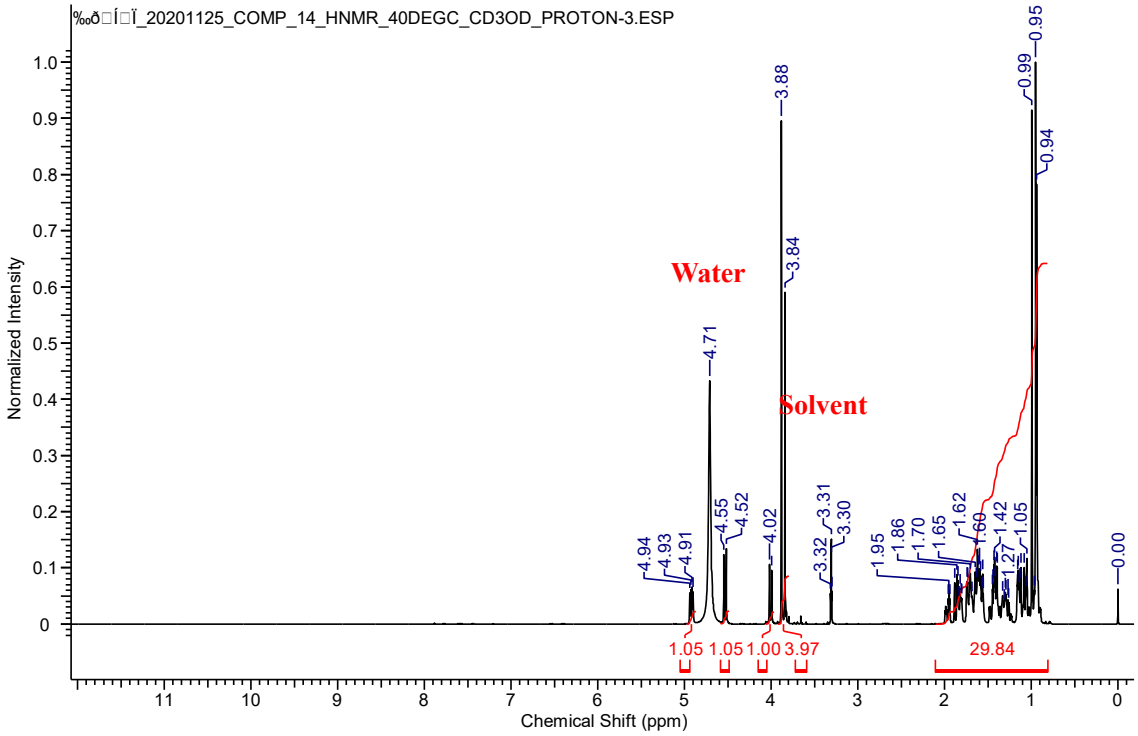
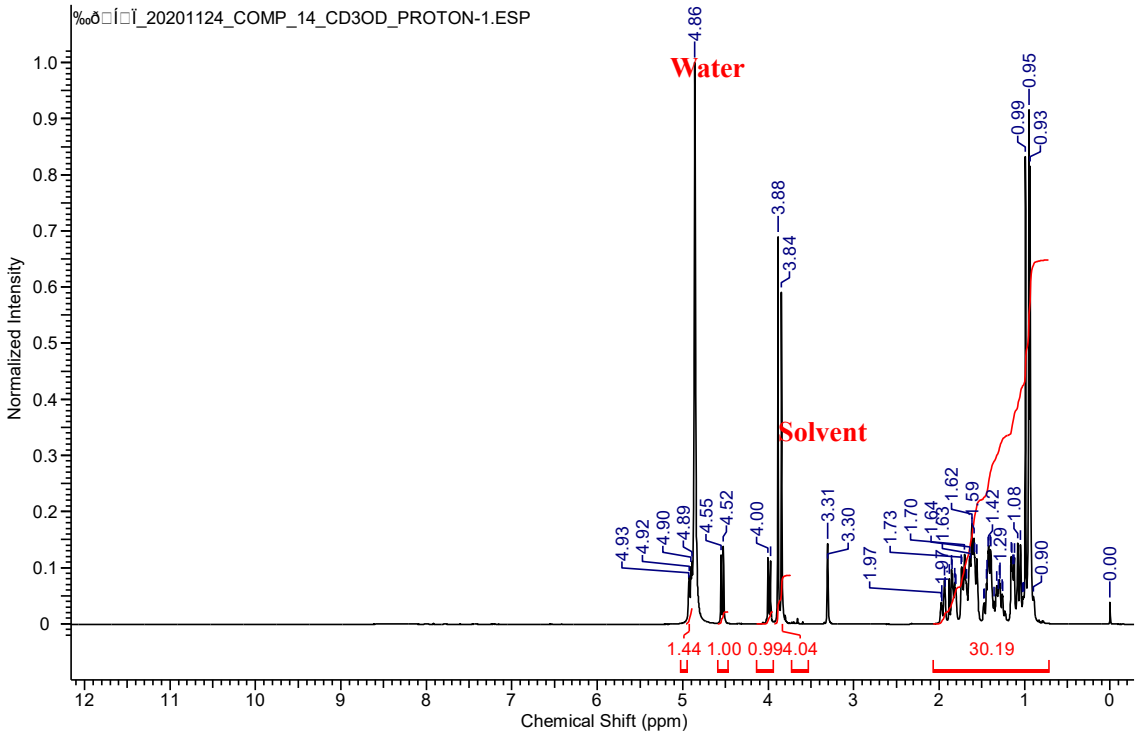
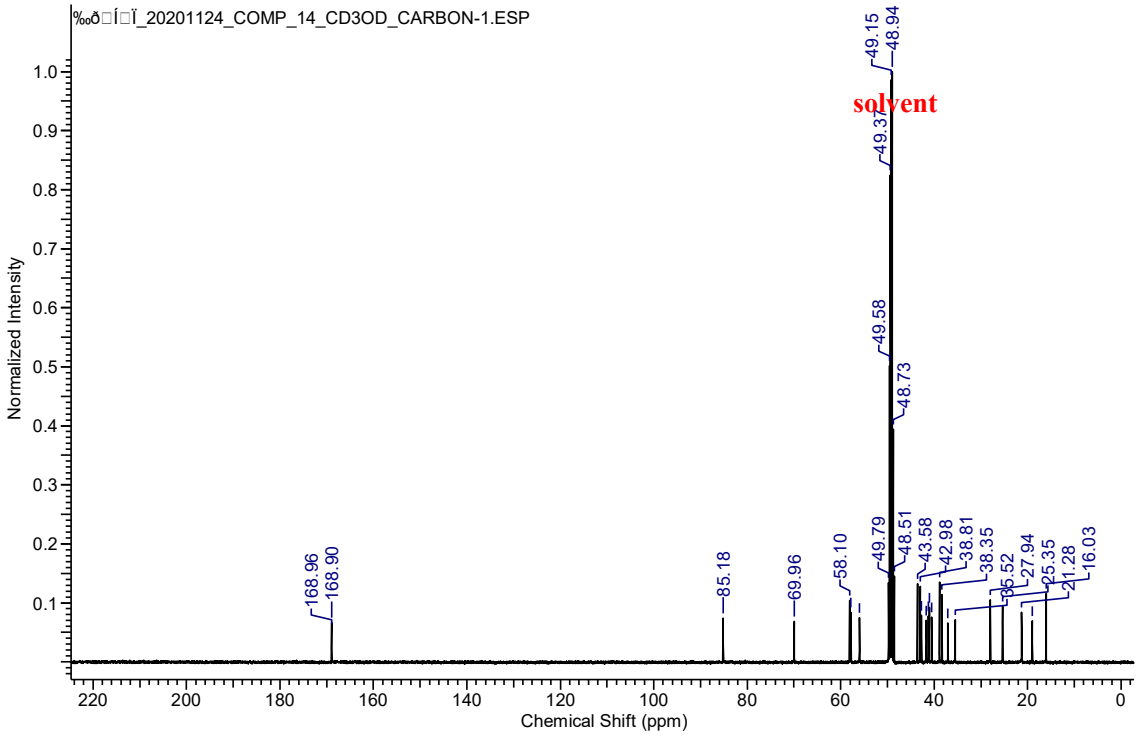
^{1}H-NMR (Methanol-d_4, 40°C) of compound **5**



^{1}H-NMR (Methanol-d_4, 23°C) of compound **5**

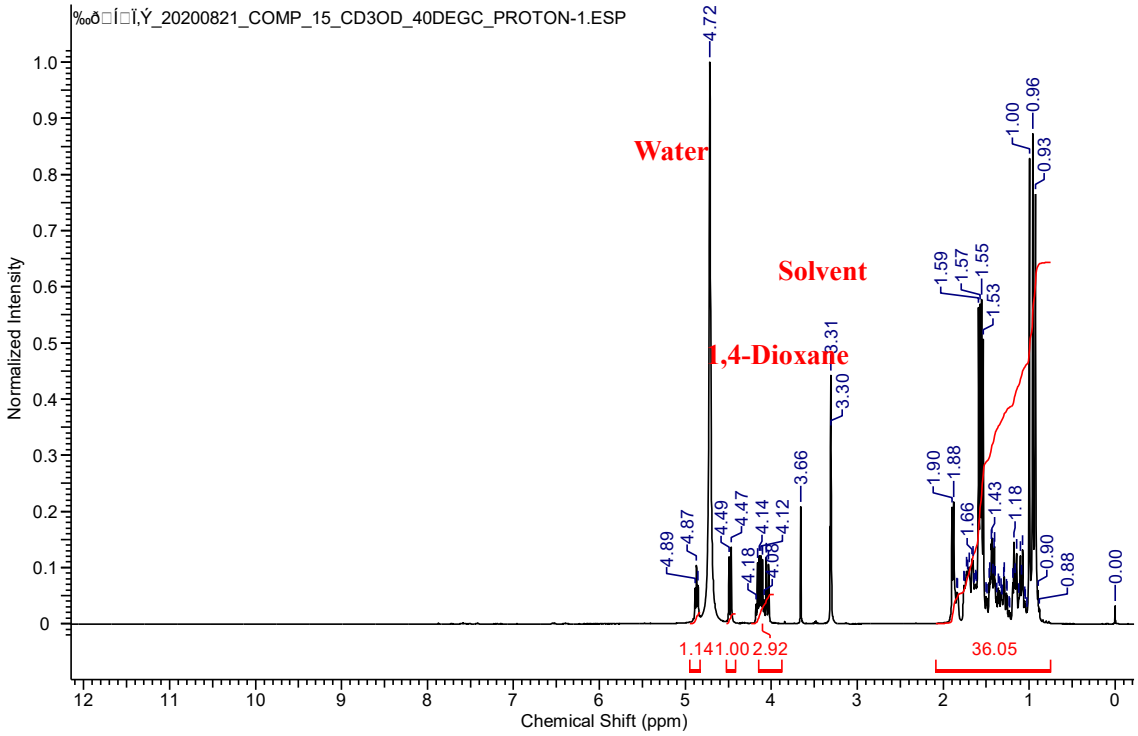


^{13}C-NMR (Methanol-d_4, 23°C) of compound **5**

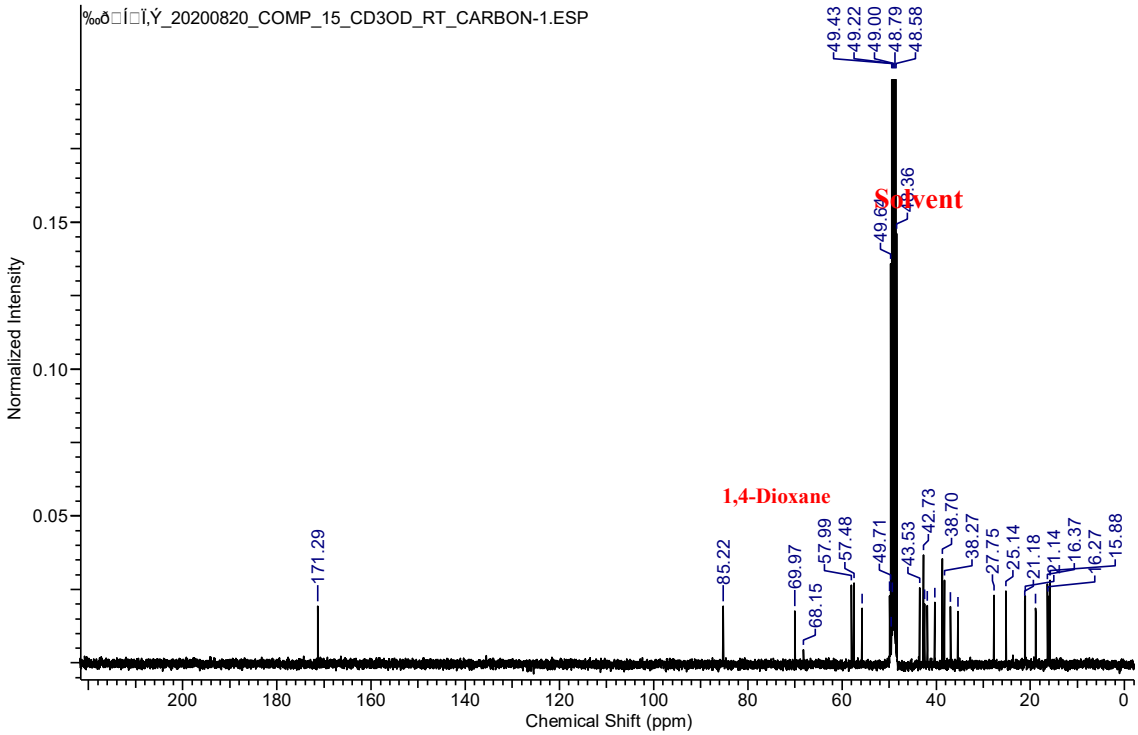


HRMS (ESI-MS) of compound **5**

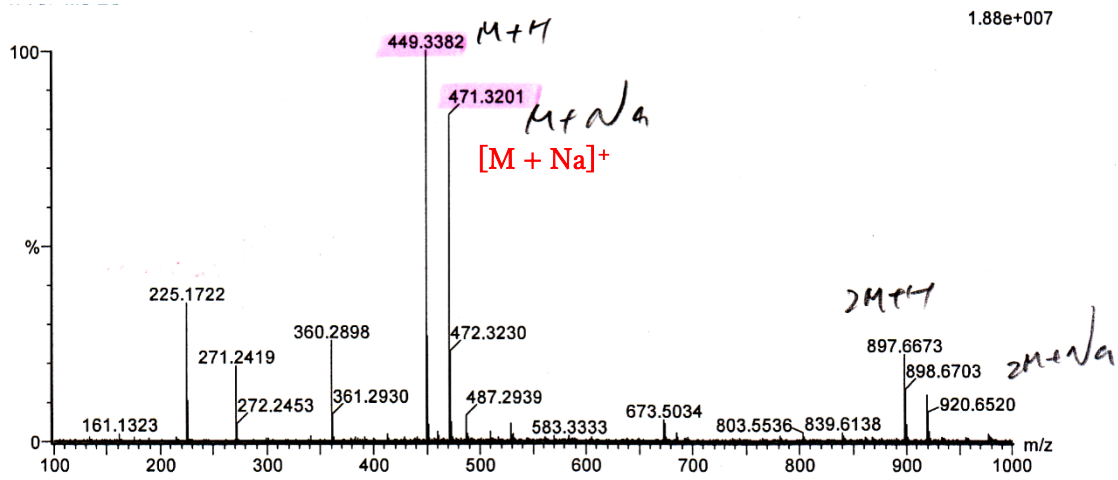
^{1}H-NMR (Methanol-d$_4$, 40°C) of compound **6**



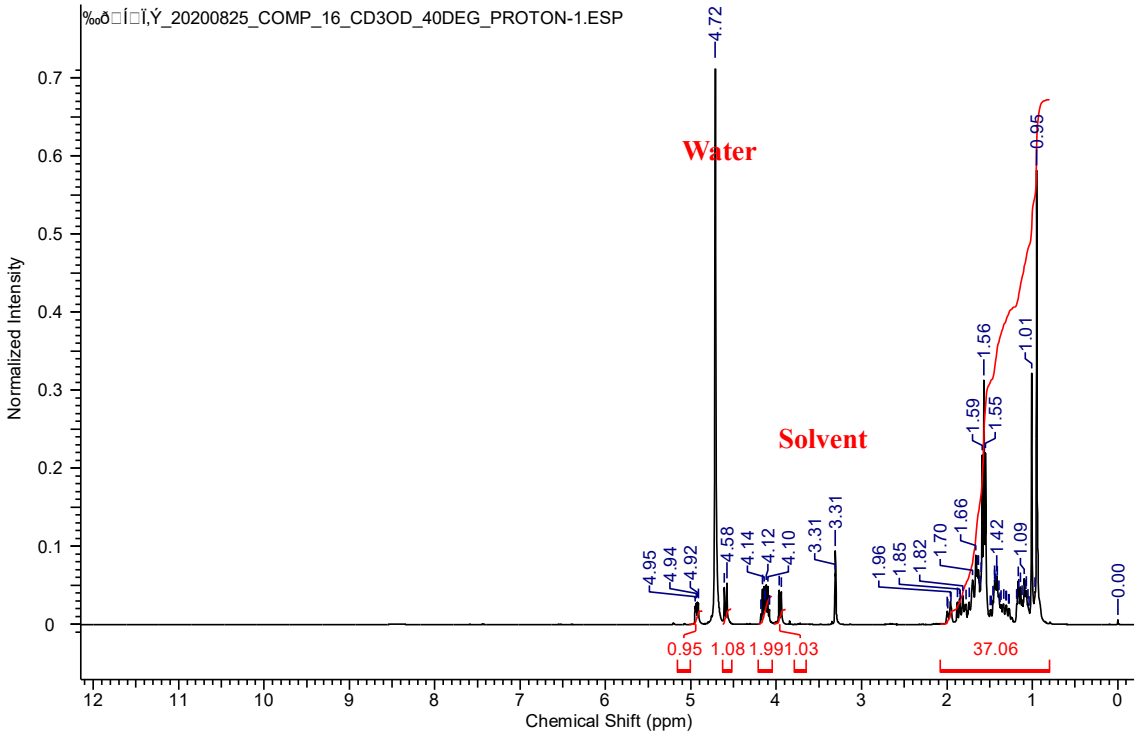
^{13}C-NMR (Methanol-d$_4$, 21°C) of compound **6**



