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## **Supporting Information**

# The $\alpha$ -glucosidase Inhibitory Activities of Phenolic Acid Amides with L-Amino Acid Moiety

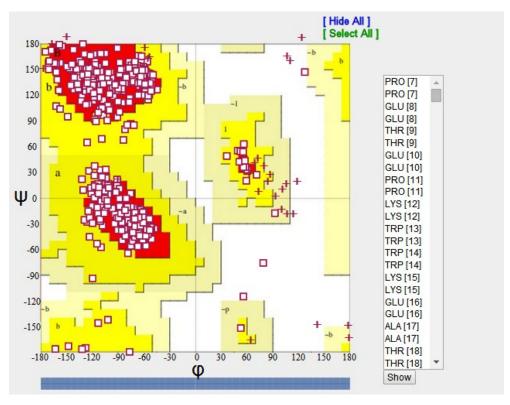
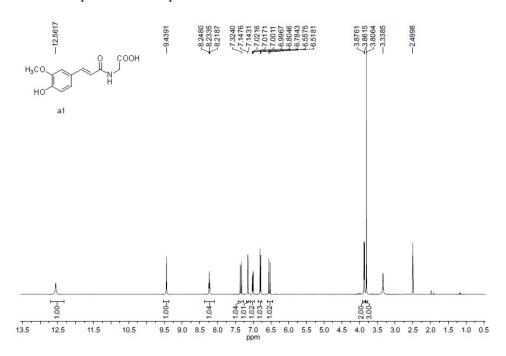
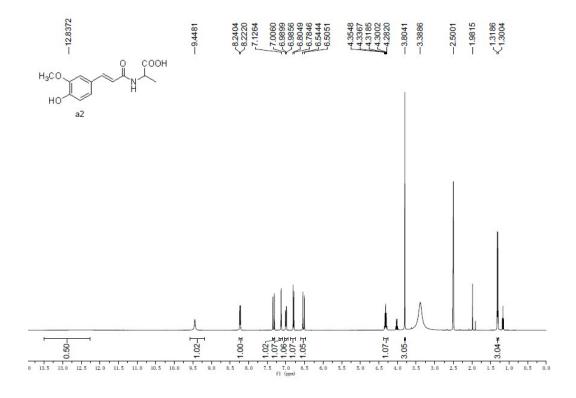


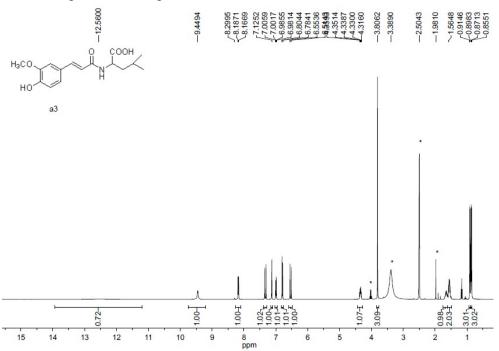
Fig. S1 Ramachandran Plot of the modeling 3D structure of  $\alpha$ -glucosidase

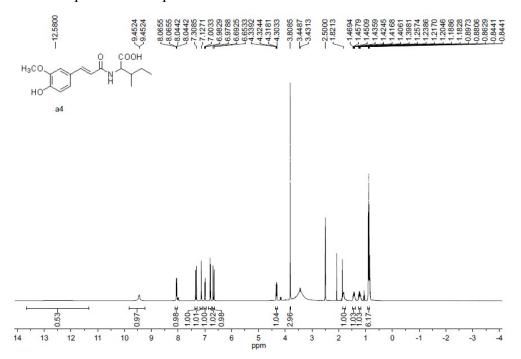
Table S1 Observed and predicted activities for training set and test set (\*)compounds against  $\alpha$ -glucosidase

