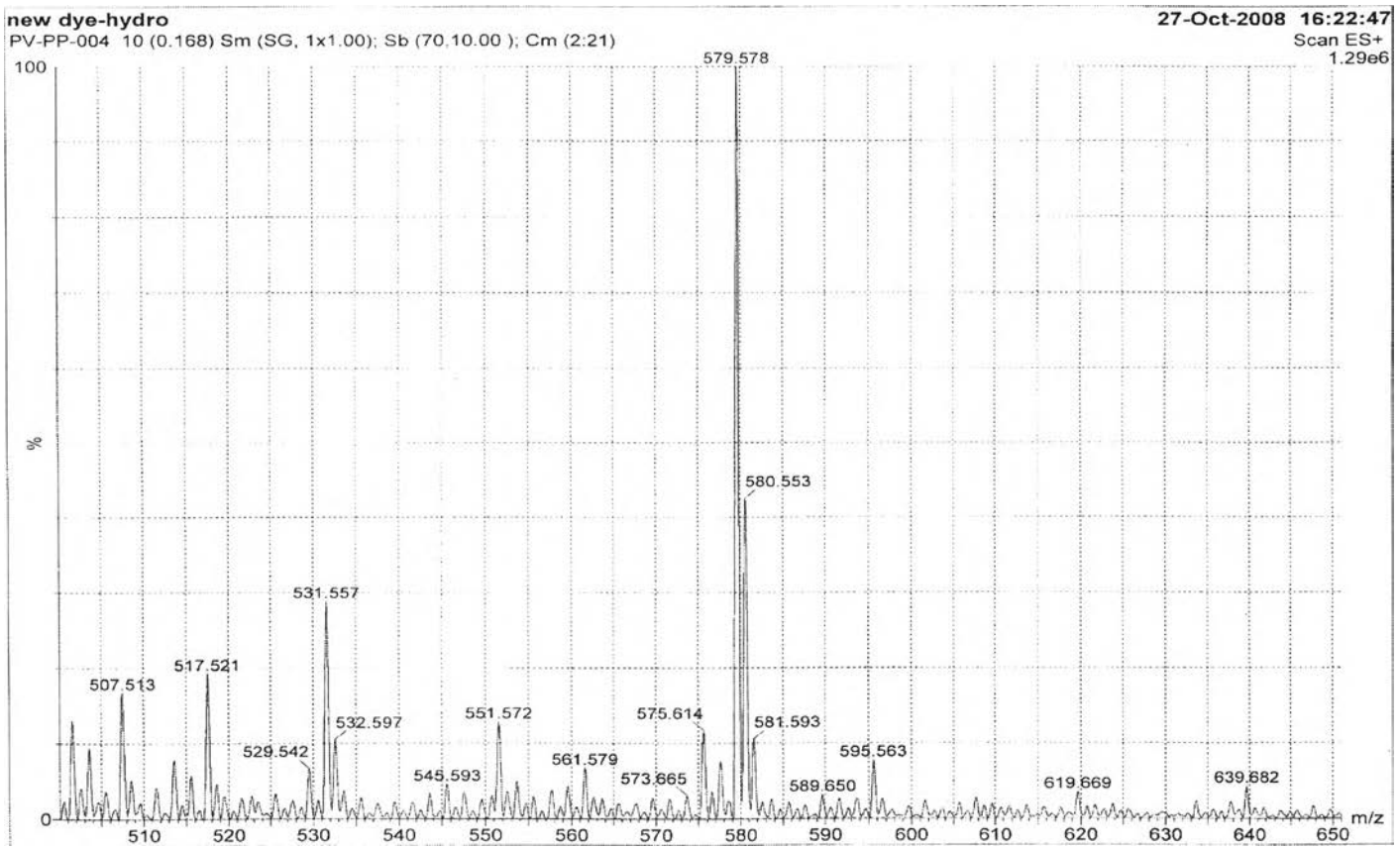

Figure A-26 Mass spectrum of Compound **17**.

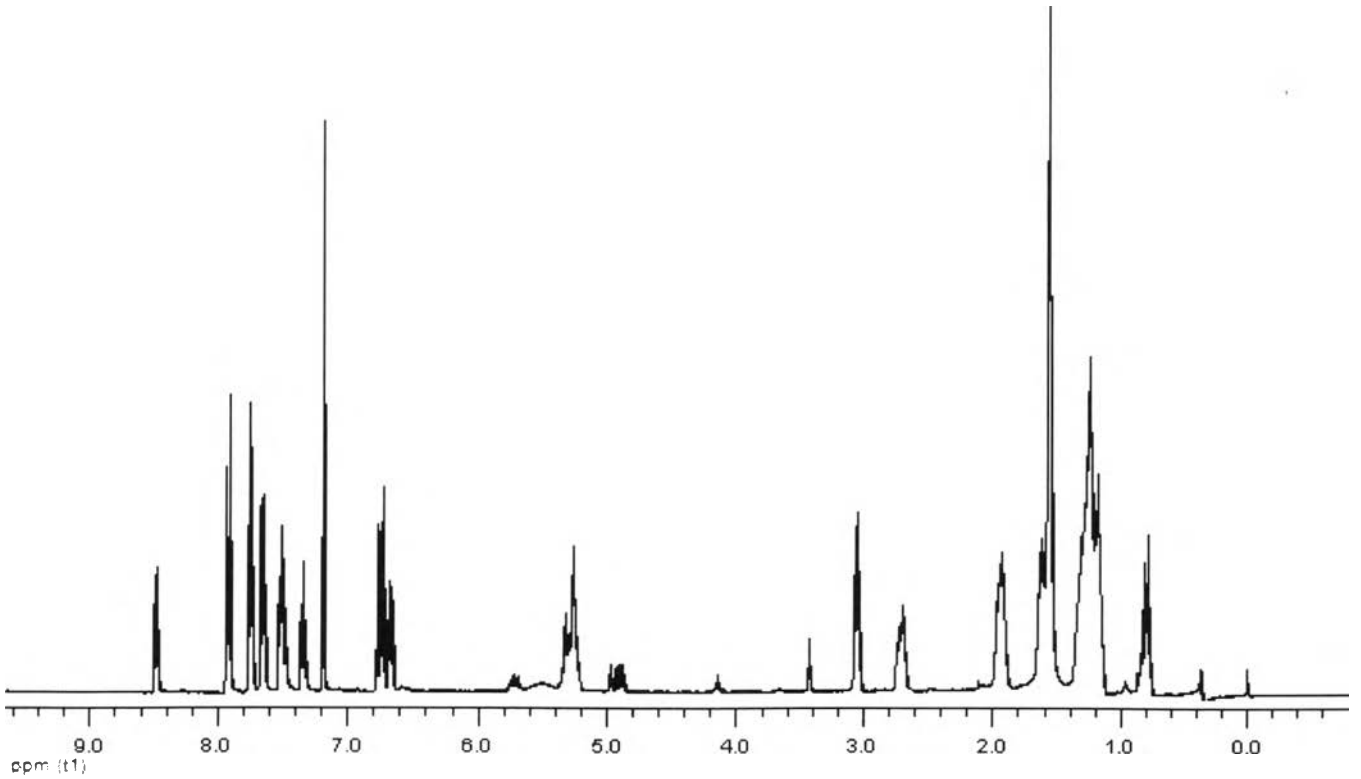

Figure A-27 ^{1}H-NMR spectrum of Compound **18**.