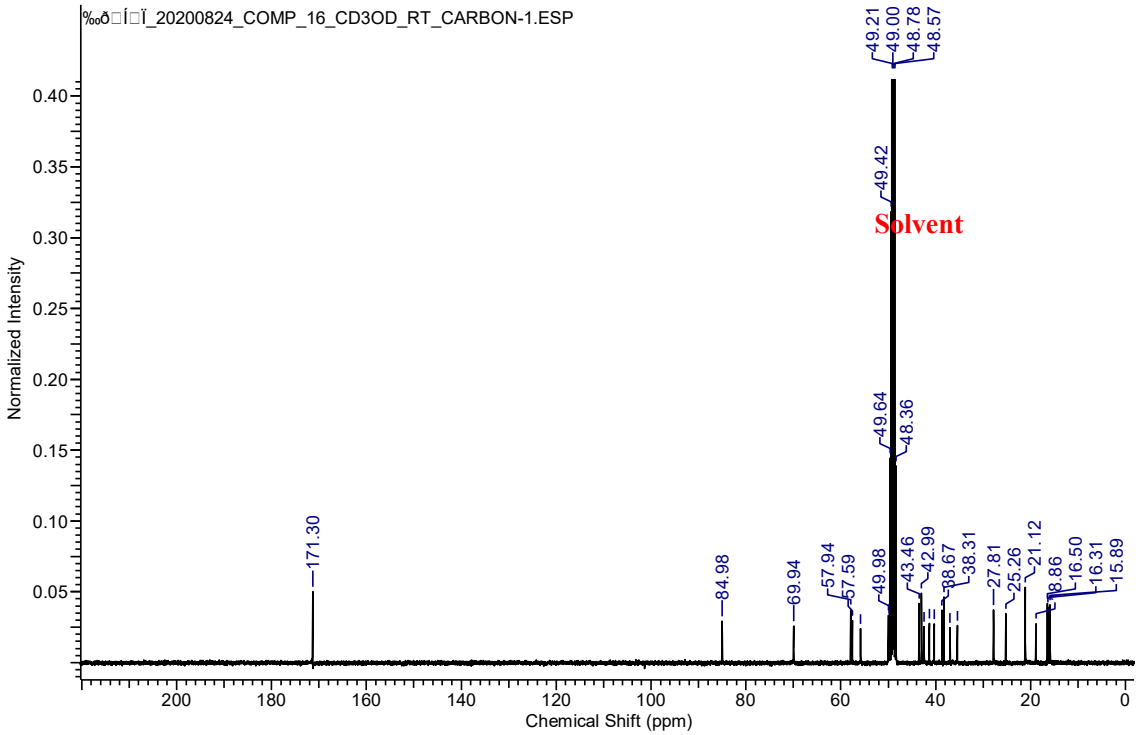
HRMS (ESI-MS) of compound **6**



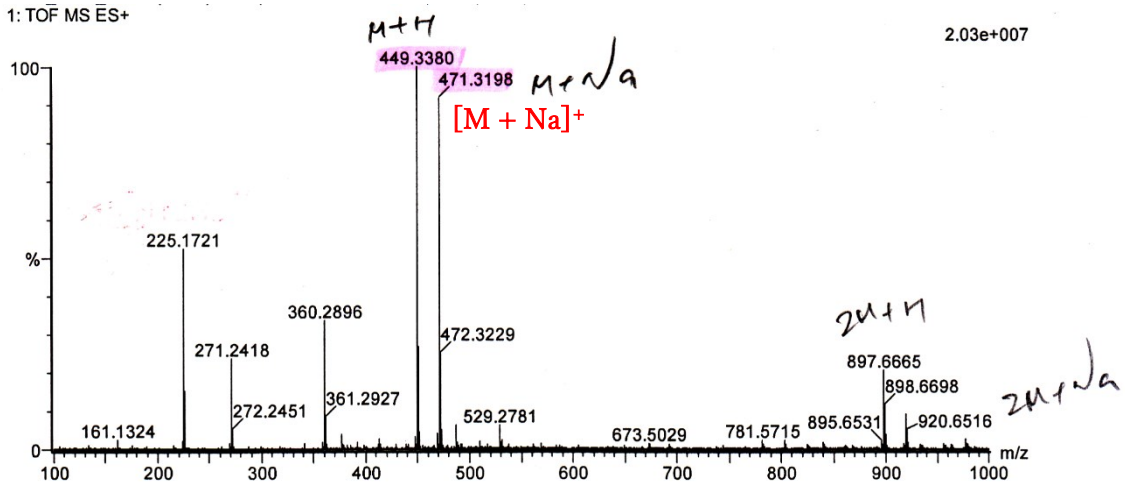
^{1}H-NMR (Methanol-d_4, 40°C) of compound **7**



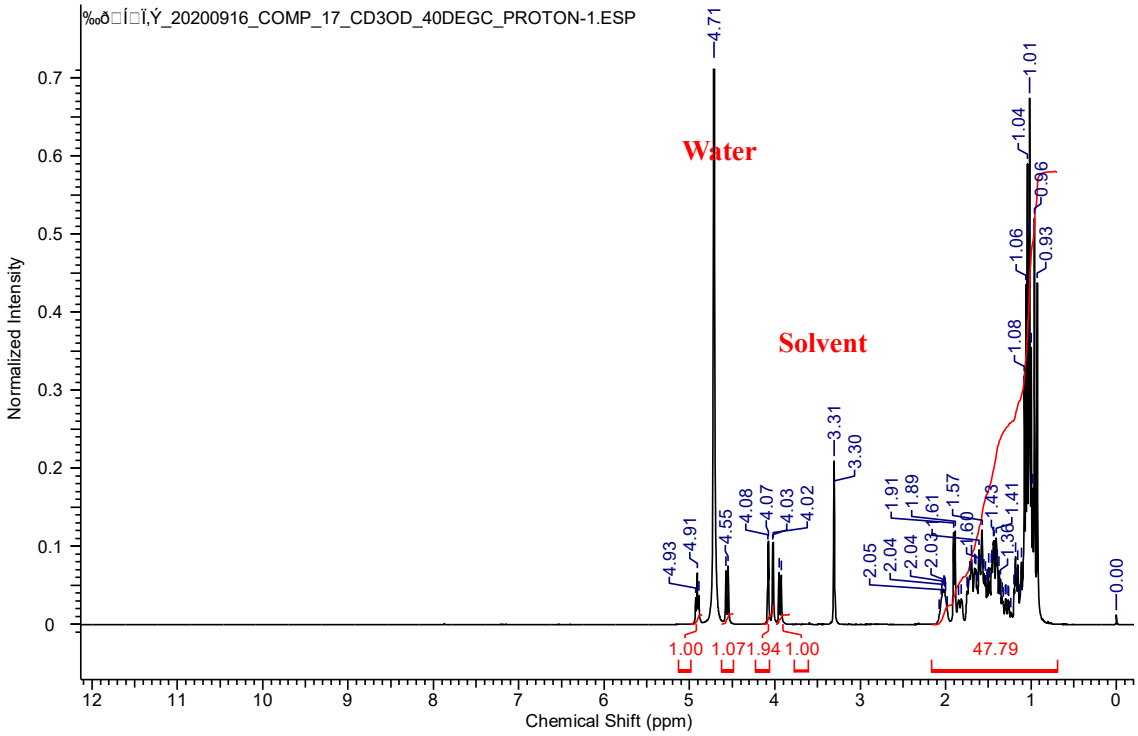
^{13}C-NMR (Methanol-d_4, 21°C) of compound **7**



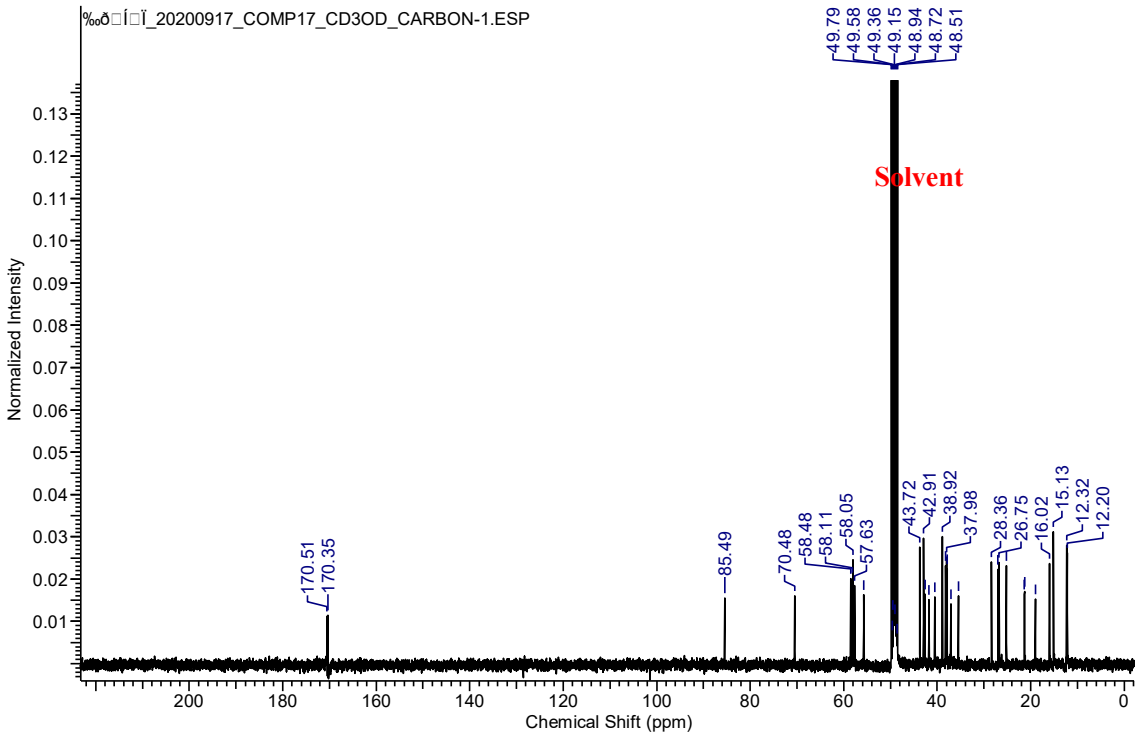
HRMS (ESI-MS) of compound **7**



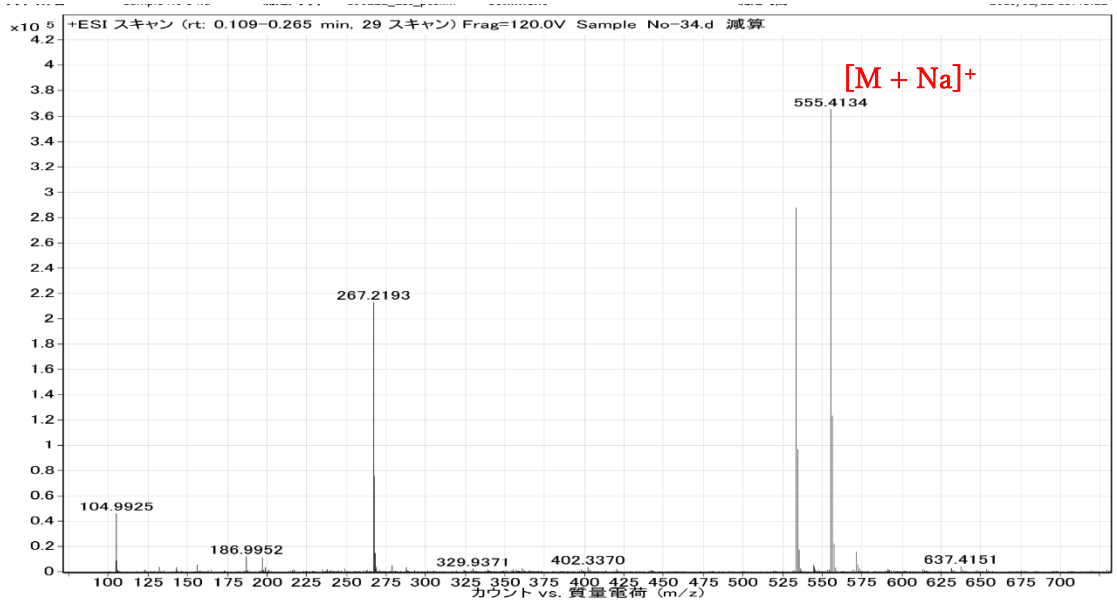
^{1}H-NMR (Methanol-d_4, 40°C) of compound **8**



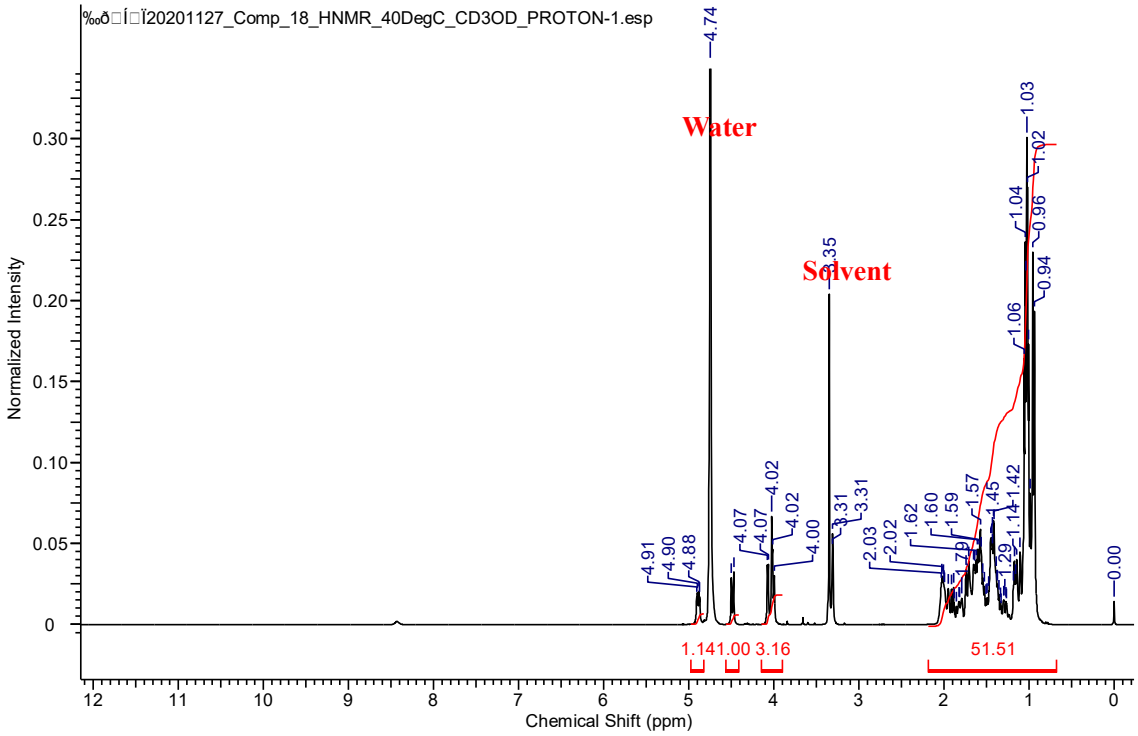
^{13}C-NMR (Methanol-d_4, 21°C) of compound **8**



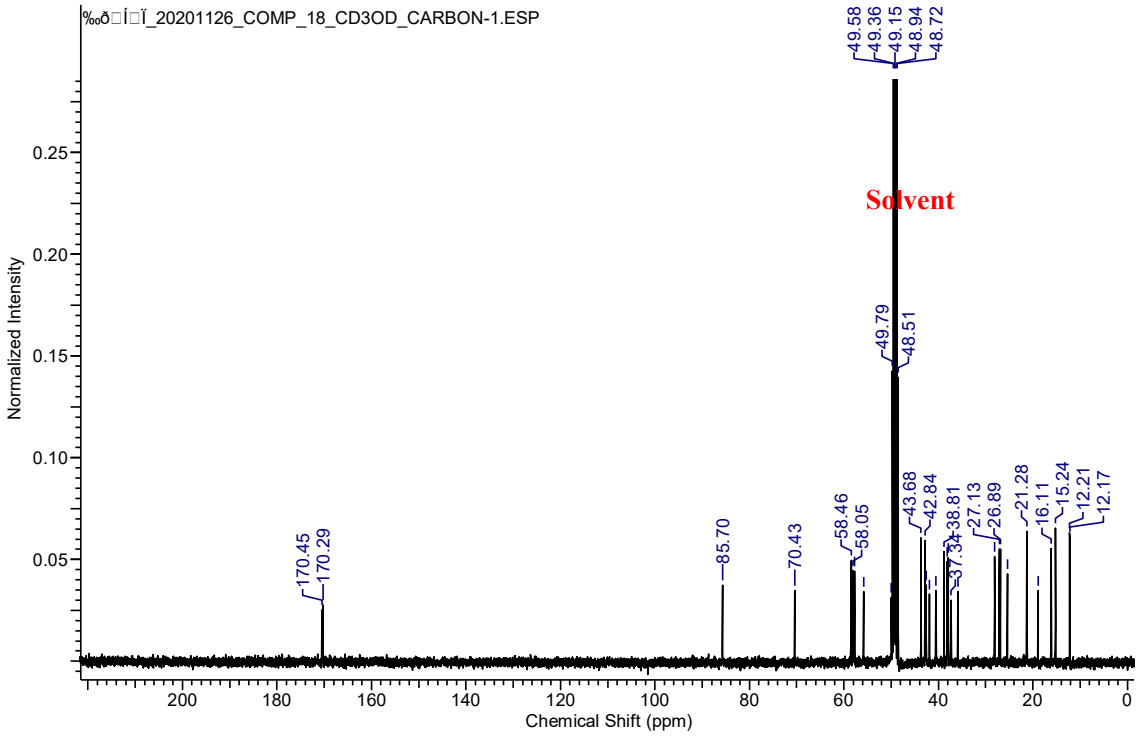
HRMS (ESI-MS) of compound **8**



^{1}H-NMR (Methanol-d_4, 40°C) of compound **9**

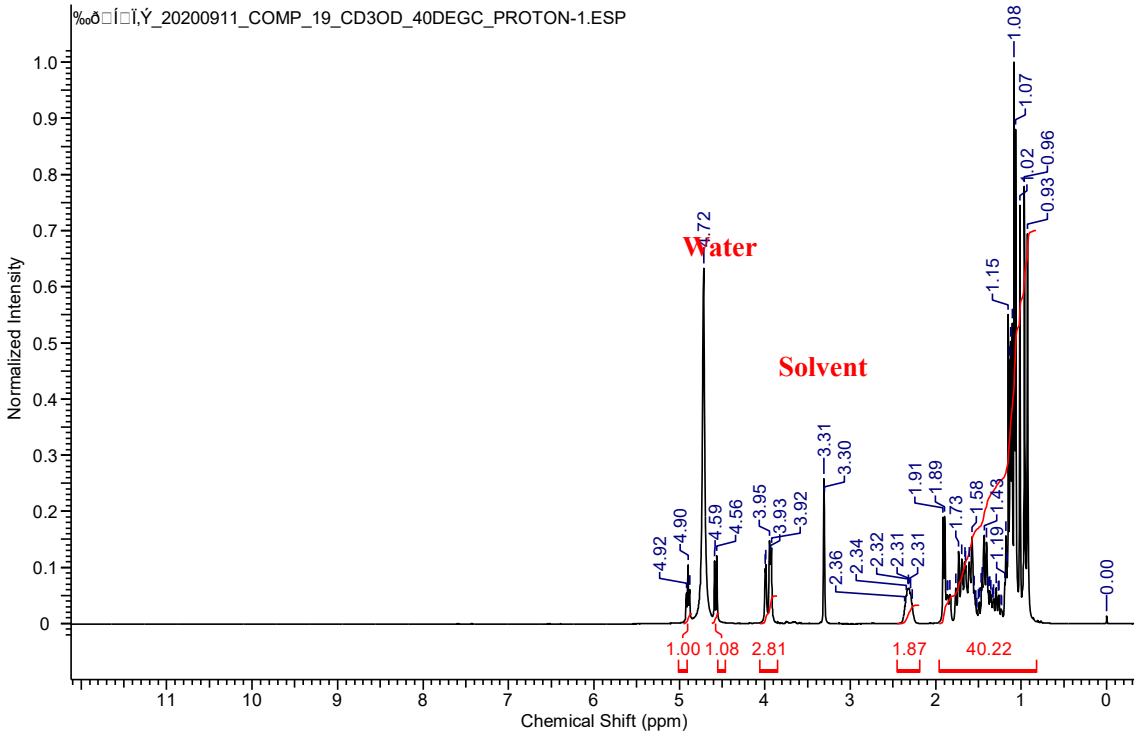


^{13}C-NMR (Methanol-d_4, 23°C) of compound **9**

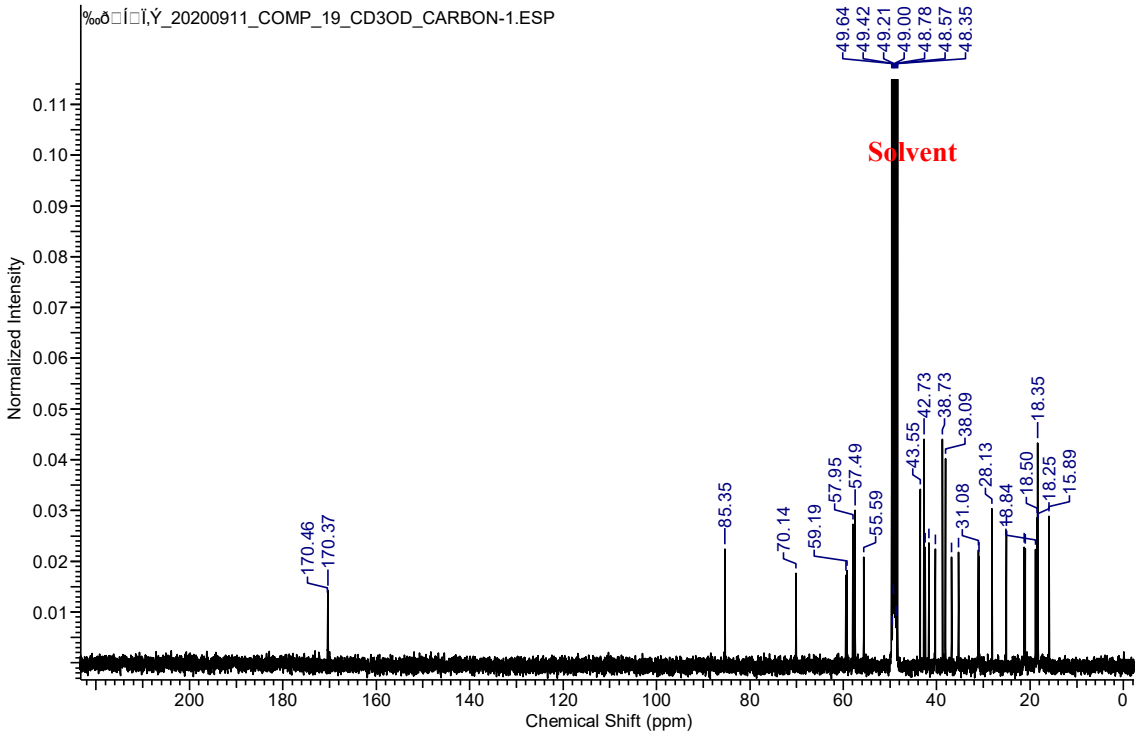


HRMS (ESI-MS) of compound **9**

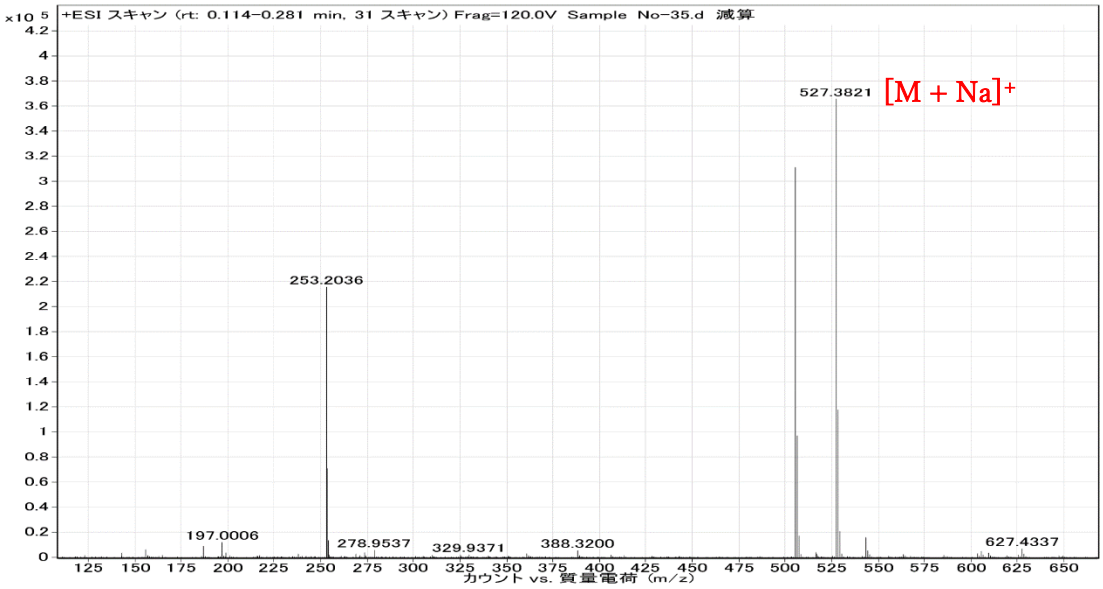
^{1}H-NMR (Methanol-d_4, 40°C) of compound **10**



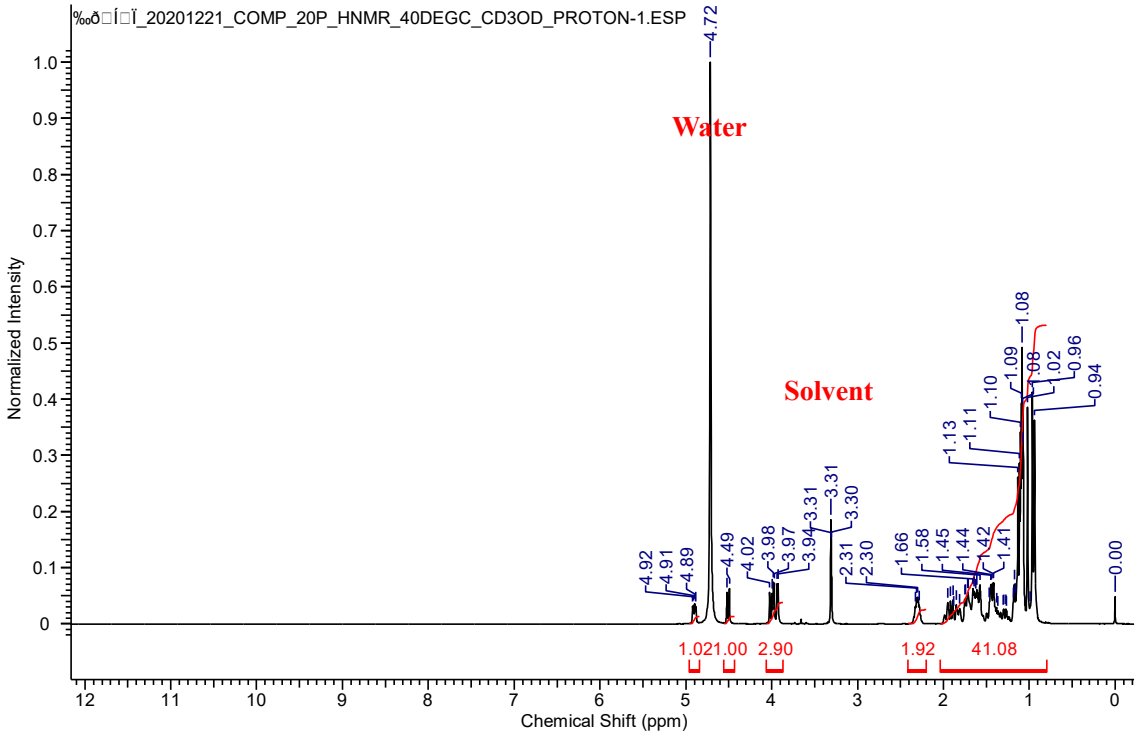
^{13}C-NMR (Methanol-d_4, 21°C) of compound **10**



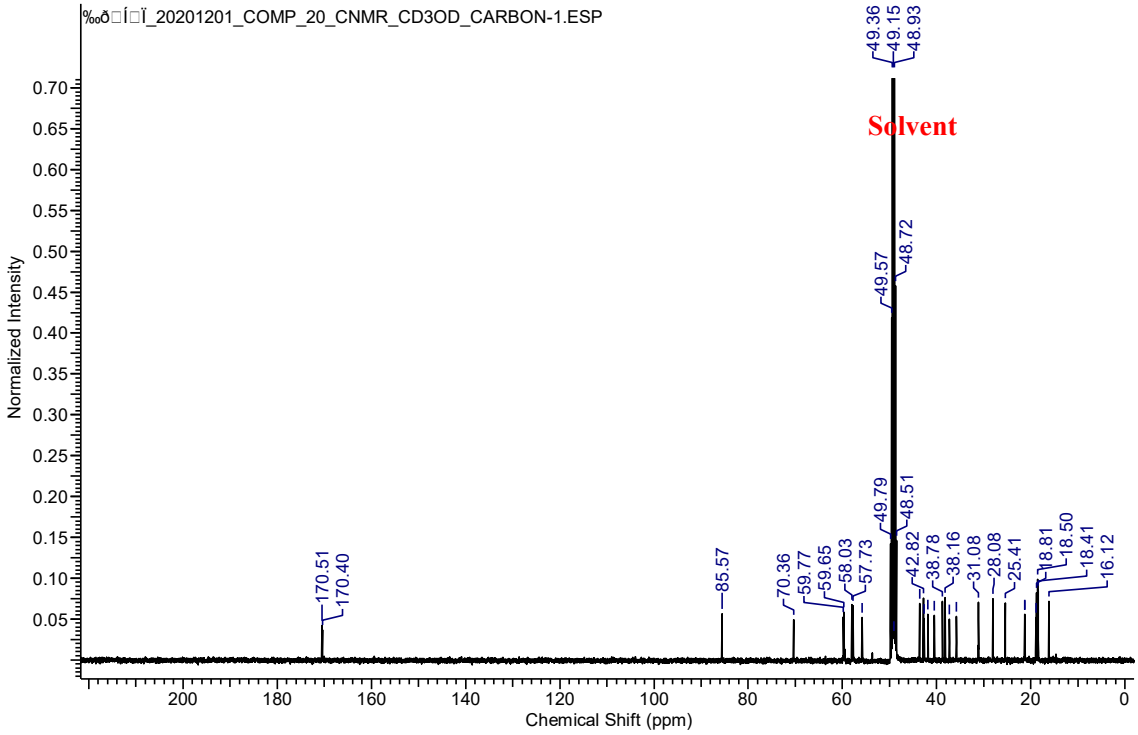
HRMS (ESI-MS) of compound **10**



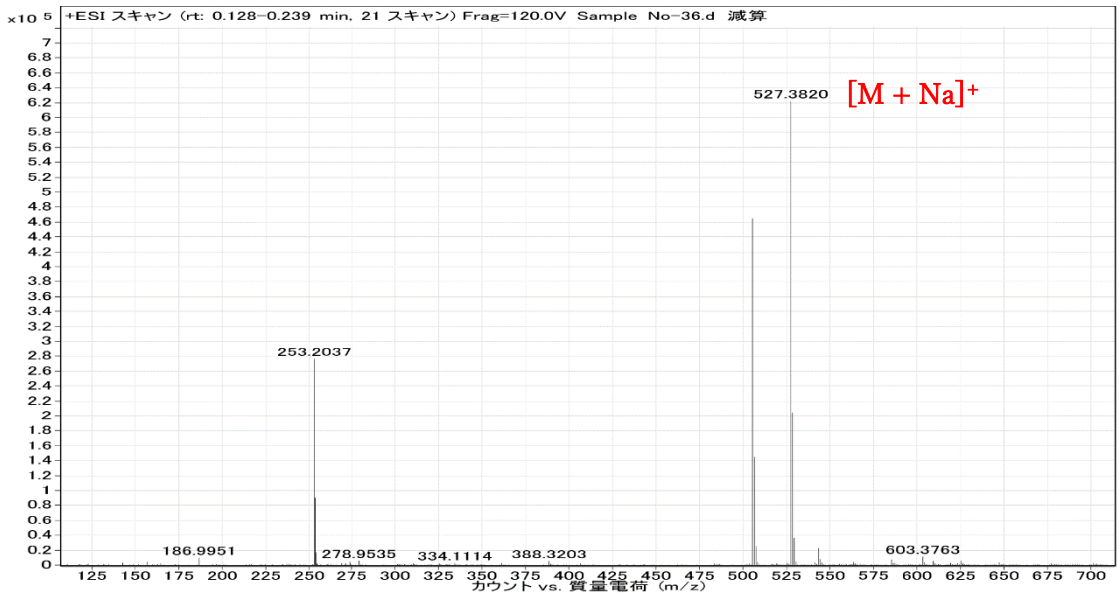
^{1}H-NMR (Methanol-d_4, 40°C) of compound **11**



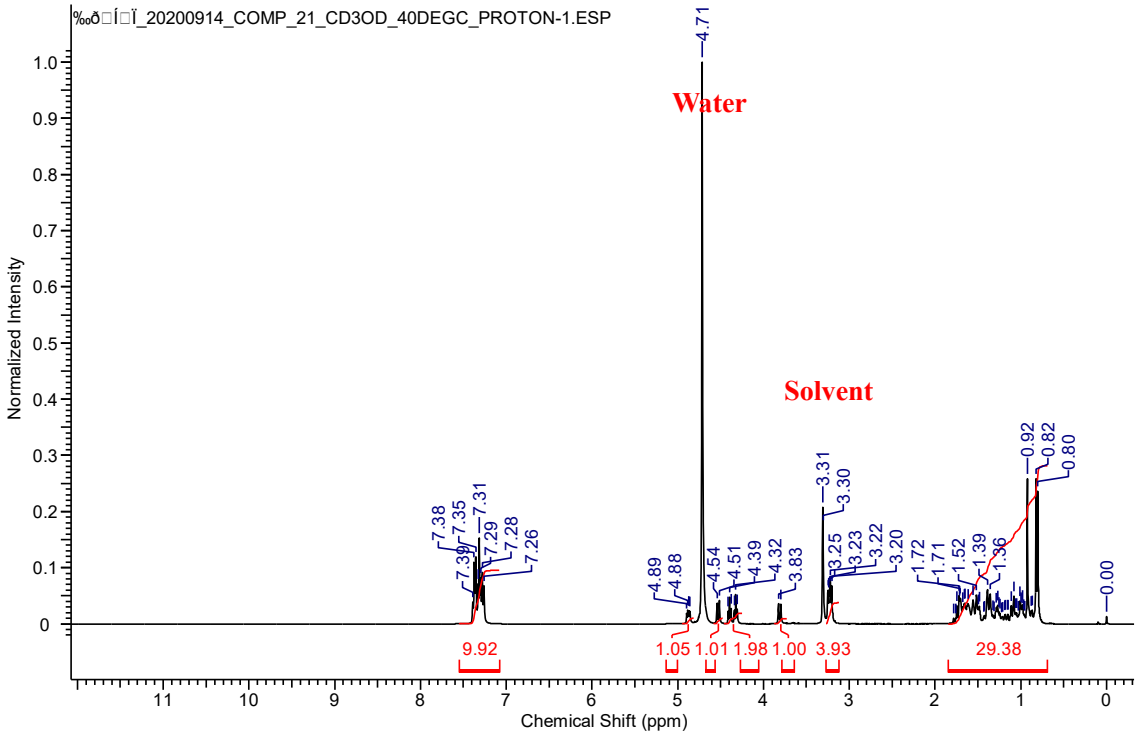
^{13}C-NMR (Methanol-d_4, 22°C) of compound **11**