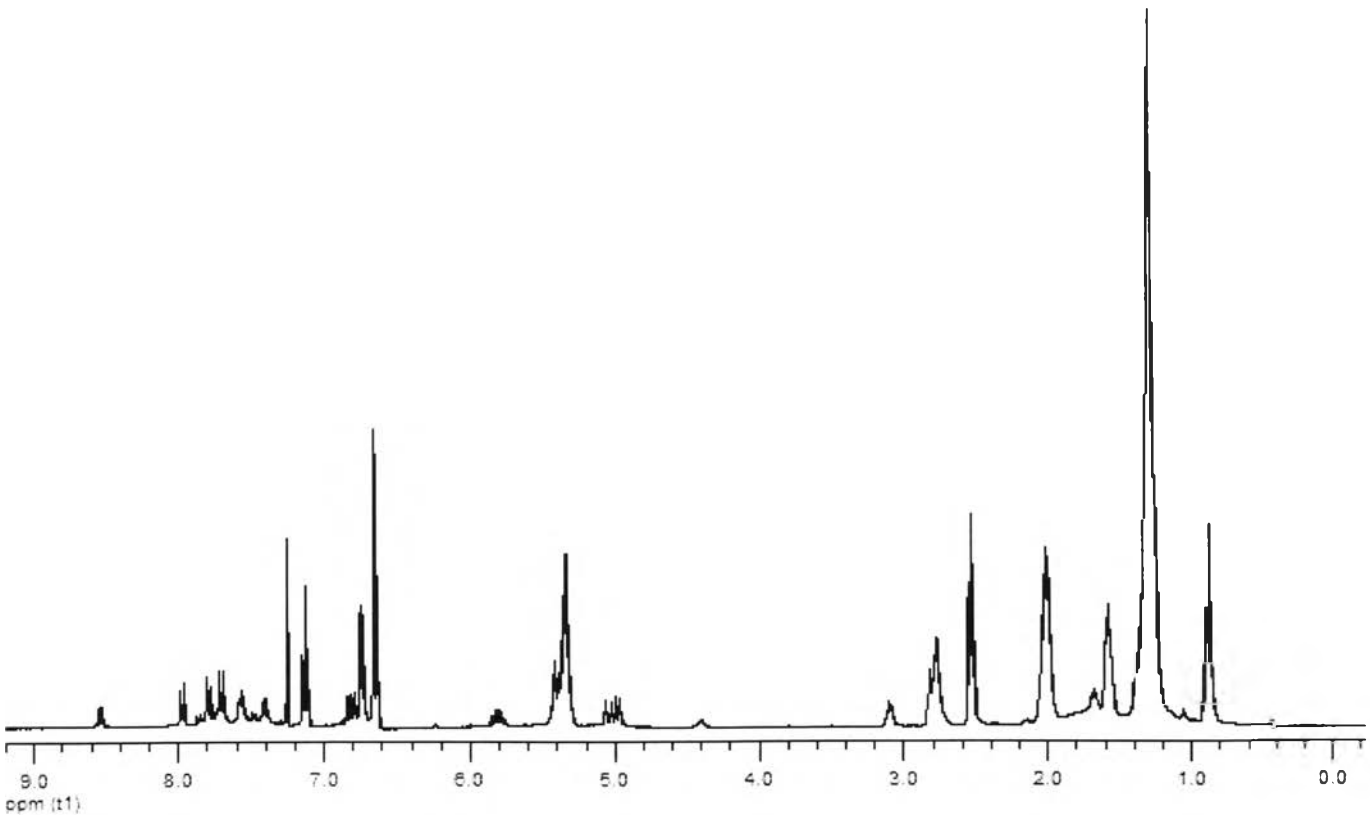

Figure A-28 ^{1}H-NMR spectrum of crude of Compound **18**.