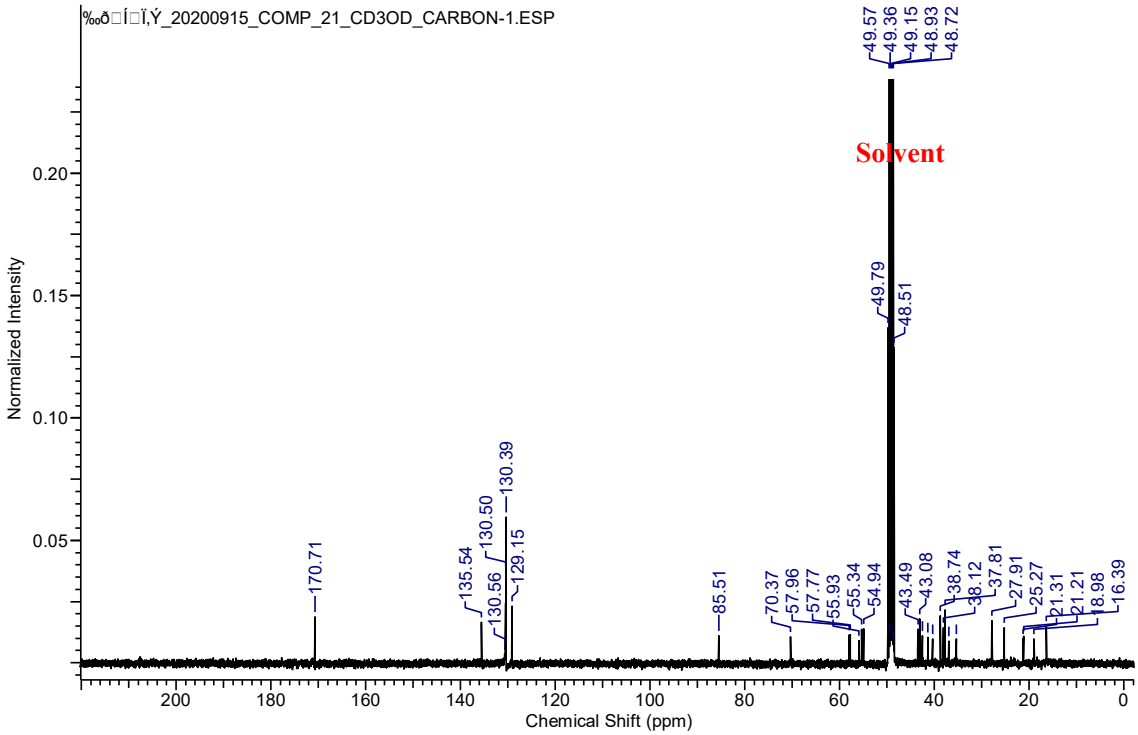
HRMS (ESI-MS) of compound **11**



^{1}H-NMR (Methanol-d_4, 40°C) of compound **12**

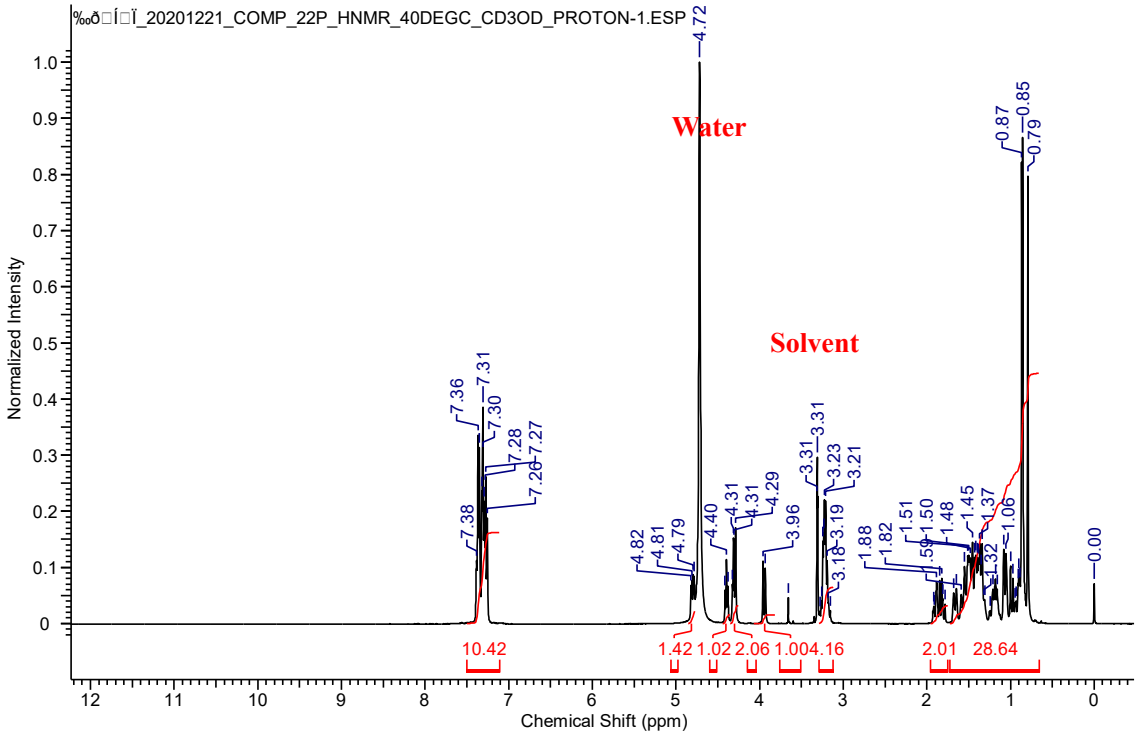


^{13}C-NMR (Methanol-d_4, 21°C) of compound **12**

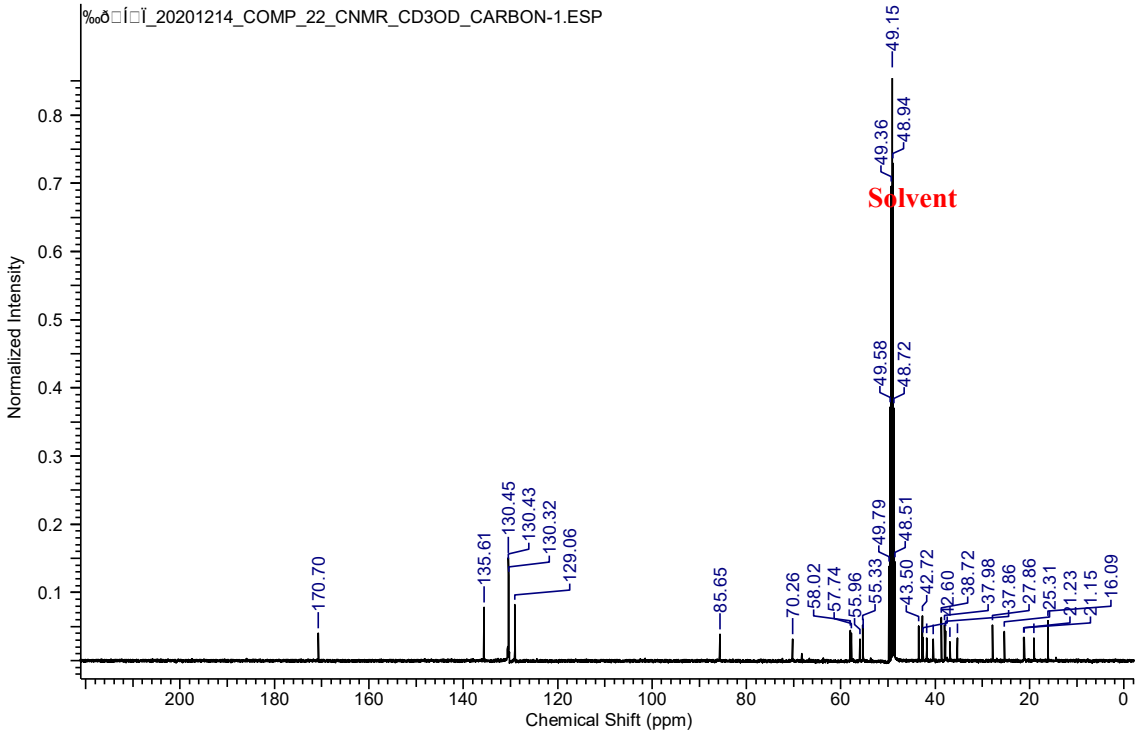


HRMS (ESI-MS) of compound **12**

^{1}H-NMR (Methanol-d_4, 40°C) of compound **13**

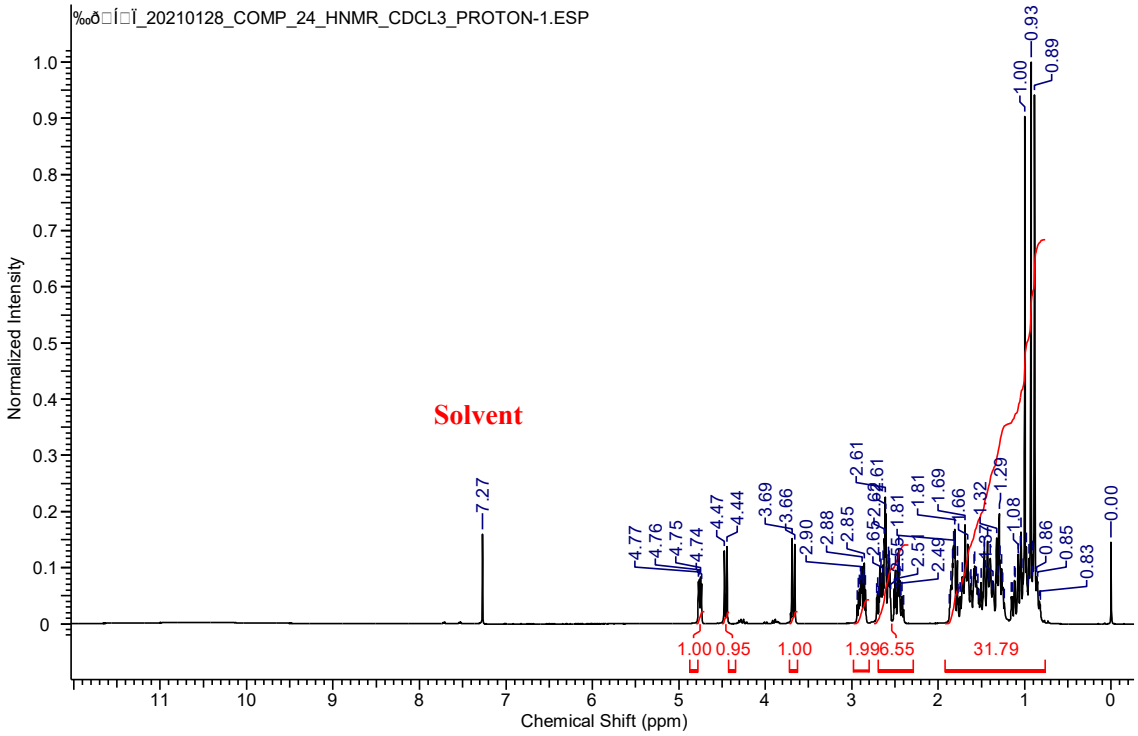


^{13}C-NMR (Methanol-d_4, 21°C) of compound **13**

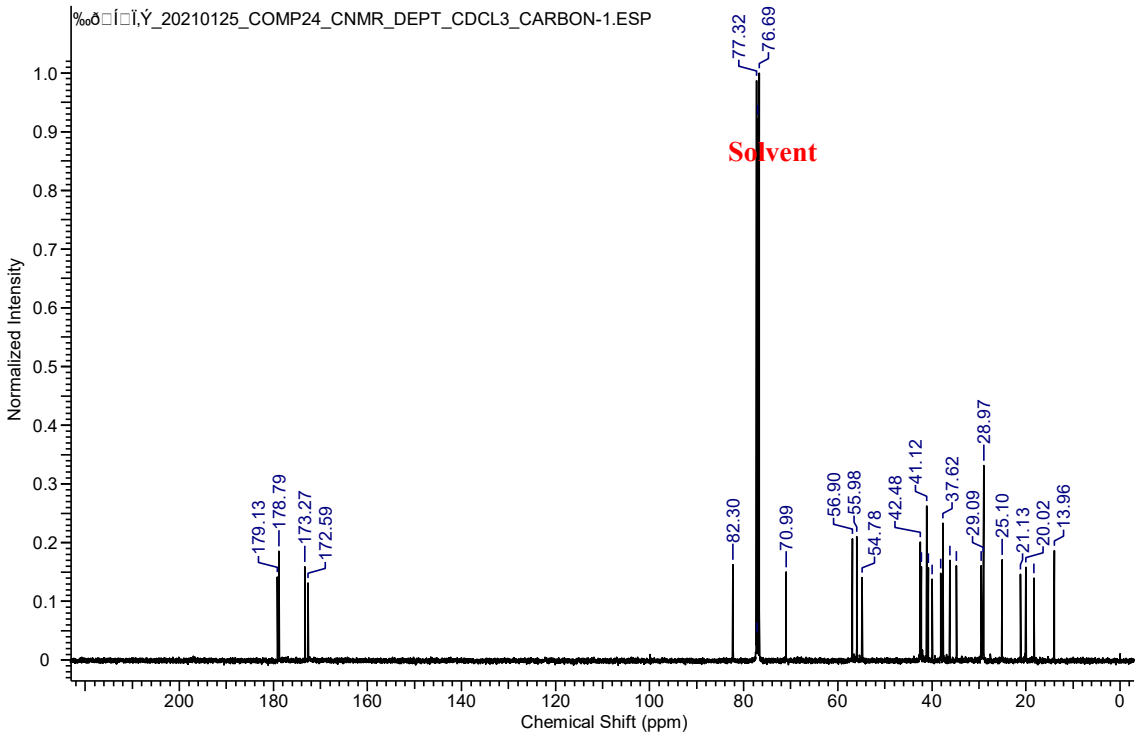


HRMS (ESI-MS) of compound **13**

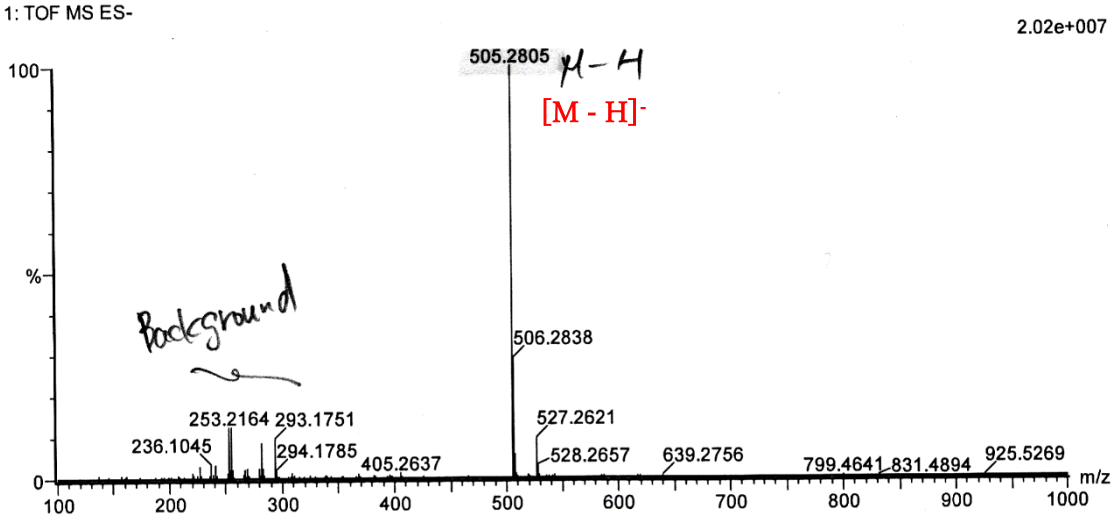
^{1}H-NMR (Chloroform-d, 21°C) of compound **14**



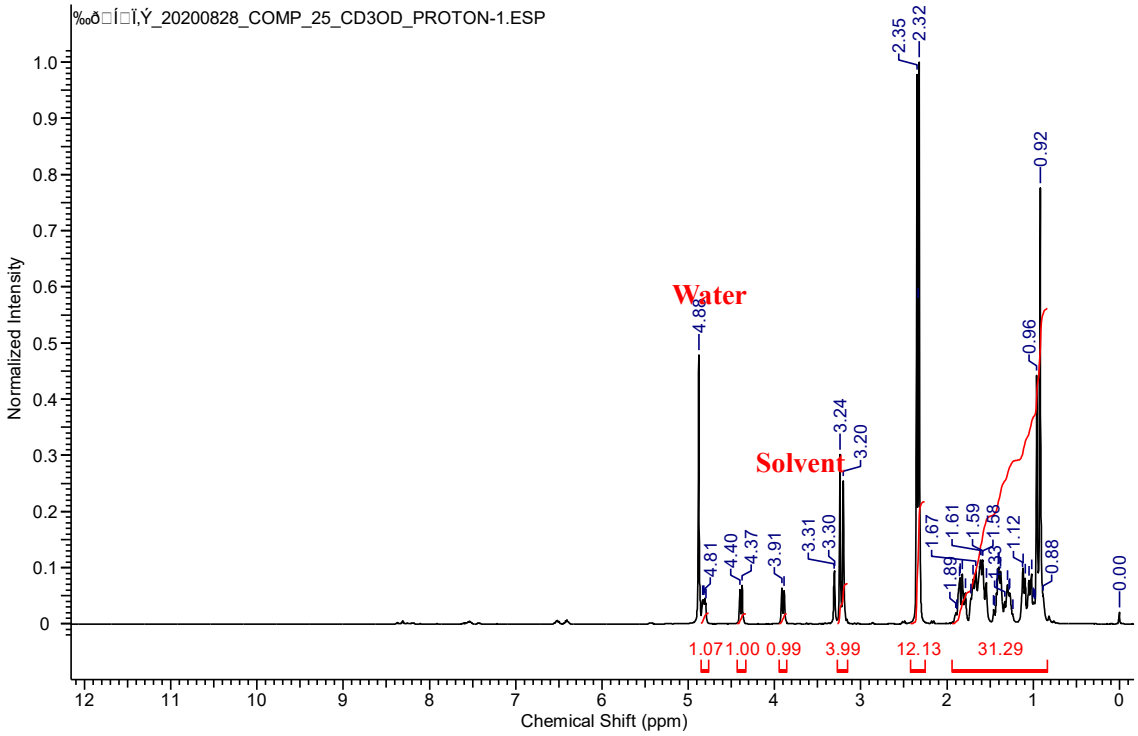
^{13}C-NMR (Chloroform-d, 21°C) of compound **14**



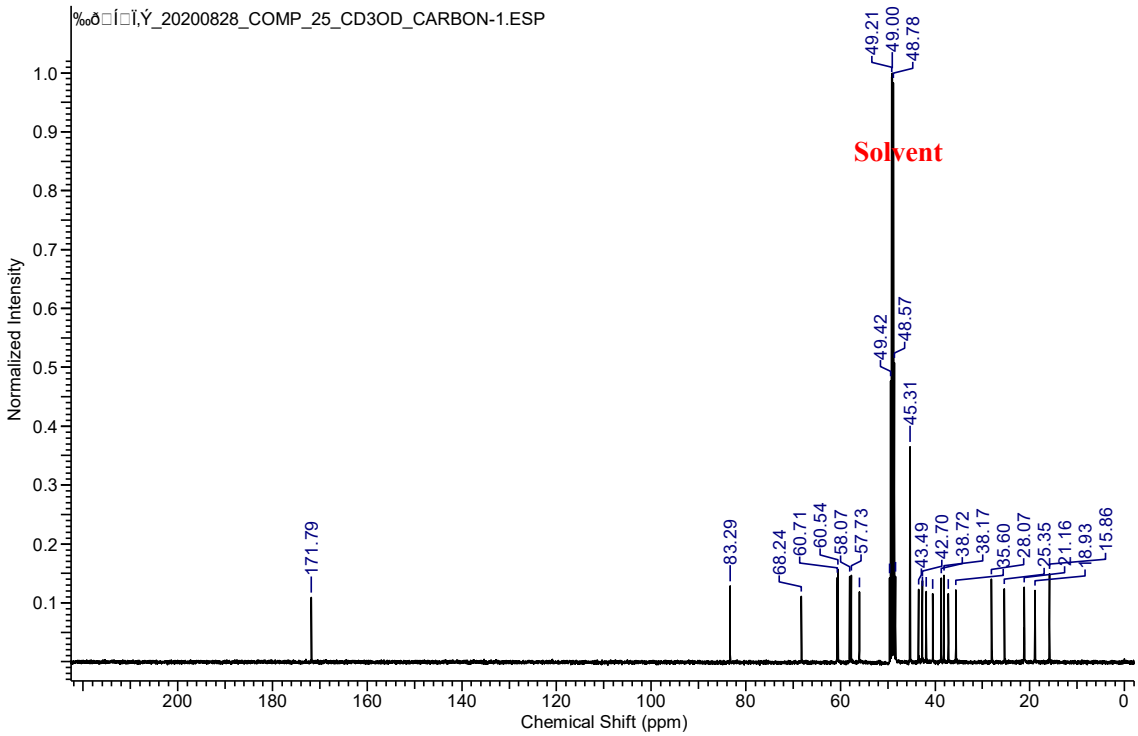
HRMS (ESI-MS) of compound **14**



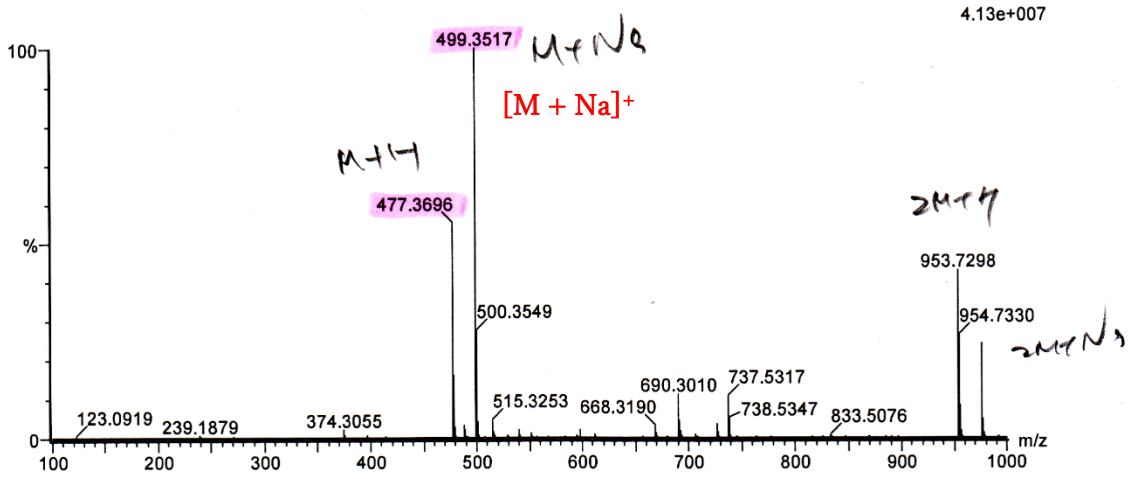
^{1}H-NMR (Methanol-d_4, 21°C) of compound **15**



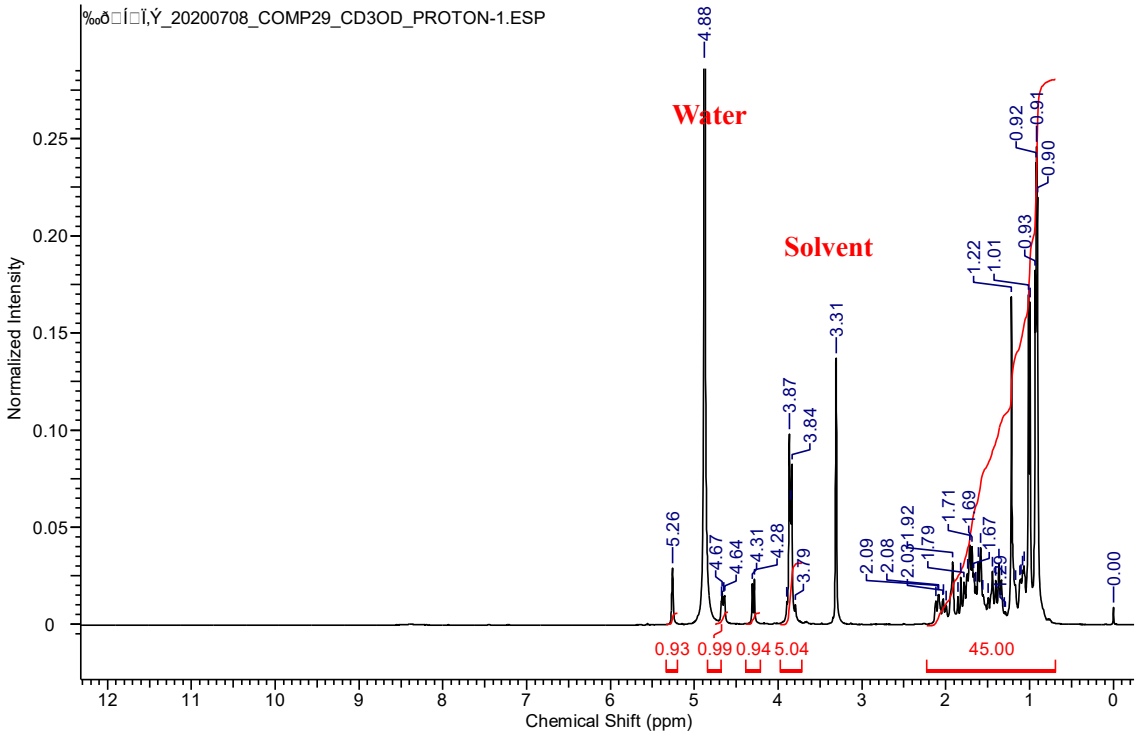
^{13}C-NMR (Methanol-d_4, 21°C) of compound **15**



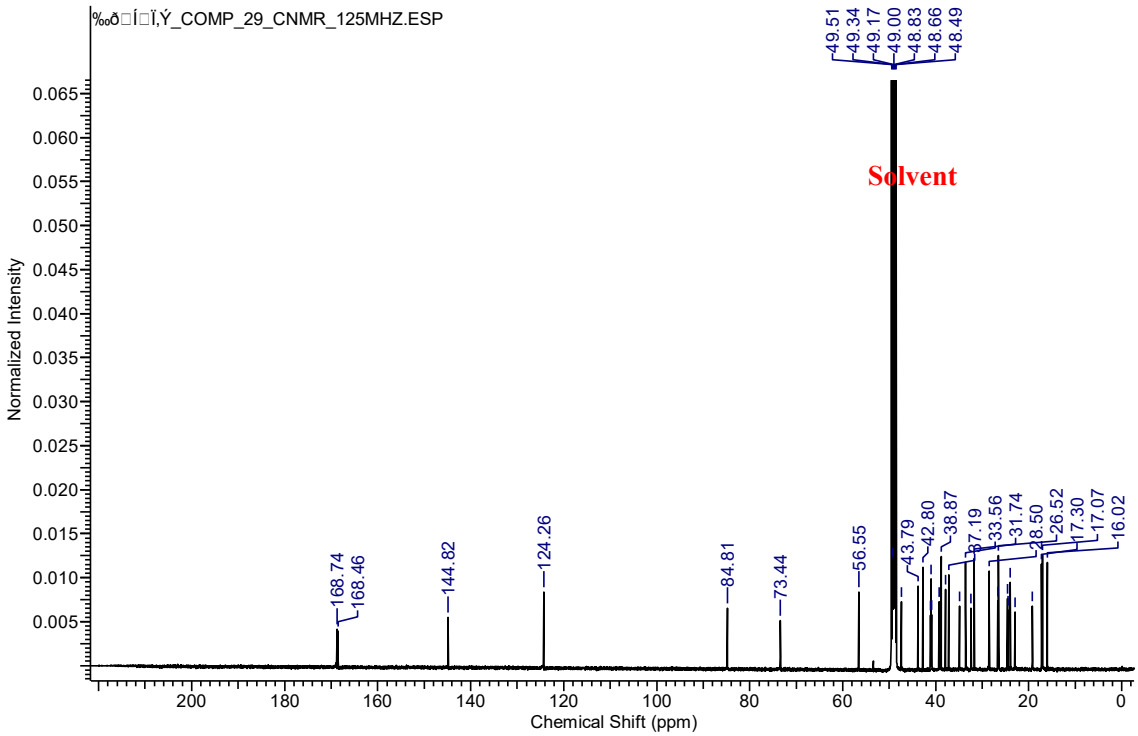
HRMS (ESI-MS) of compound **15**



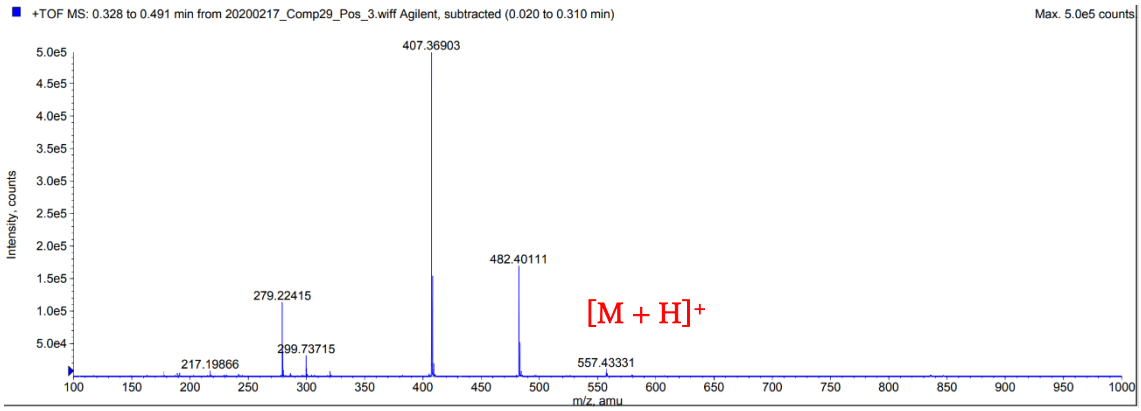
^{1}H-NMR (Methanol-d_4, 21°C) of compound **19**



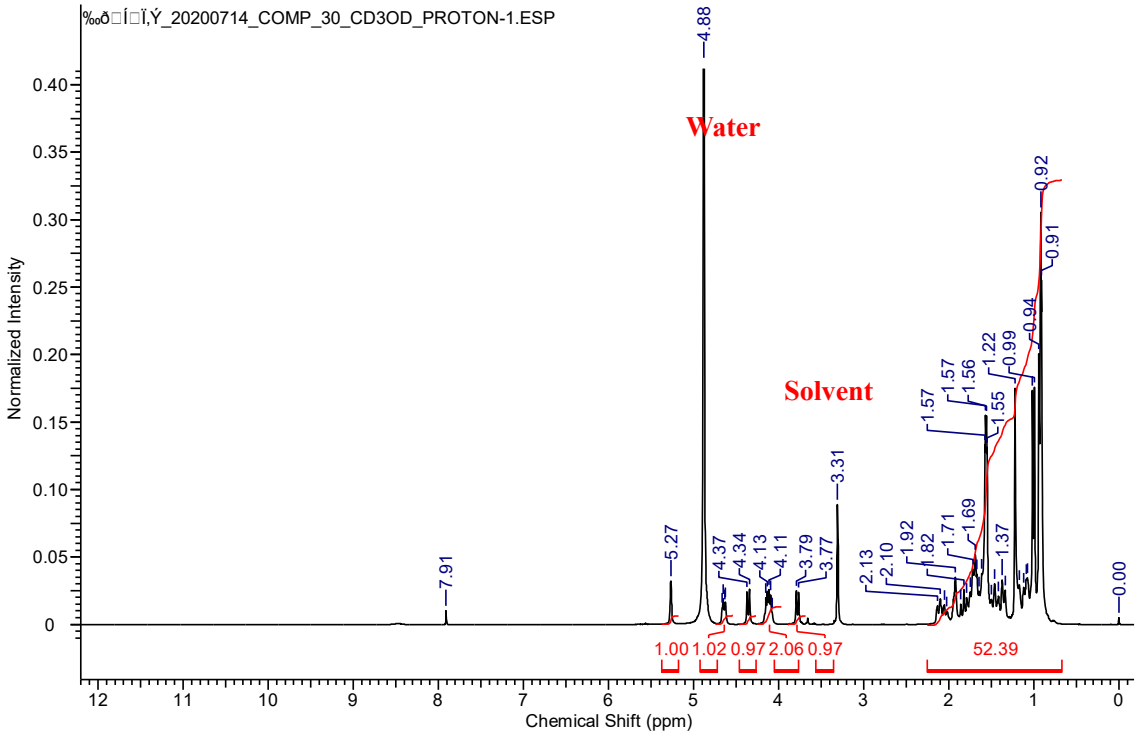
^{13}C-NMR (125 MHz, Methanol-d_4, 21°C) of compound **19**



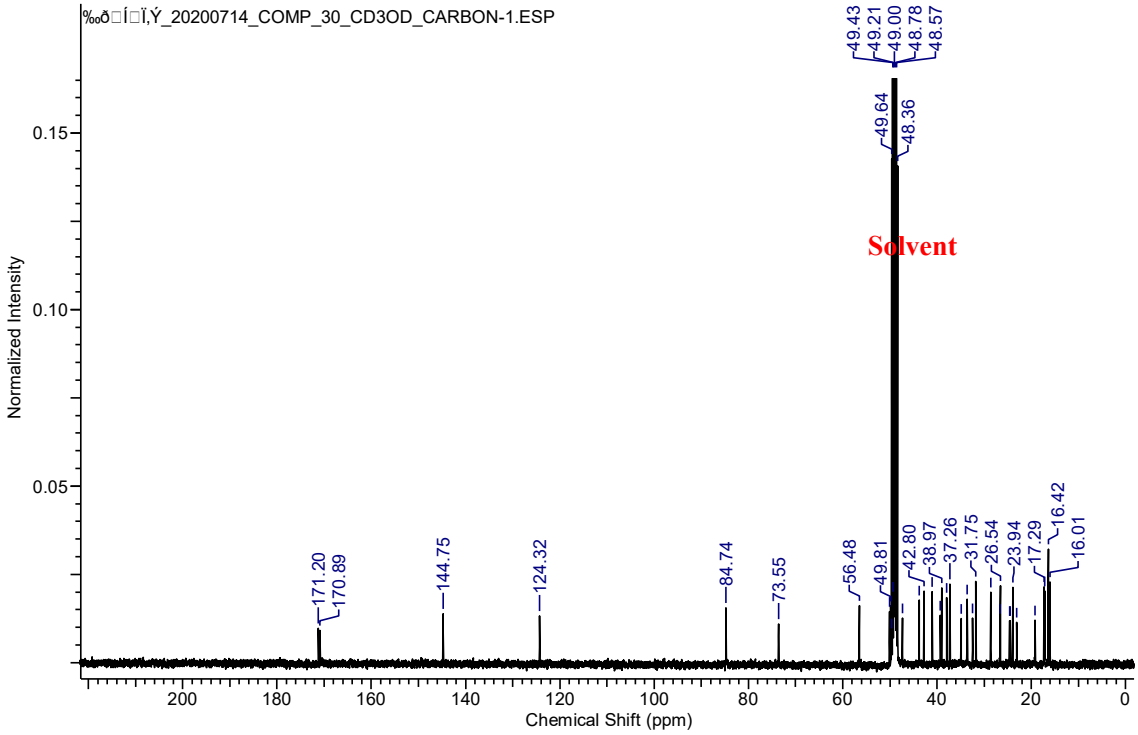
HRMS (ESI-MS) of compound **19**



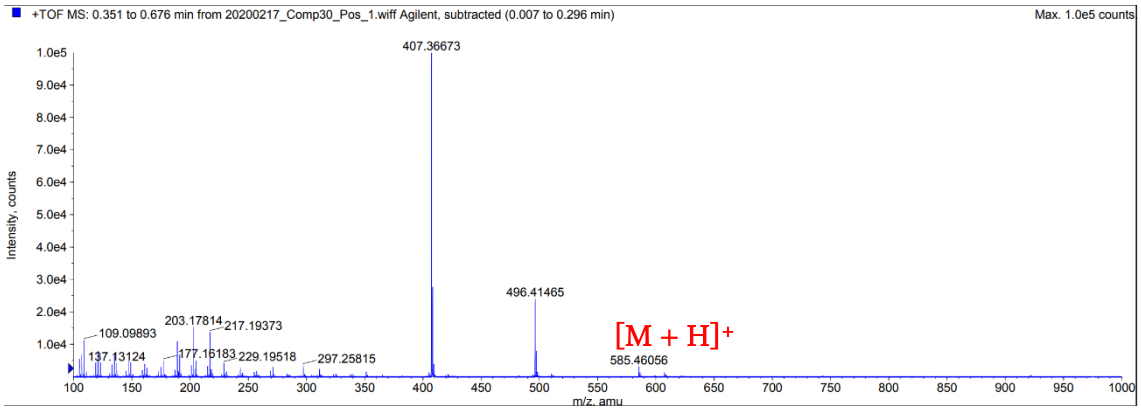
^{1}H-NMR (Methanol-d_4, 21°C) of compound **20**



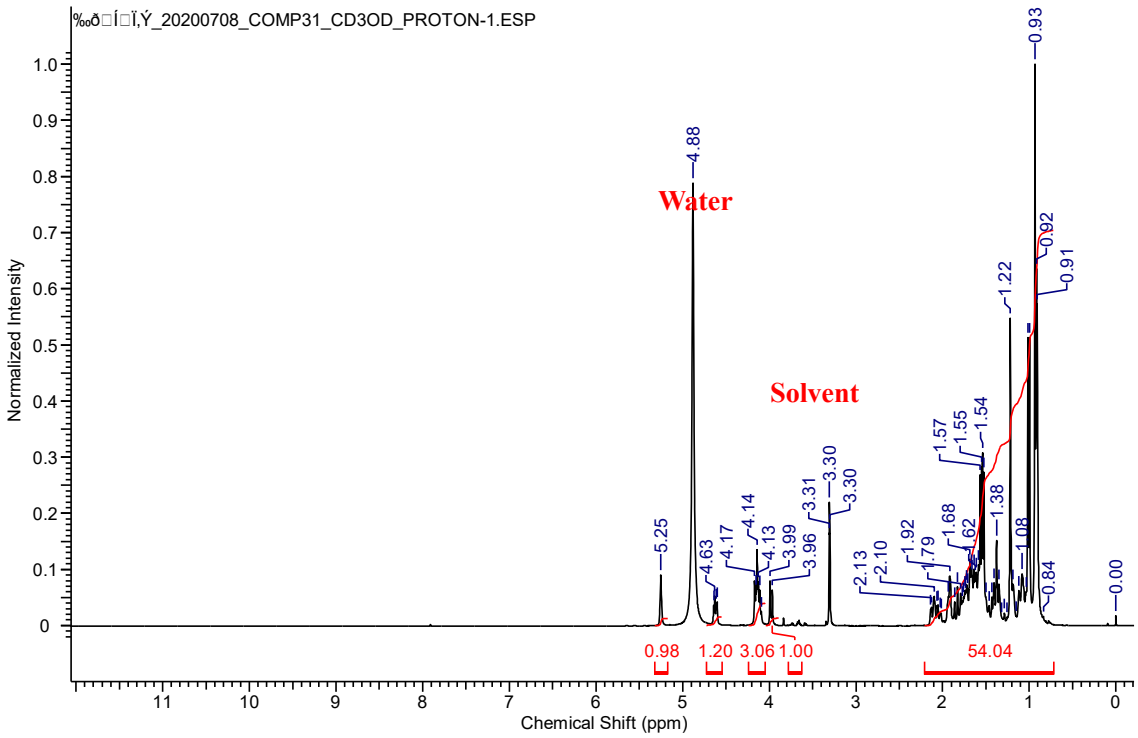
^{13}C-NMR (Methanol-d_4, 21°C) of compound **20**



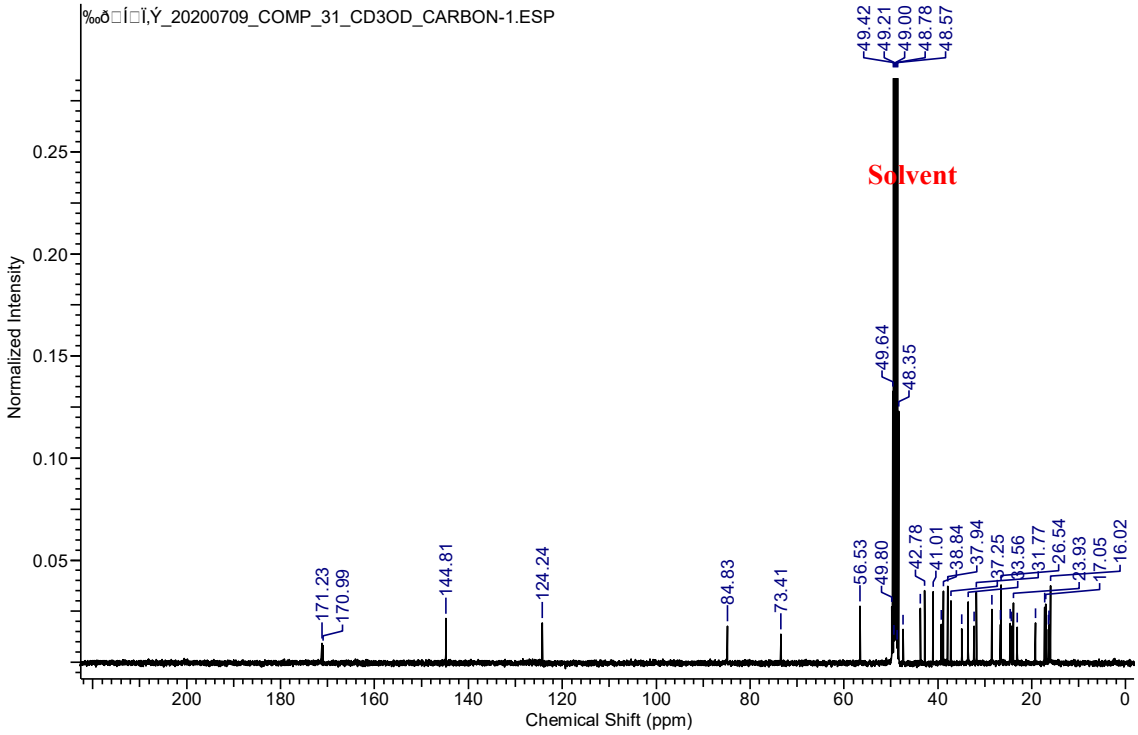
HRMS (ESI-MS) of compound **20**



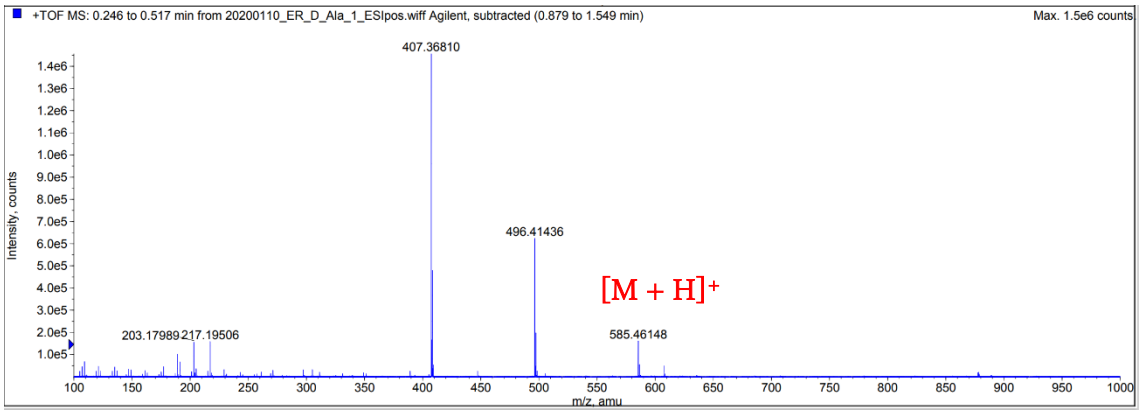
^{1}H-NMR (Methanol-d_4, 21°C) of compound **21**



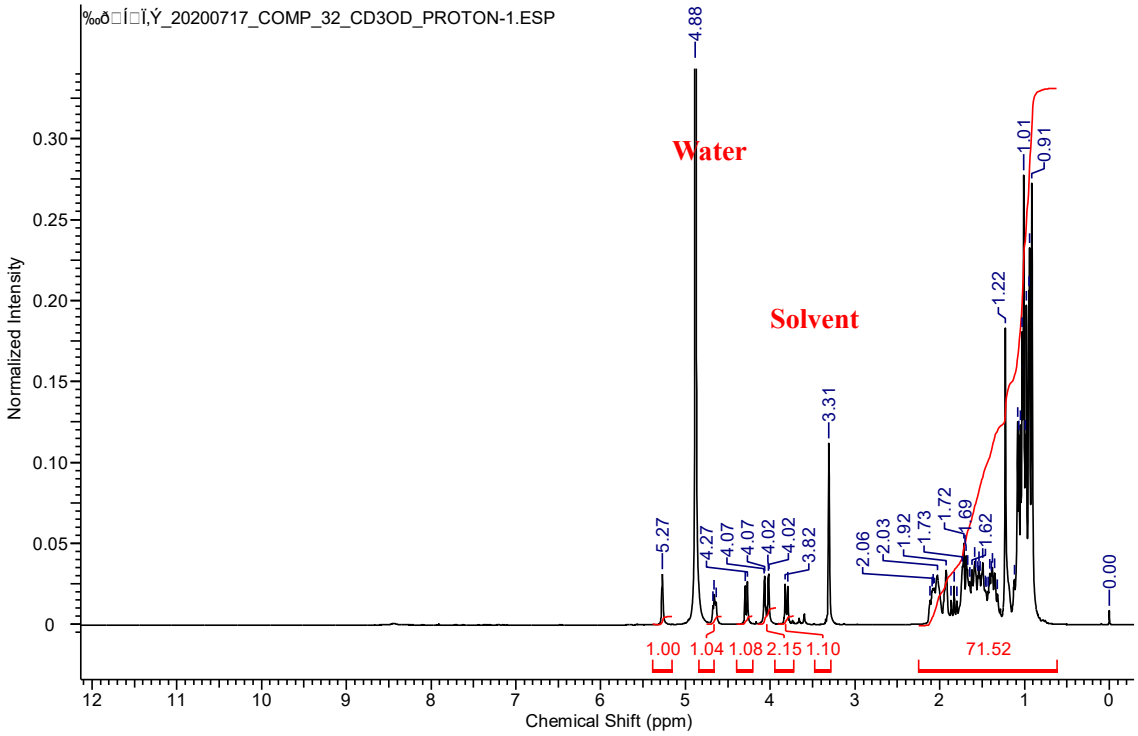
^{13}C-NMR (Methanol-d_4, 21°C) of compound **21**