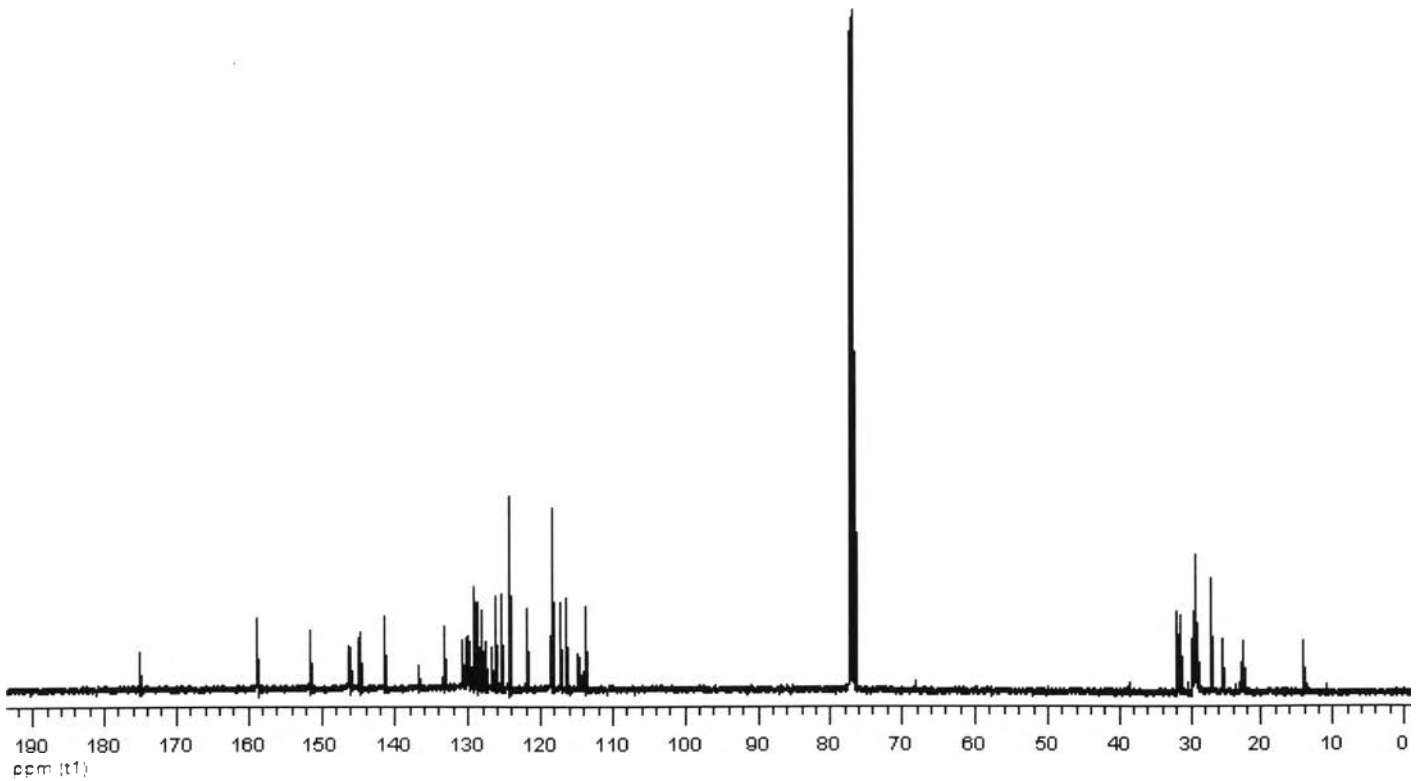

Figure A-29 ^{13}C-NMR spectrum of Compound **18**.

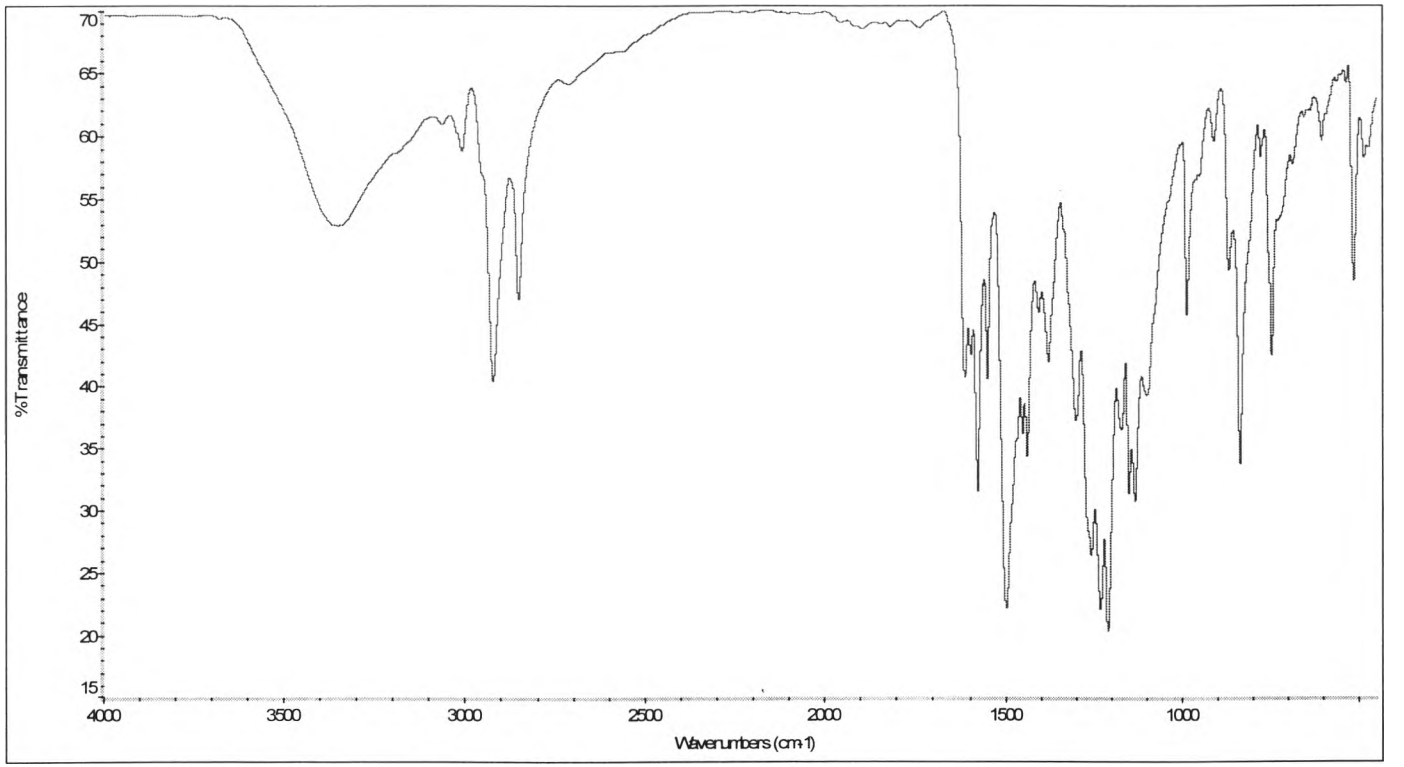

Figure A-30 IR spectrum of Compound **18**.