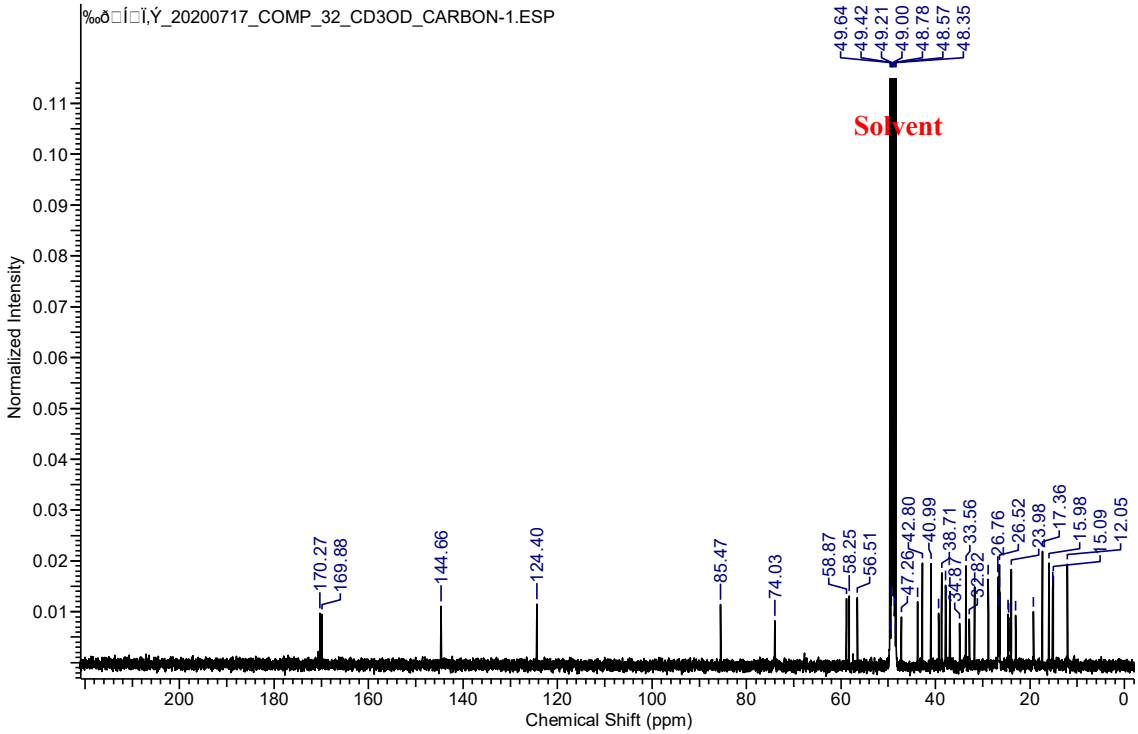
HRMS (ESI-MS) of compound **21**



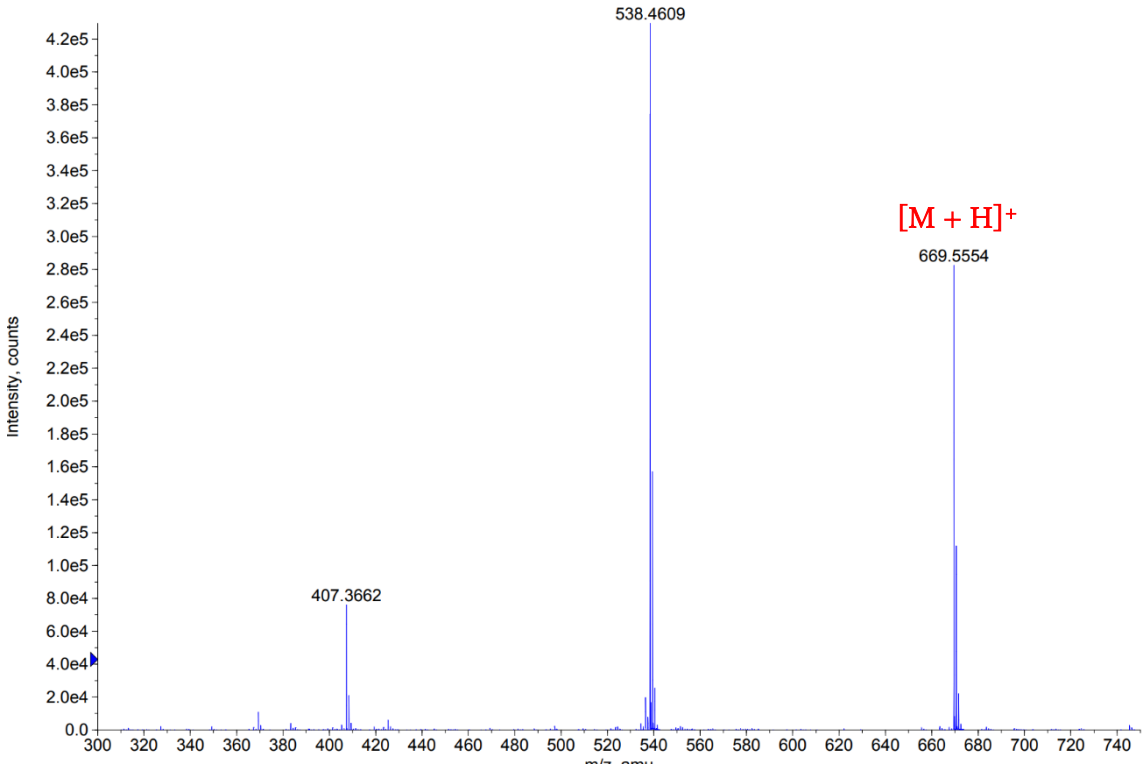
^{1}H-NMR (Methanol-d_4, 21°C) of compound **22**



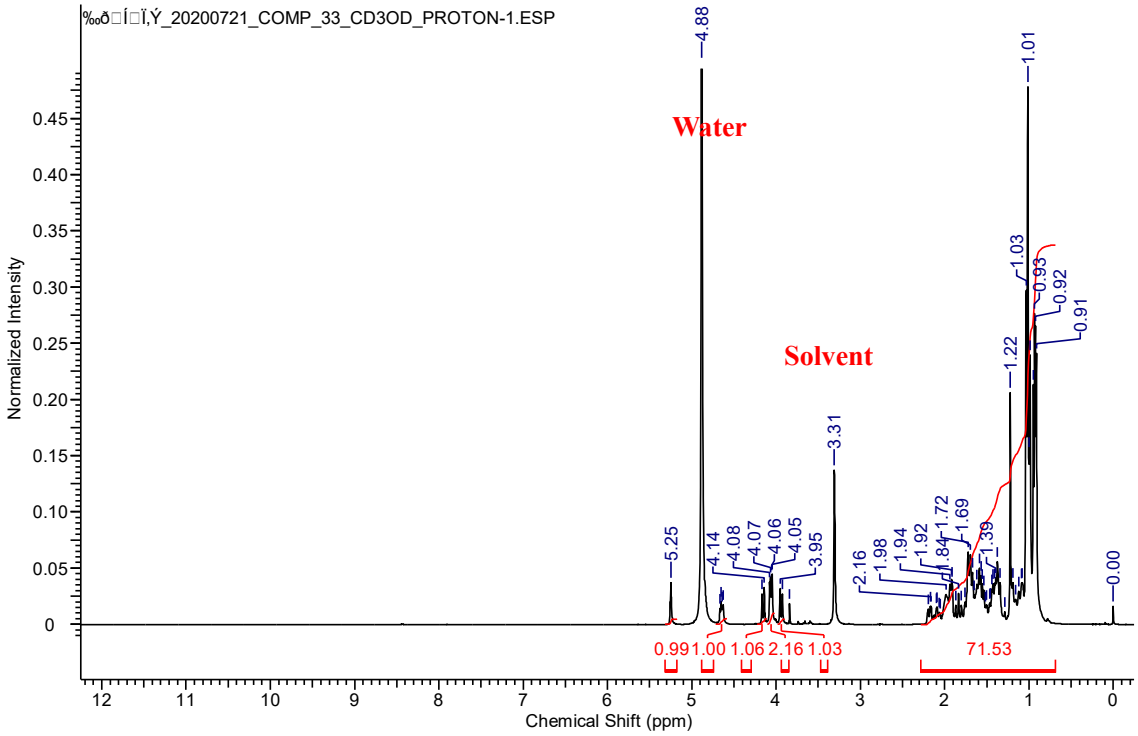
^{13}C-NMR (Methanol-d_4, 21°C) of compound **22**



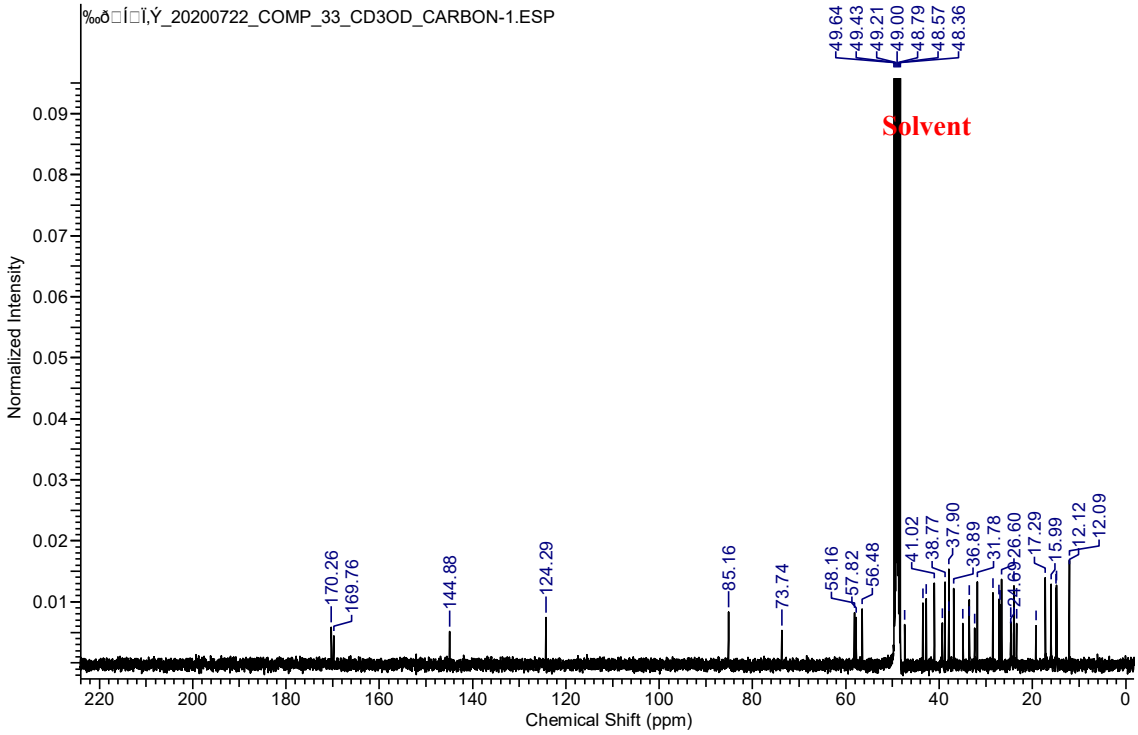
HRMS (ESI-MS) of compound **22**



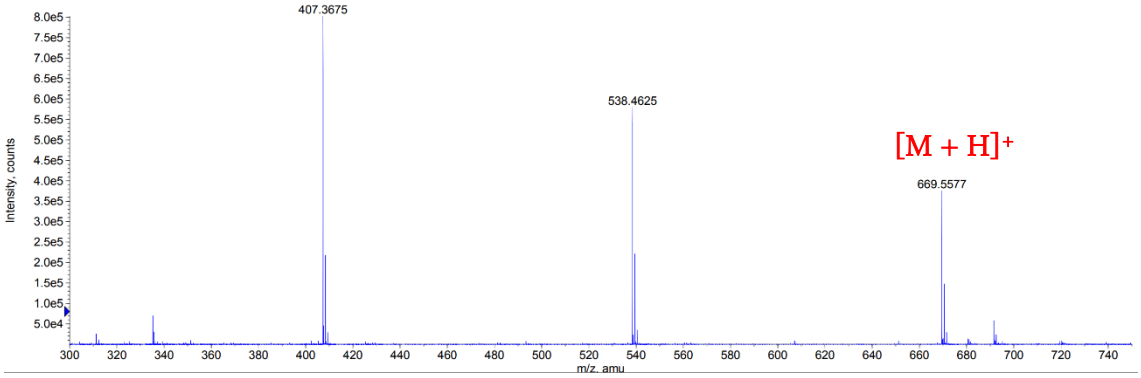
^{1}H-NMR (Methanol-d_4, 21°C) of compound **23**



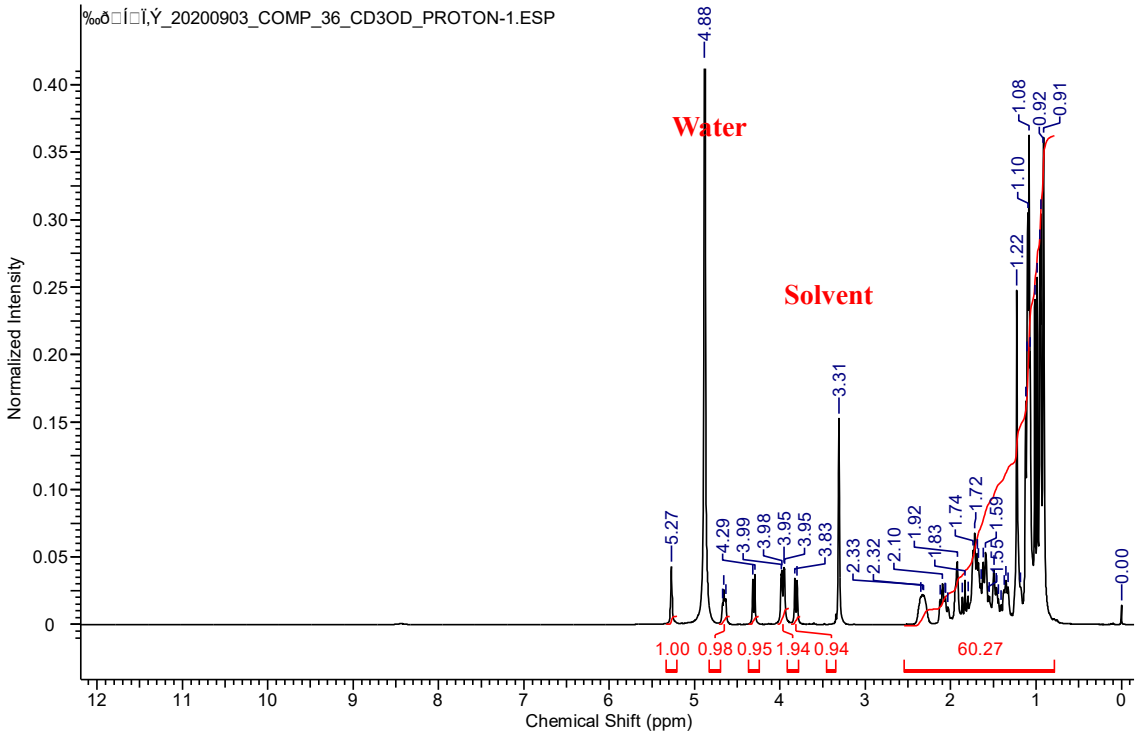
^{13}C-NMR (Methanol-d_4, 21°C) of compound **23**



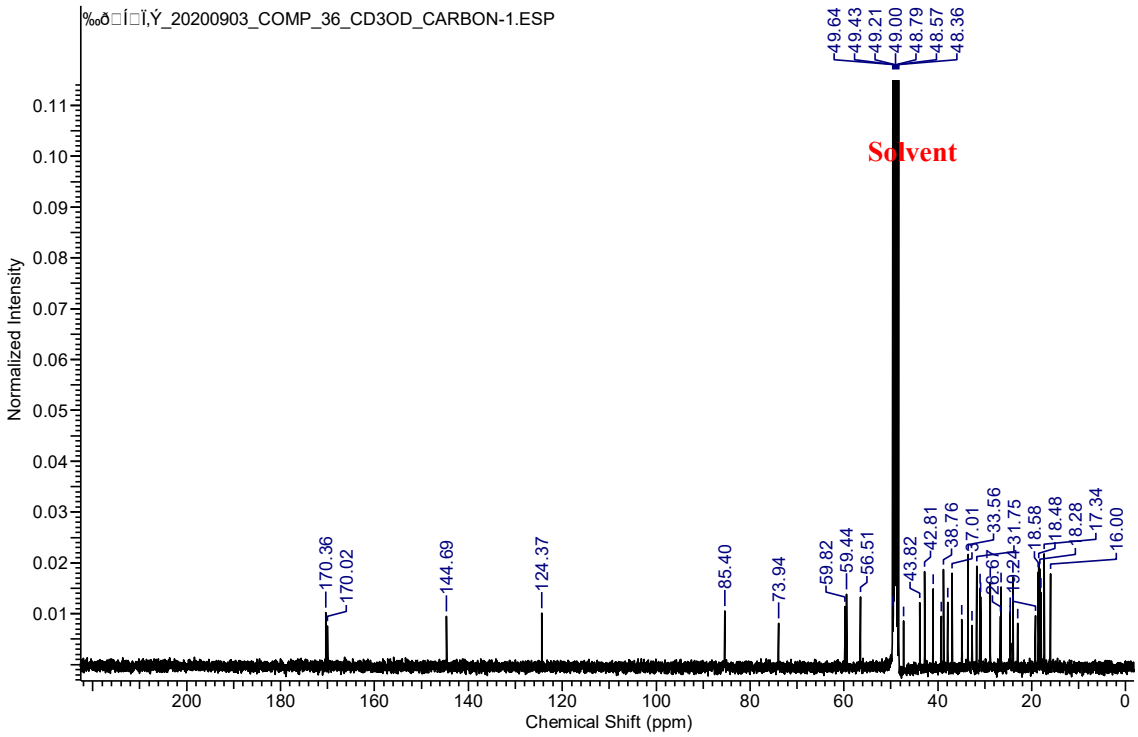
HRMS (ESI-MS) of compound **23**



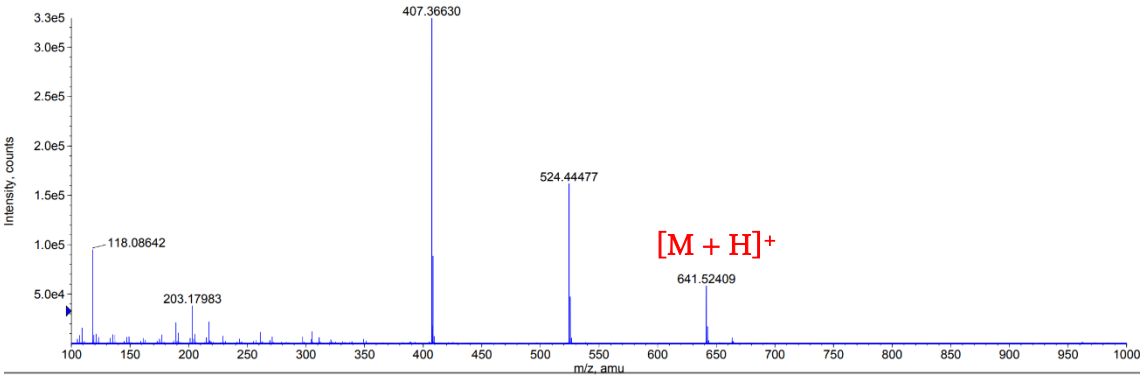
^{1}H-NMR (Methanol-d_4, 21°C) of compound **24**