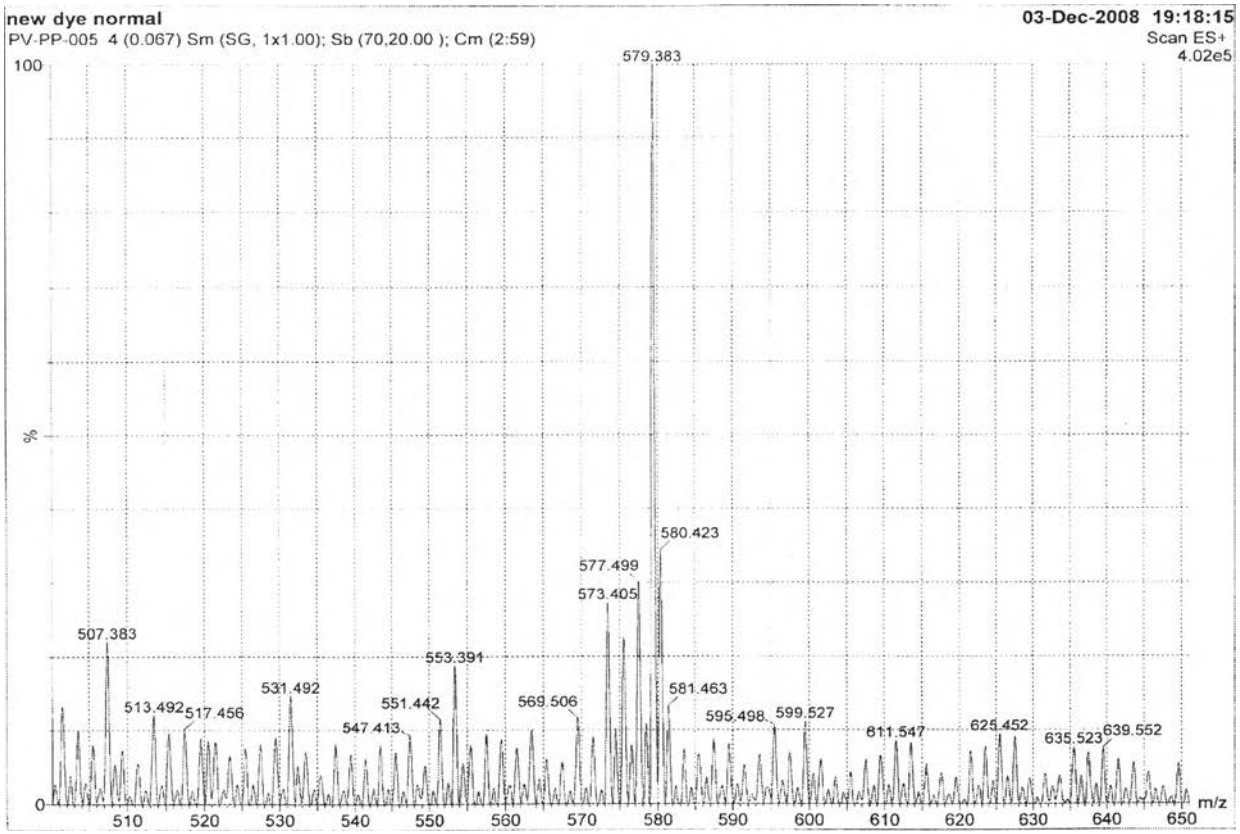

Figure A-31 Mass spectrum of Compound **18**.

APPENDIX B

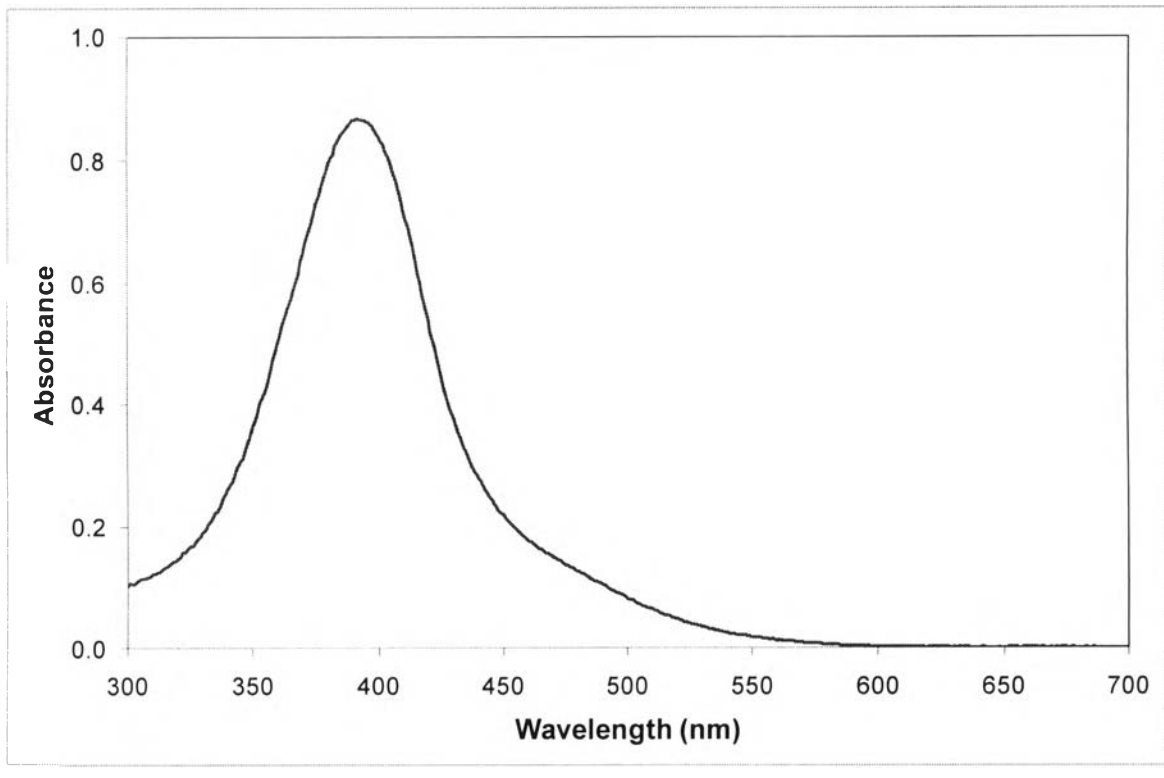

Figure B-1 Absorption spectrum of compound **6** in CH_2Cl_2.

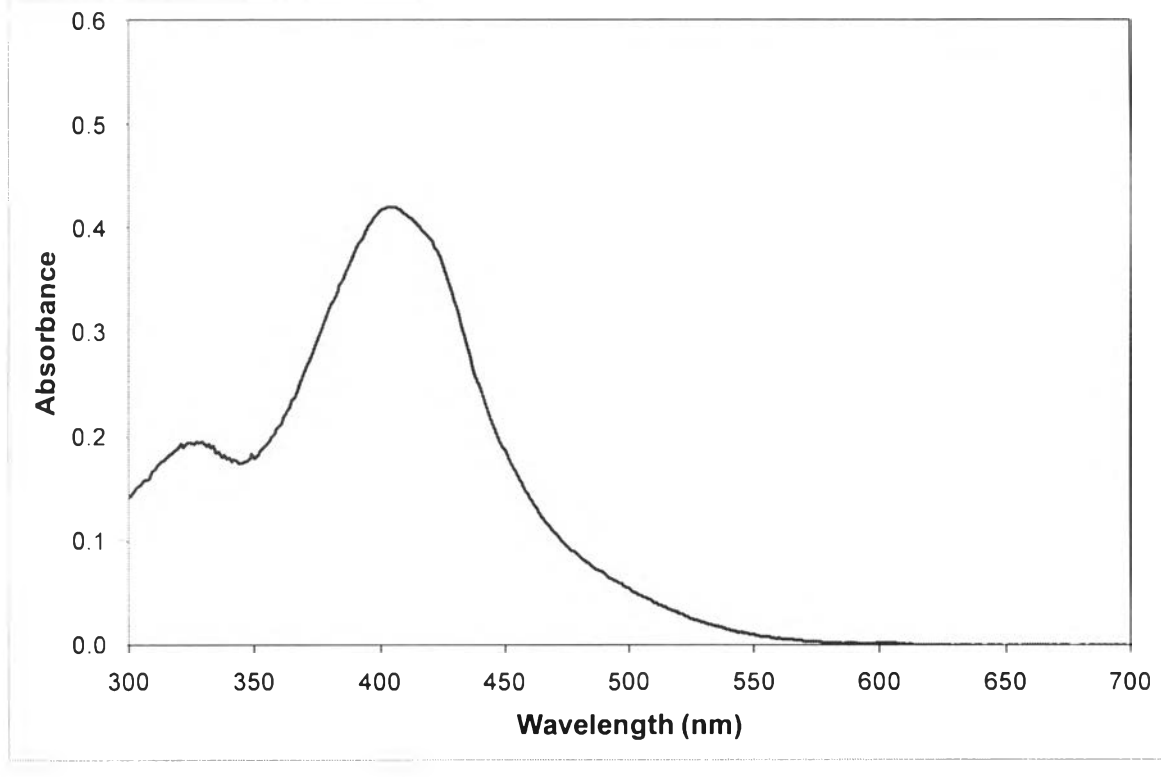

Figure B-2 Absorption spectrum of compound **7** in CH_2Cl_2.

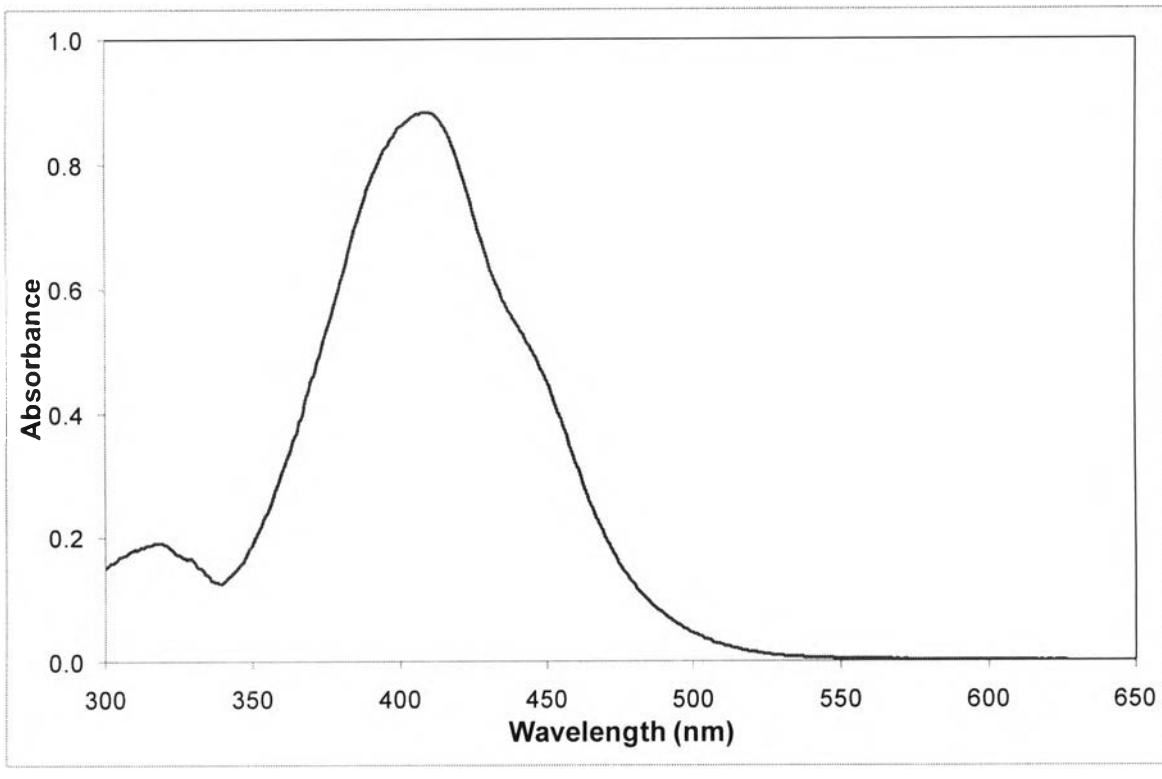

Figure B-3 Absorption spectrum of compound **12** in CH_2Cl_2.