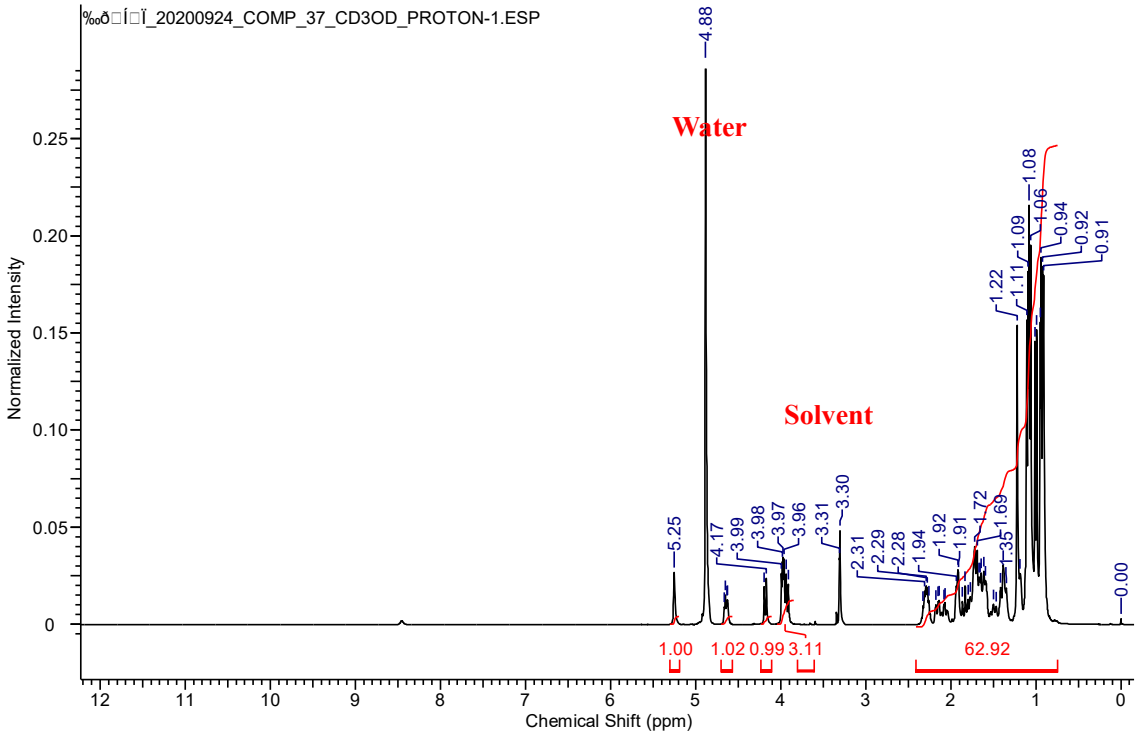
^{13}C-NMR (Methanol-d_4, 21°C) of compound **24**



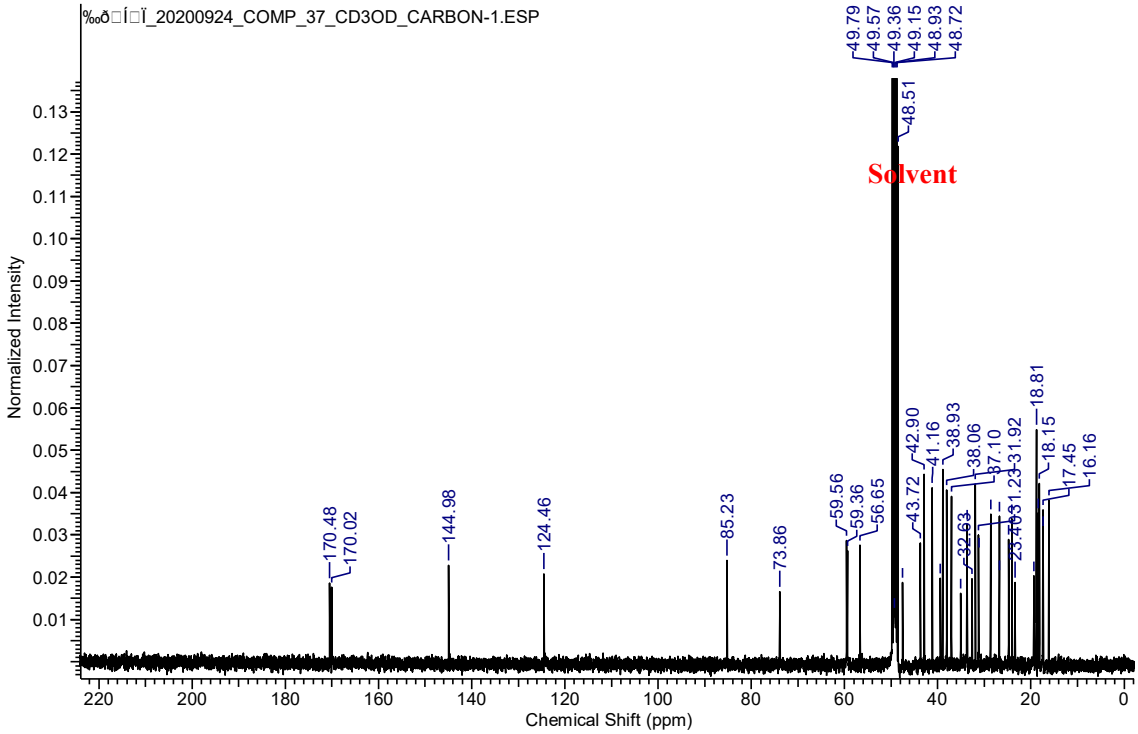
HRMS (ESI-MS) of compound **24**



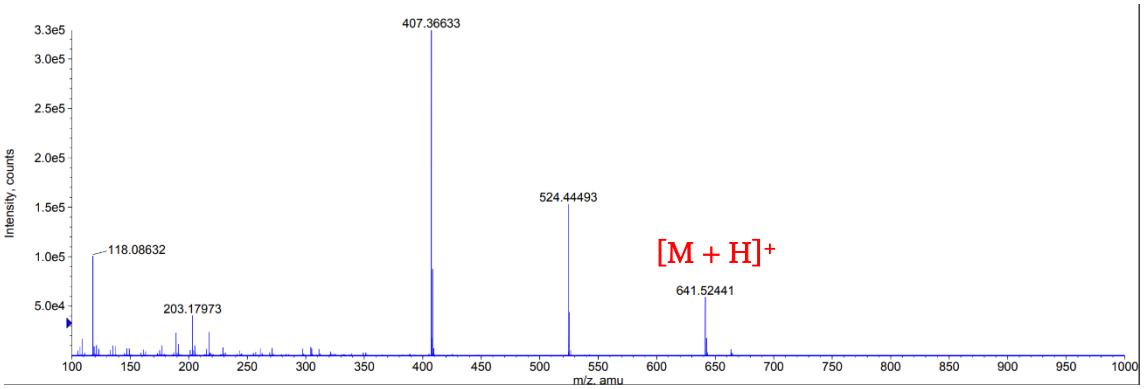
^{1}H-NMR (Methanol-d_4, 21°C) of compound **25**



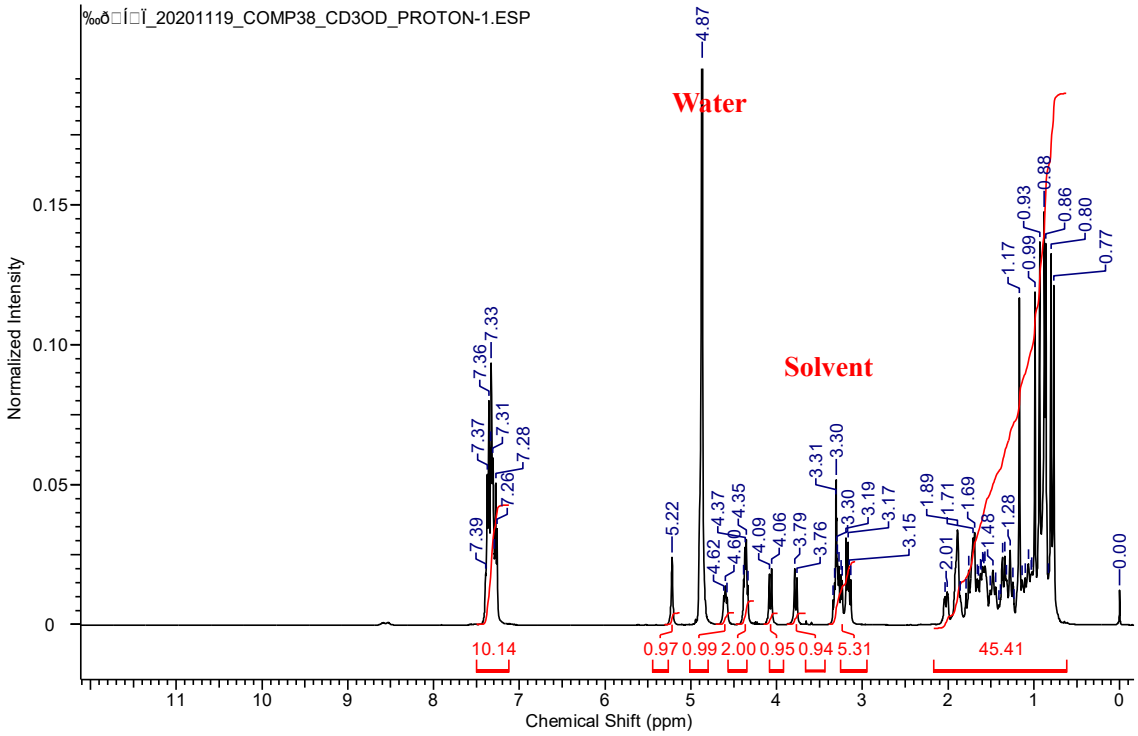
^{13}C-NMR (Methanol-d_4, 21°C) of compound **25**



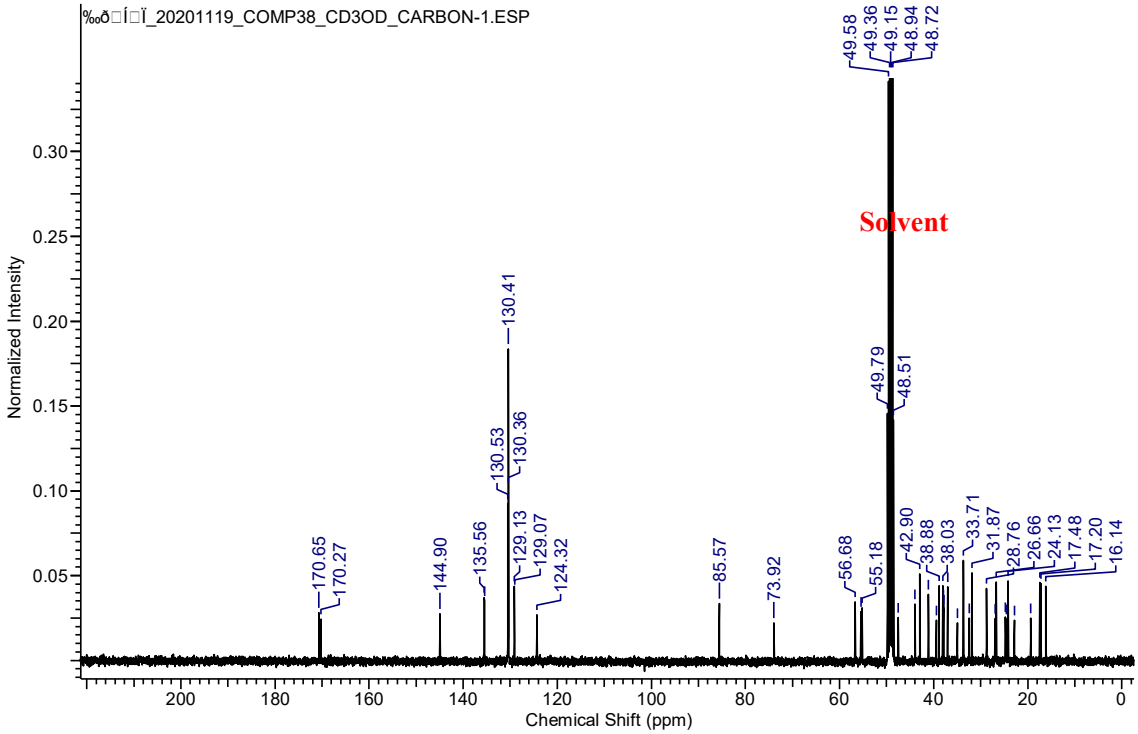
HRMS (ESI-MS) of compound **25**



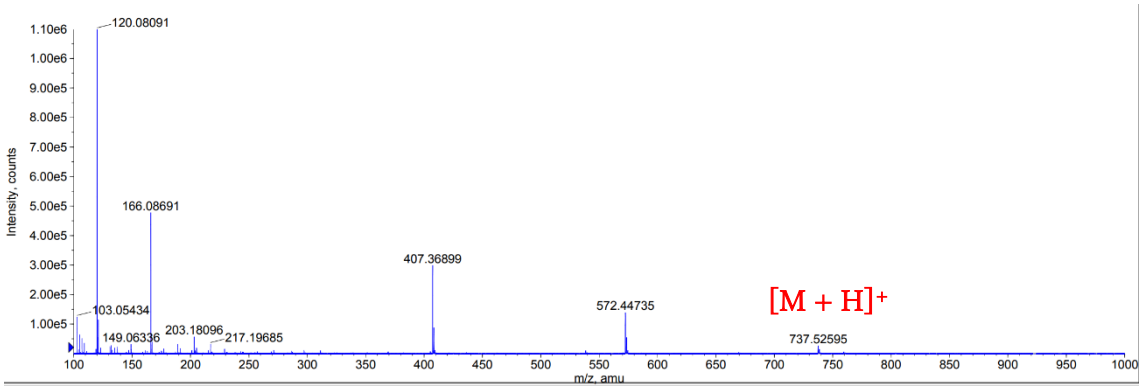
^{1}H-NMR (Methanol-d_4, 22°C) of compound **26**



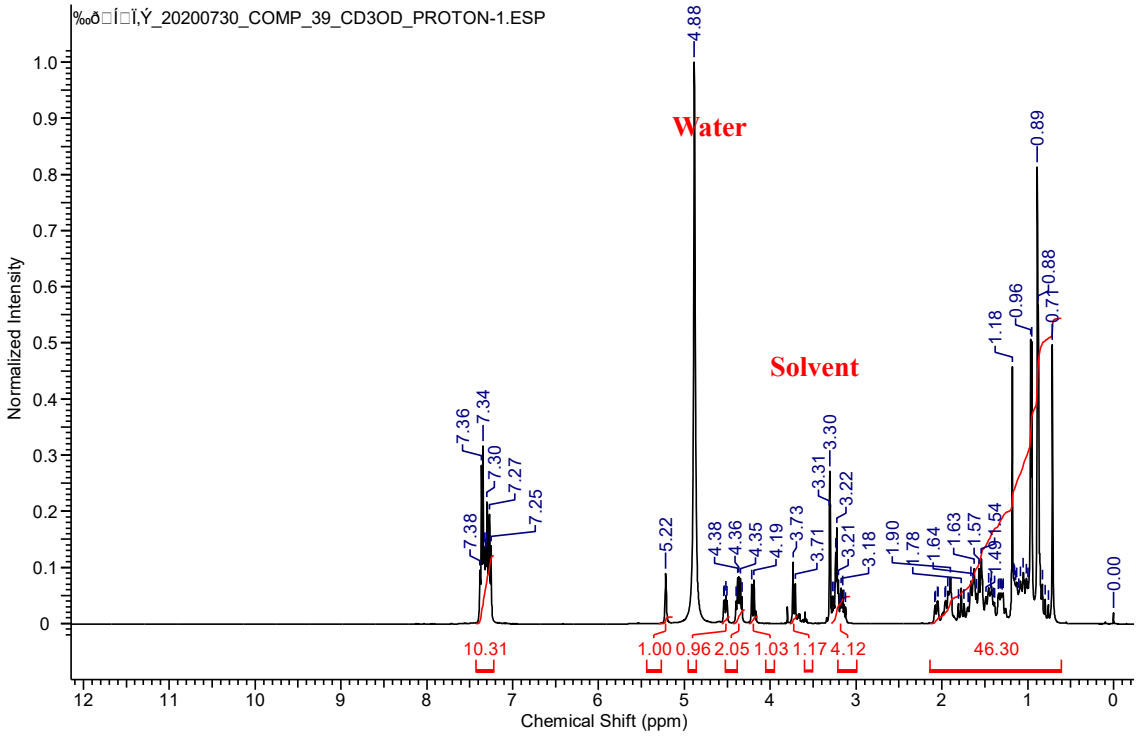
^{13}C-NMR (Methanol-d_4, 22°C) of compound **26**



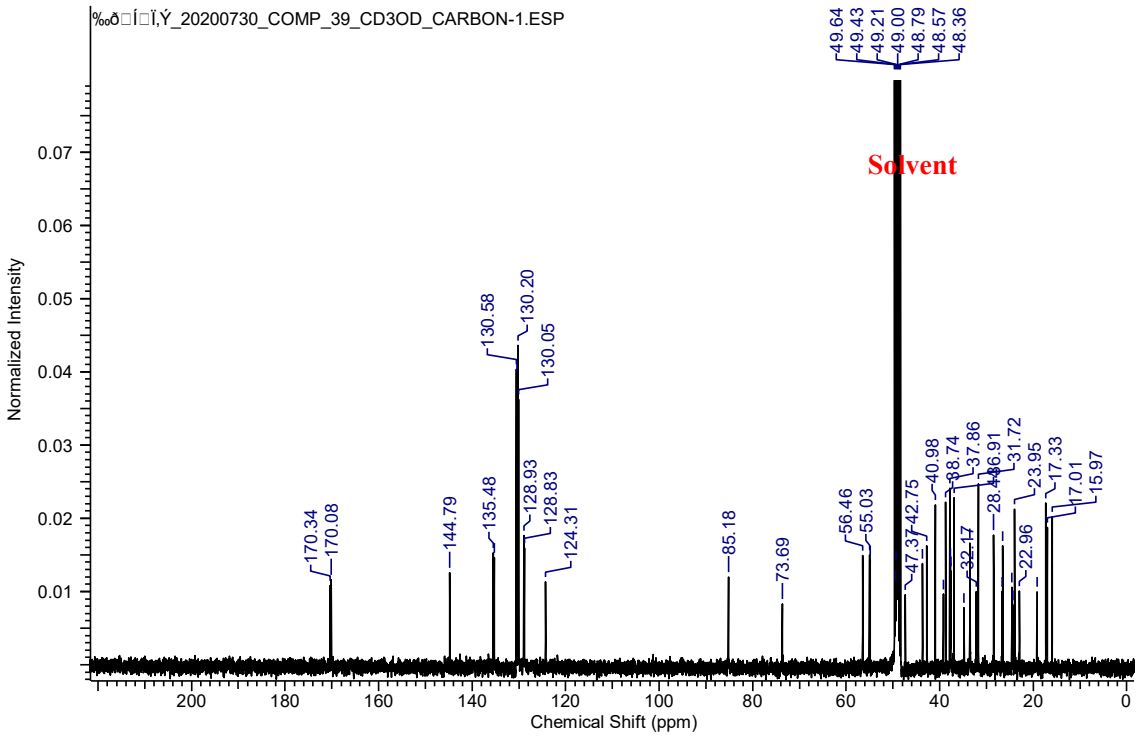
HRMS (ESI-MS) of compound **26**



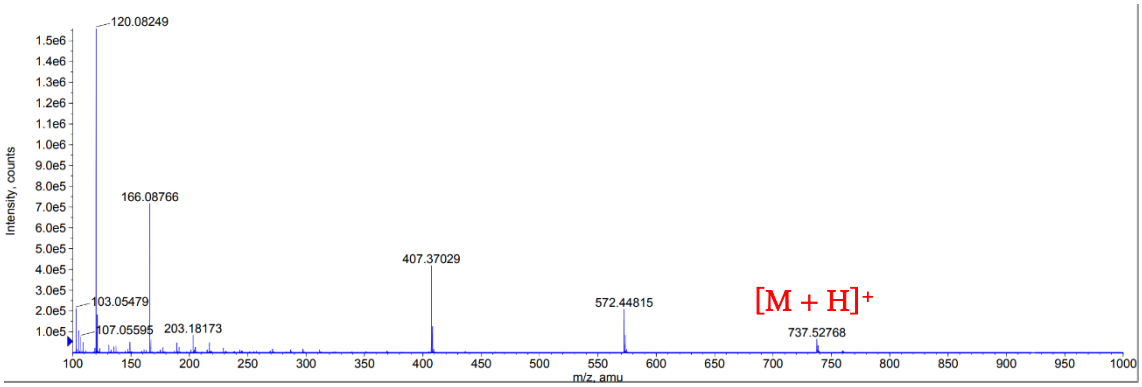
^{1}H-NMR (Methanol-d_4, 21°C) of compound **27**