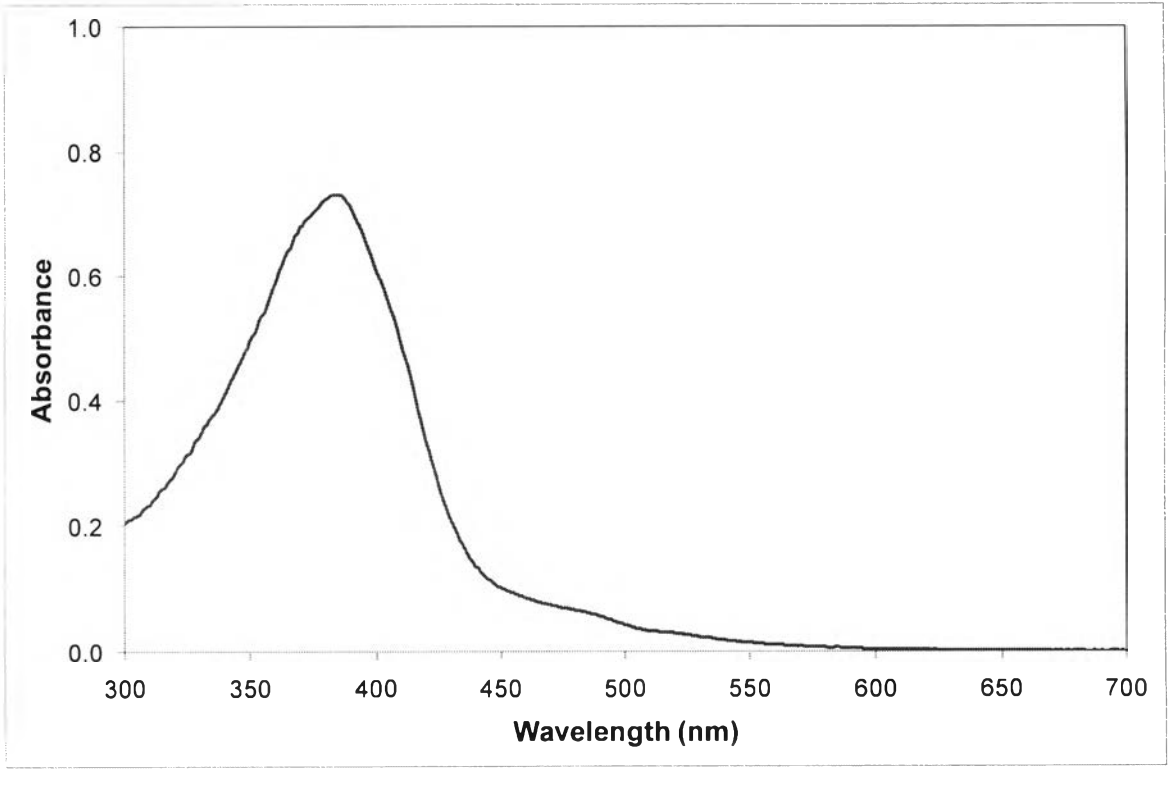

Figure B-4 Absorption spectrum of a mixture of compound **13** and cardanol in CH_2Cl_2.

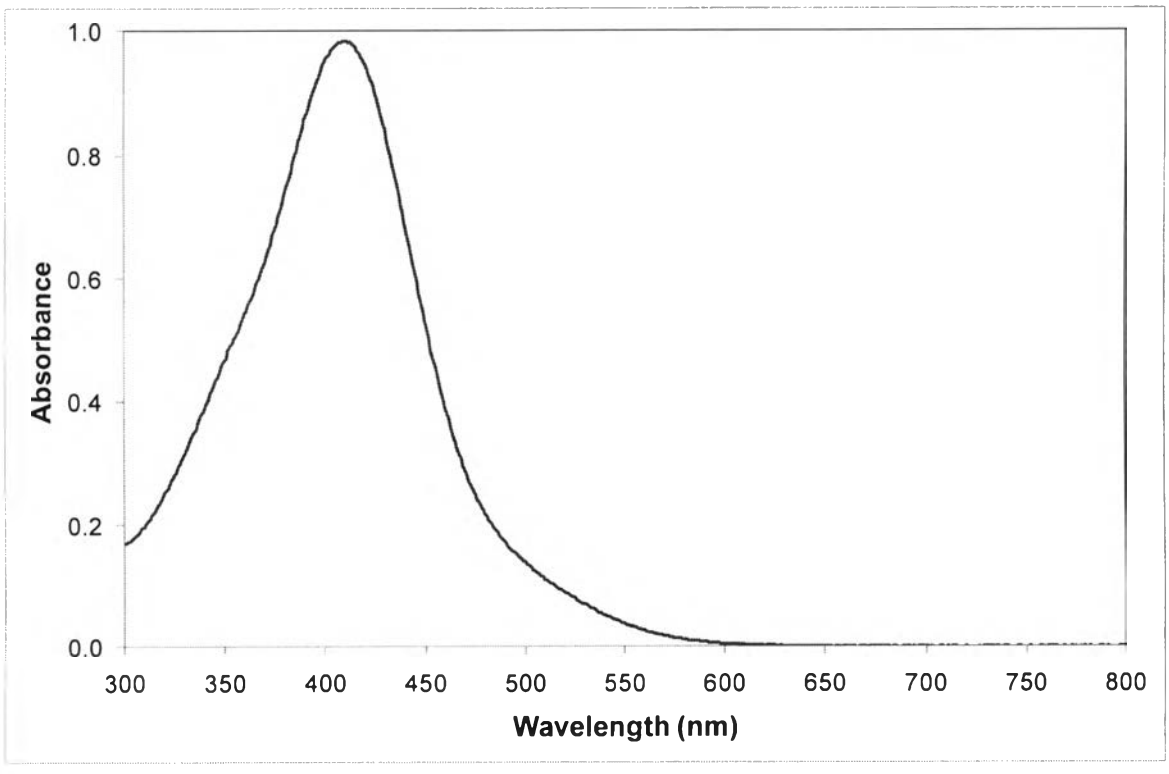

Figure B-5 Absorption spectrum of a mixture of compound **14** and cardanol in CH_2Cl_2.

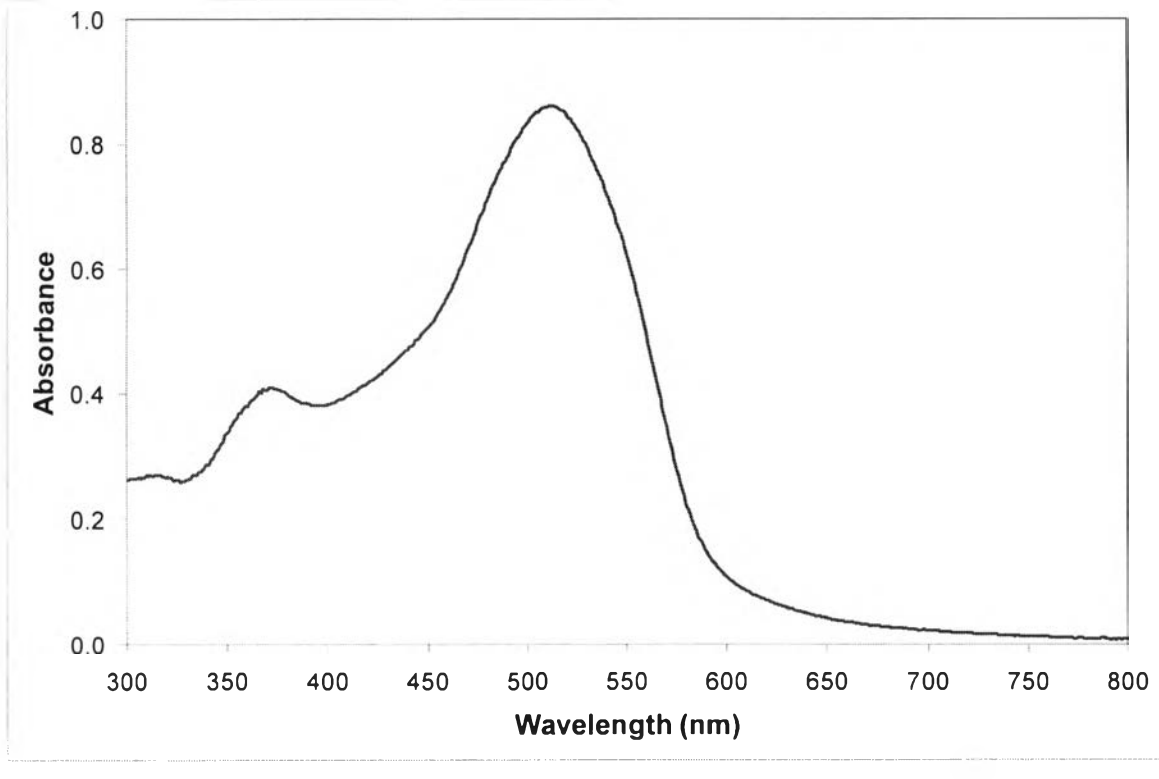

Figure B-6 Absorption spectrum of compound **17** in CH_2Cl_2.

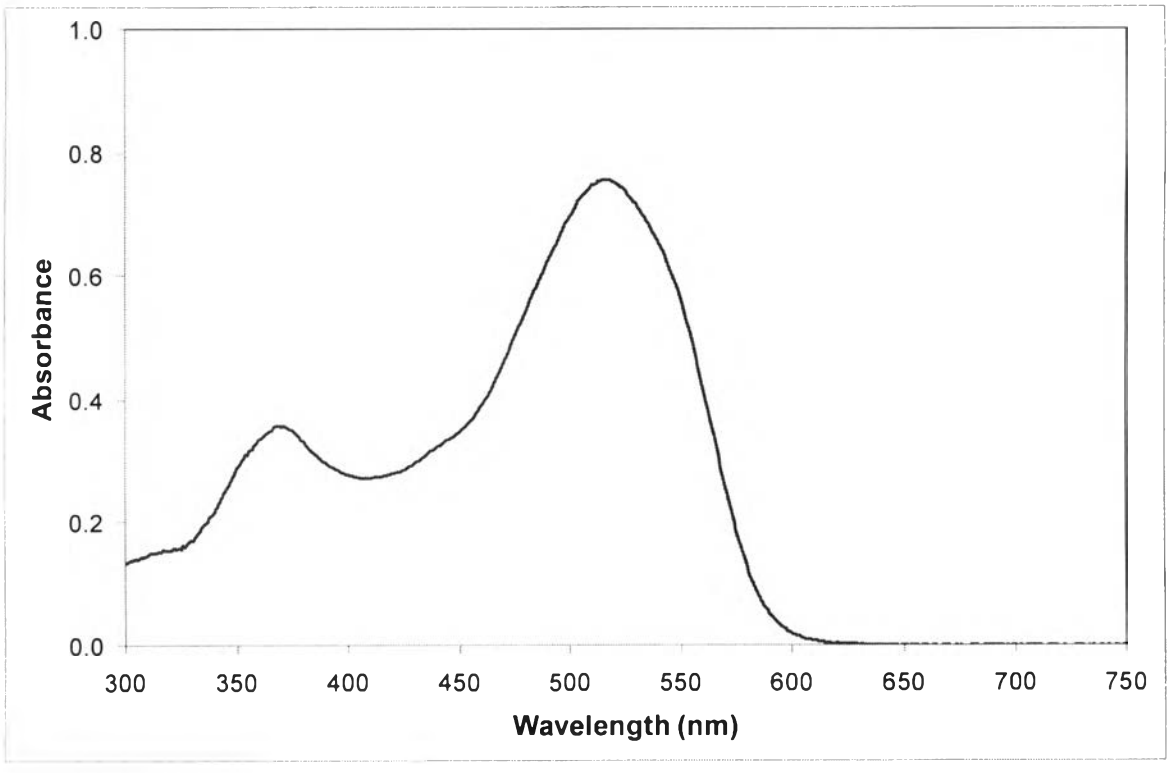

Figure B-7 Absorption spectrum of compound **18** in CH_2Cl_2.

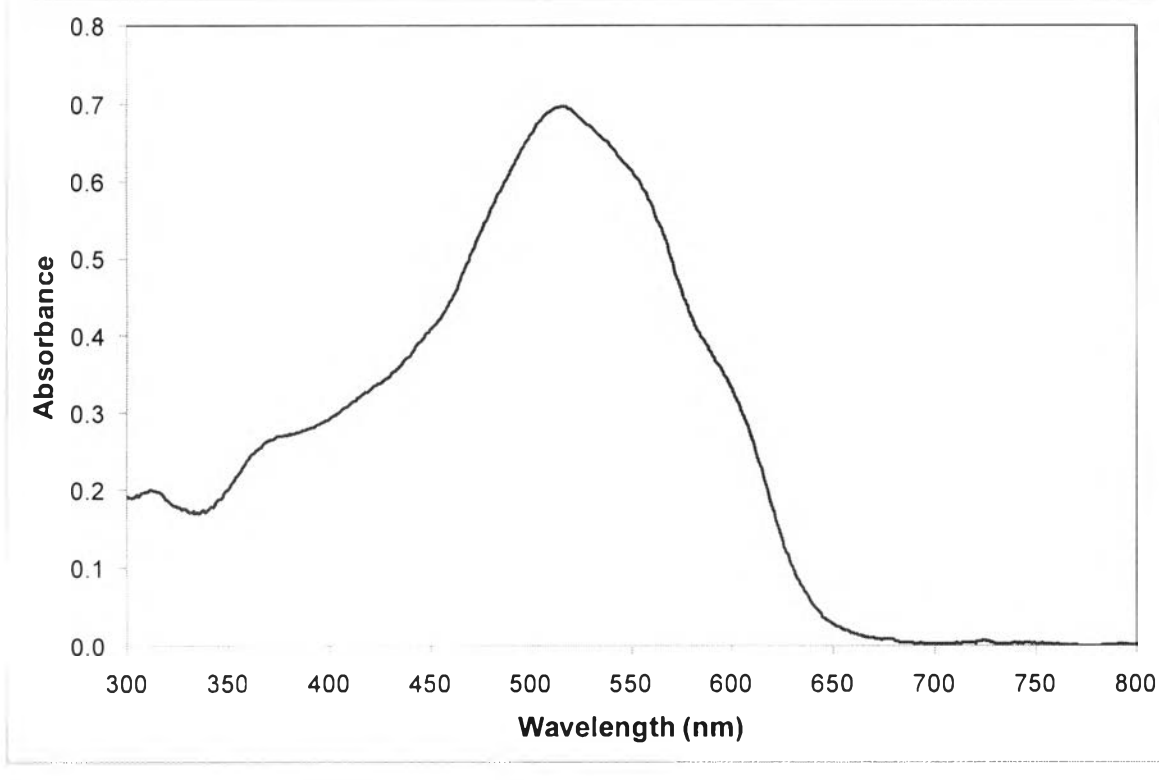

Figure B-8 Absorption spectrum of crude of compound **18** in CH_2Cl_2.