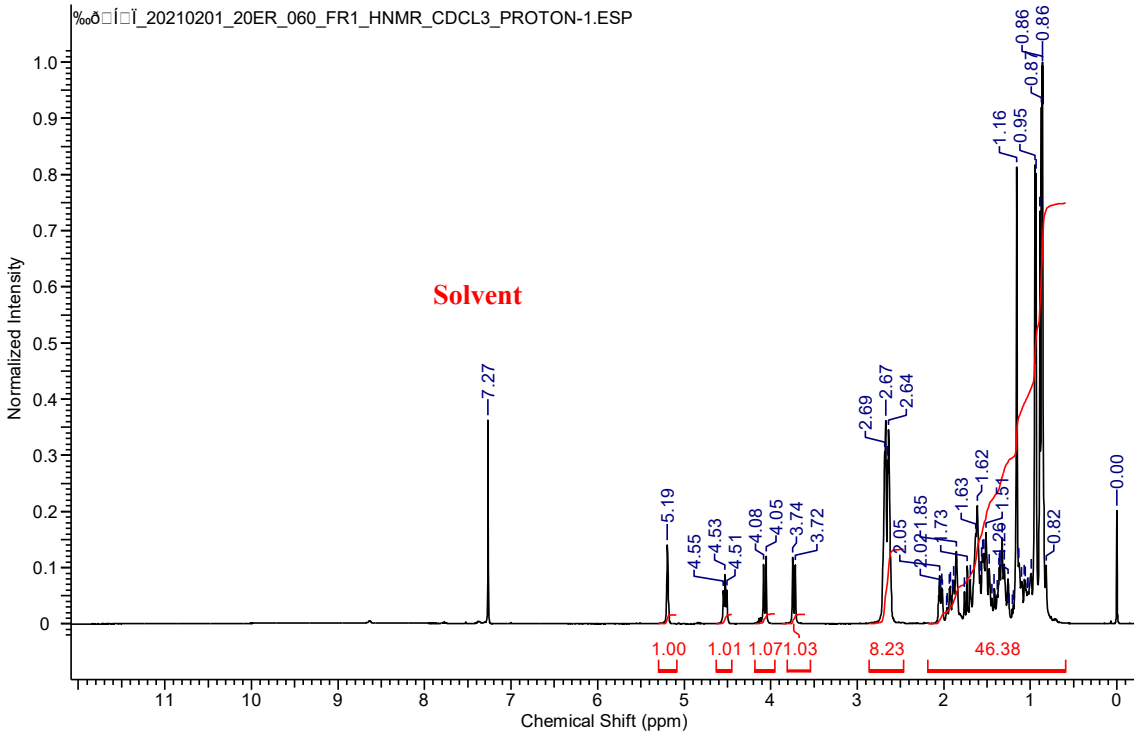
^{13}C-NMR (Methanol-d_4, 21°C) of compound **27**



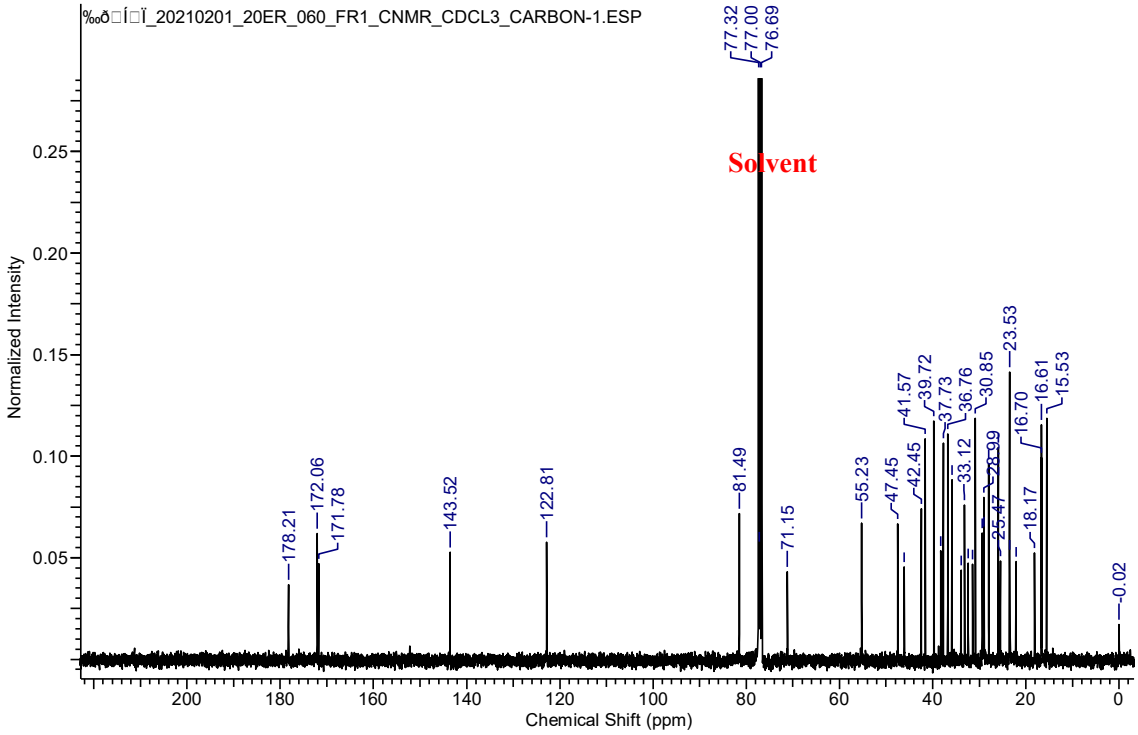
HRMS (ESI-MS) of compound **27**



^{1}H-NMR (Chloroform-d, 21°C) of compound **28**

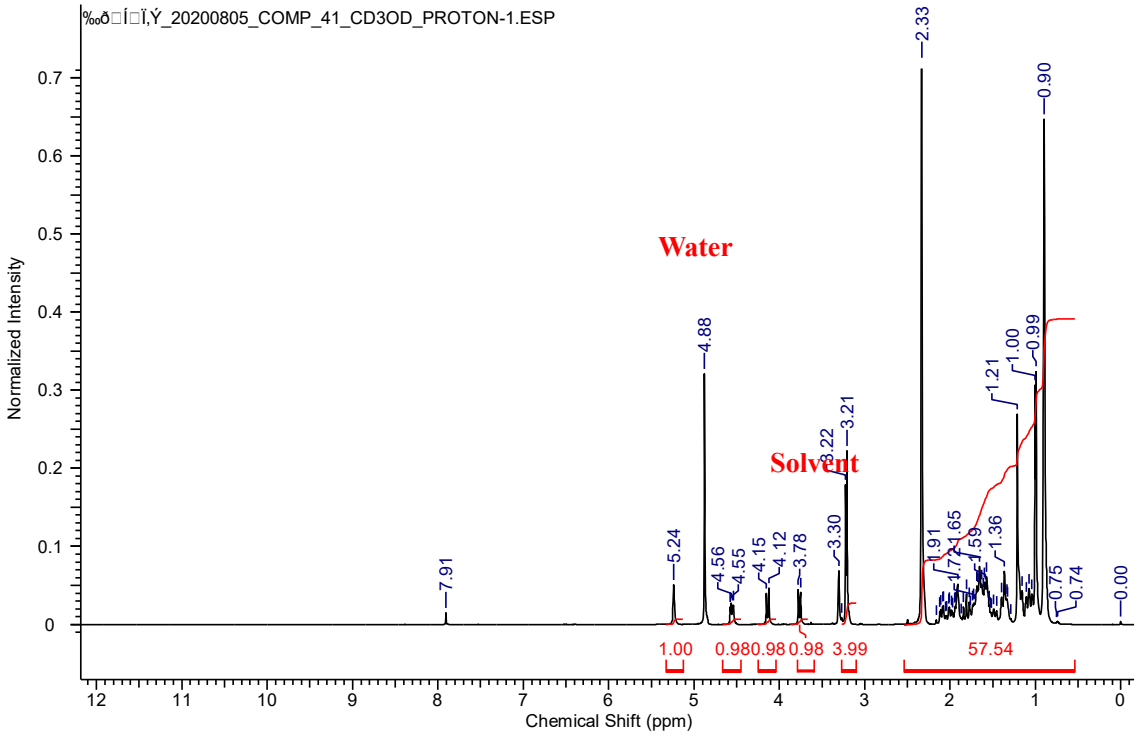


^{13}C-NMR (Chloroform-d, 22°C) of compound **28**

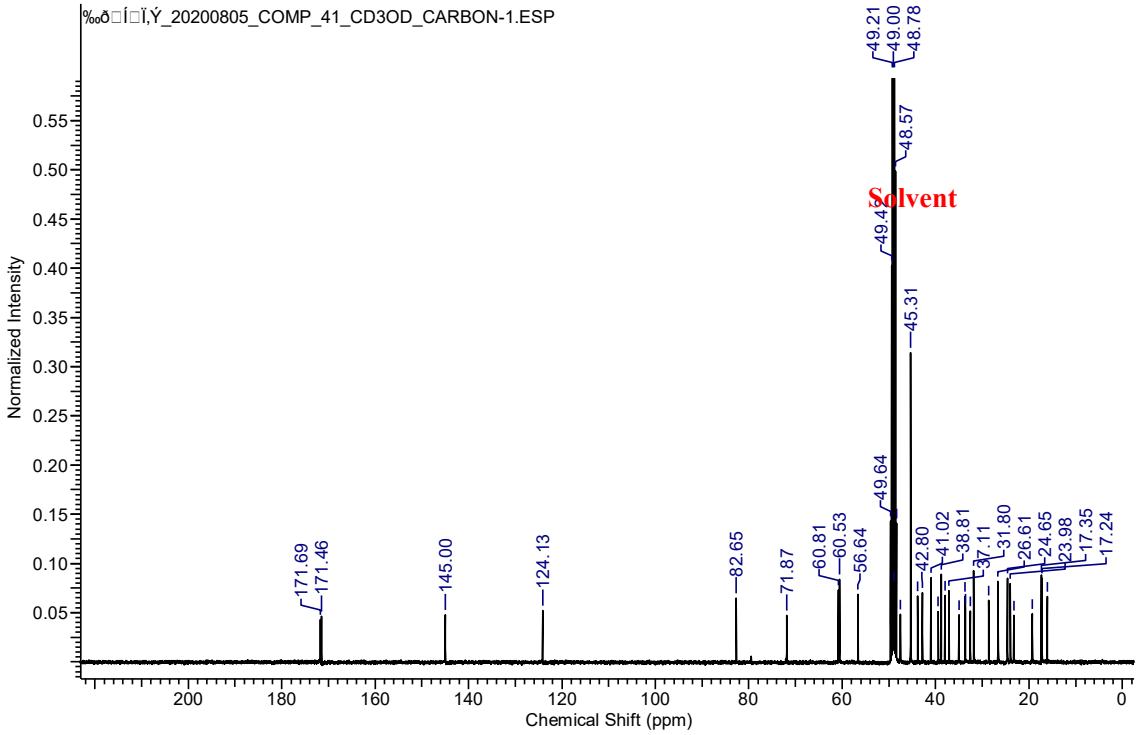


HRMS (ESI-MS) of compound **28**

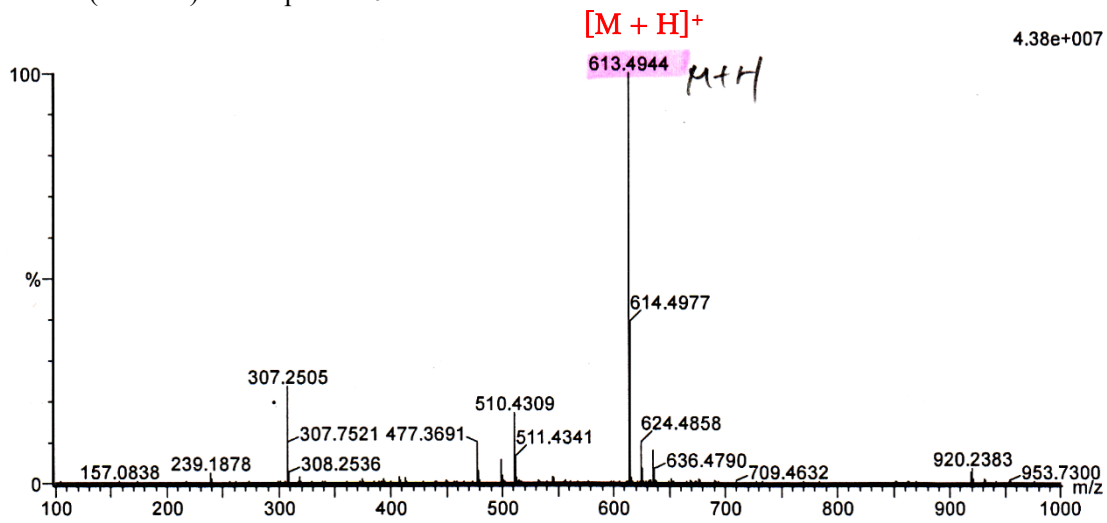
^{1}H-NMR (Methanol-d_4, 21°C) of compound **29**



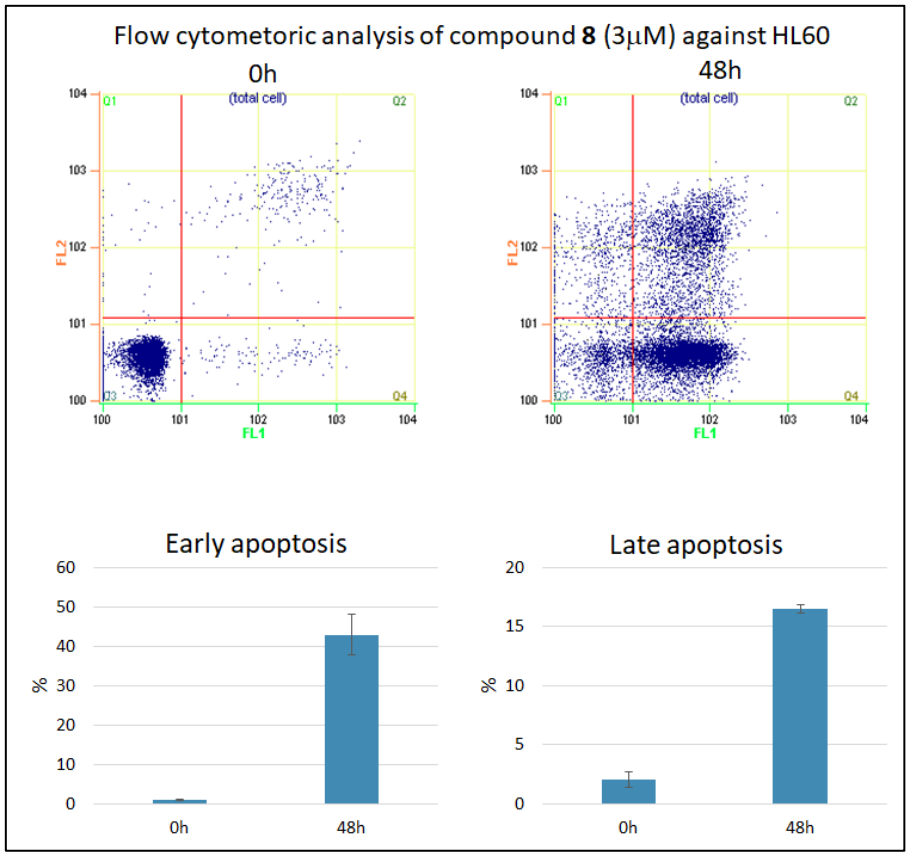
^{13}C-NMR (Methanol-d_4, 21°C) of compound **29**

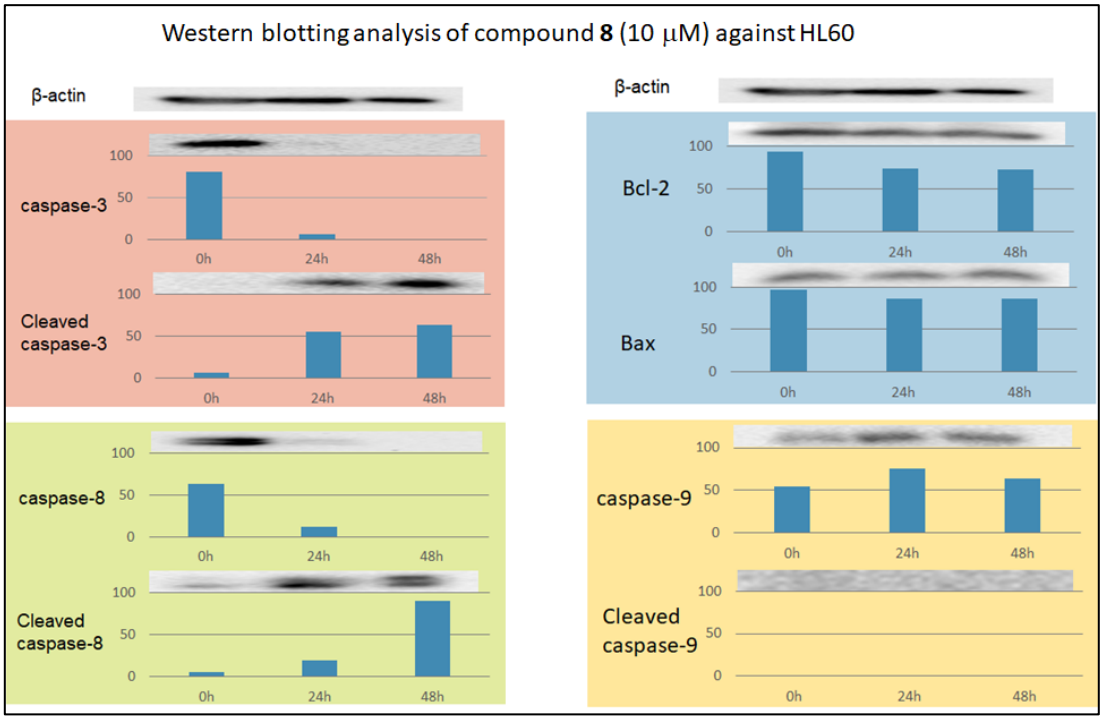


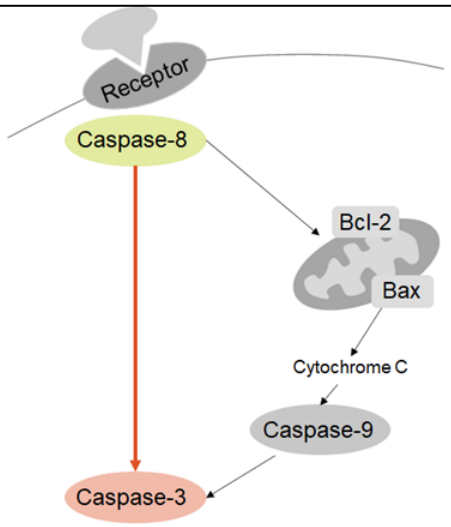
HRMS (ESI-MS) of compound **29**



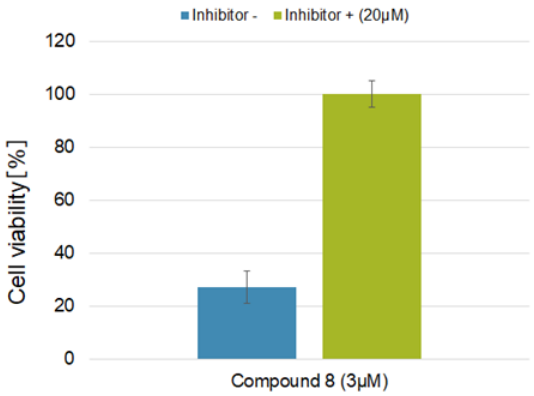
Apoptosis inducing effect by compound **8**







Deduced apoptosis inducing mechanism by compound **8**



Cytotxicity of compound **8** against HL60 in the presence of caspase 8 inhitibor (Z-IETD-FMK)