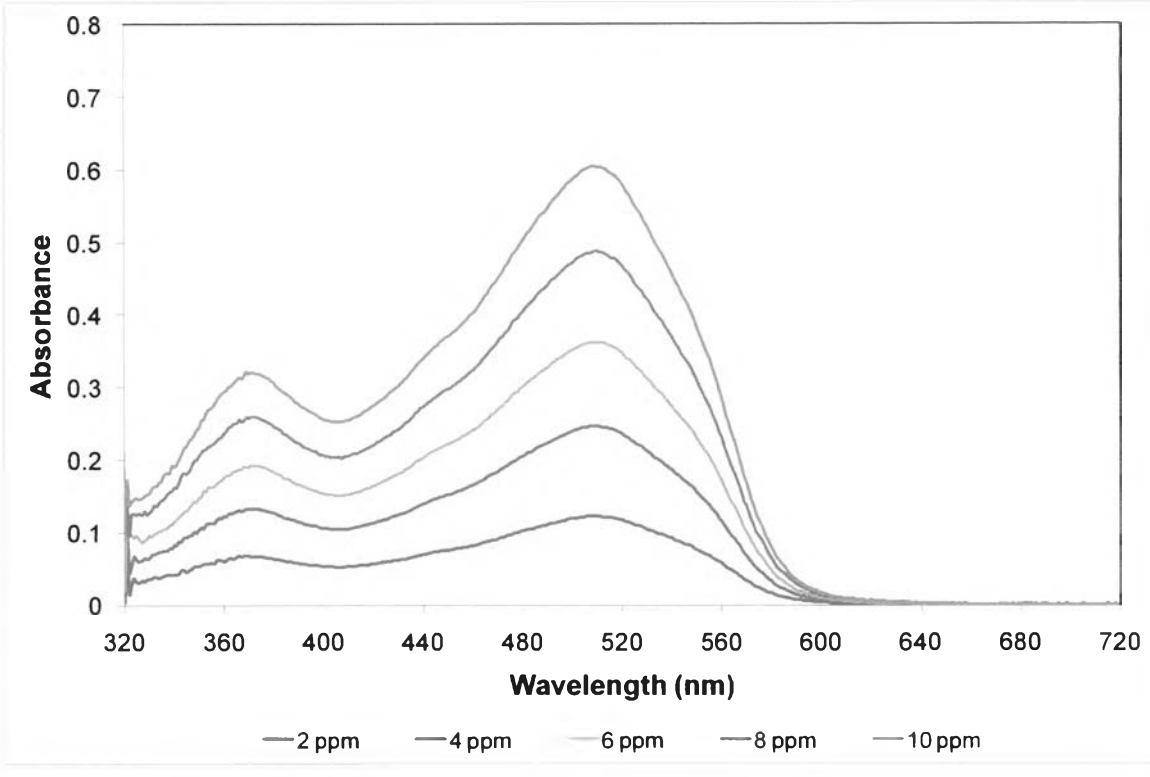

Figure B-9 Absorption spectrum of compound **18** in base gasoline 91 at 2, 4, 6, 8 and 10 ppm (λ_{abs} = 509 nm).

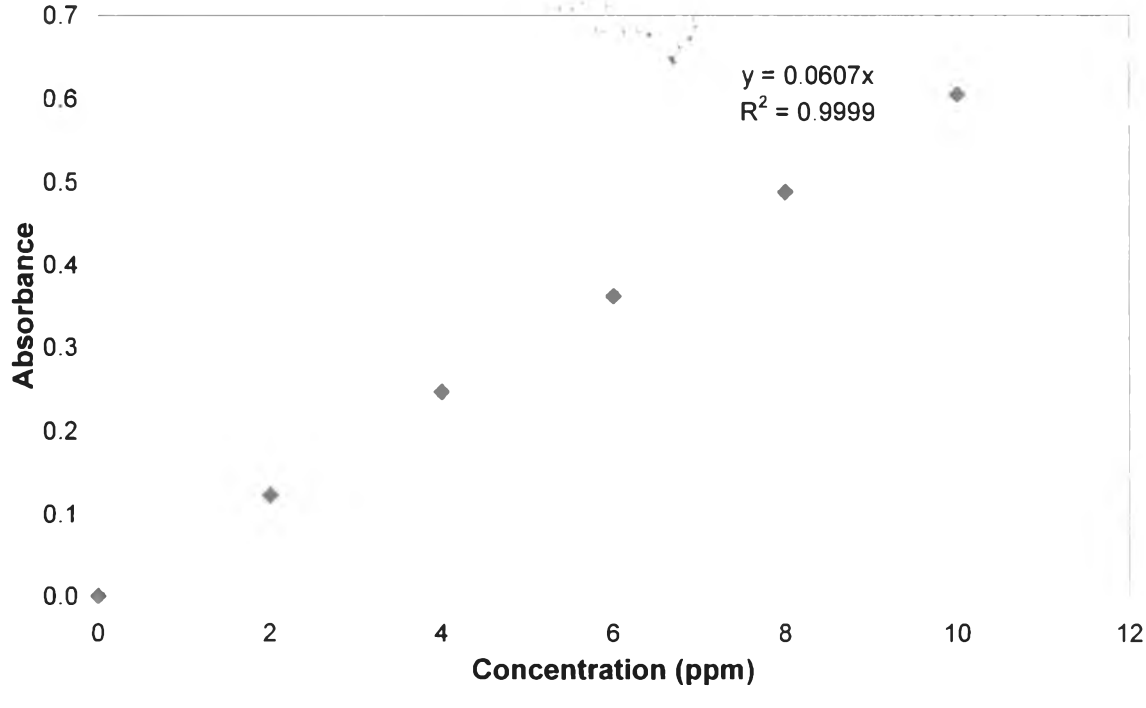

Figure B-10 Calibration curve for the quantitative determination of compound **18** in base gasoline 91 (λ_{abs} = 509 nm).

VITA

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