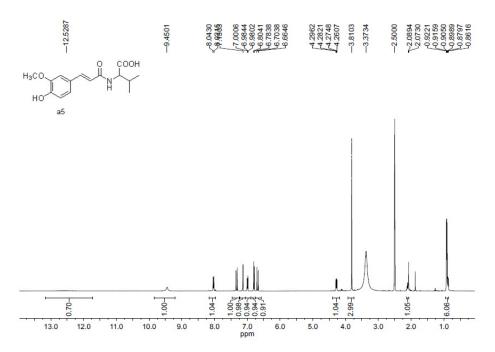
Compound	pIC <sub>50</sub>			C 1	pIC <sub>50</sub>		
	Observed	Predicted	Residual	Compound	Observed	Predicted	Residual
a1*	-1.54	-1.230	-0.307	bl	-0.548	-0.664	0.117
a2	-1.363	-1.127	-0.236	b2	-0.984	-0.962	-0.022
a3	-1.498	-1.659	0.160	b3	-0.808	-0.705	-0.103
a4	-1.249	-1.169	-0.08	b4	-1.025	-1.283	0.258
a5	-1.346	-1.479	0.133	b5*	-1.185	-1.14	-0.044
a6	-0.334	-0.35	0.015	b6*	-1.469	-0.214	-1.254
a7	-0.328	-0.361	0.033	b7	-0.068	-0.07	0.002
a8	-1.285	-1.284	-0.001	b8	-1.048	-0.817	-0.231
a9*	-0.265	-0.101	-0.164	b9	-0.597	-0.524	-0.073
a10	-0.041	-0.024	-0.017	b10	-0.079	0.02	0.099
a11	-0.634	-0.656	0.022	b11	-0.467	-0.514	0.047
a12	-0.512	-0.509	-0.003	b12*	-0.580	-0.623	-0.043
a13	-0.322	-0.403	0.081	b13	-0.290	-0.308	0.018
a14	-0.281	-0.291	0.01	b14	-0.185	-0.105	-0.08
c1	0.143	0.219	-0.077	c8	1.398	1.088	0.31
c2	1.398	1.25	0.148	c9	0.167	0.108	0.059
c3	1.161	1.173	-0.012	c10	-0.534	-0.511	-0.023
c4	0.569	0.781	-0.212	c11*	-0.152	0.125	-0.277
<b>c</b> 5	0.398	0.5	-0.102	c12	0.638	0.623	0.015
<b>c</b> 6	0.678	0.751	-0.073	c13	0.921	0.816	0.105
c7	0.523	0.613	-0.09	c14*	0.886	0.841	0.045



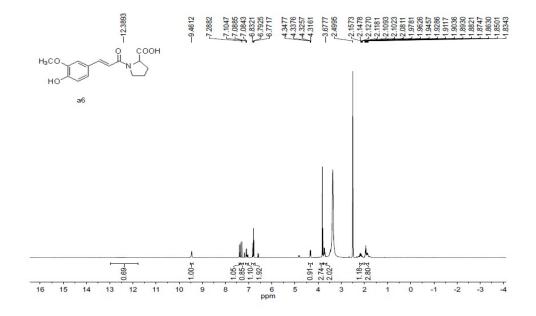


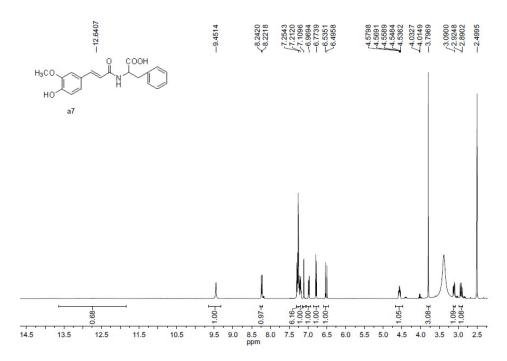


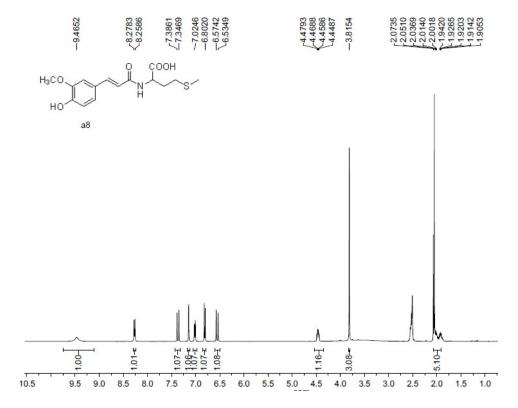


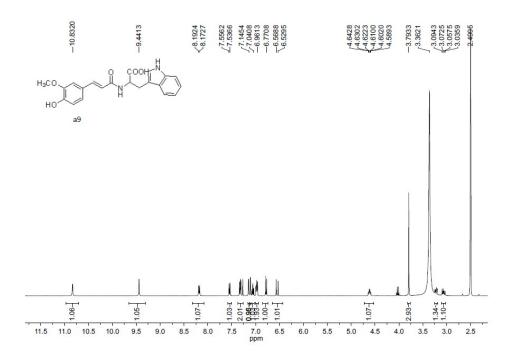


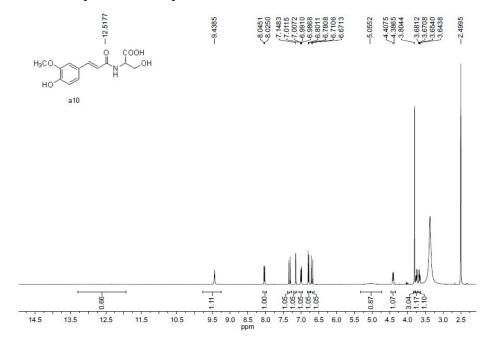
<sup>1</sup>H NMR spectra of compound **a6** 

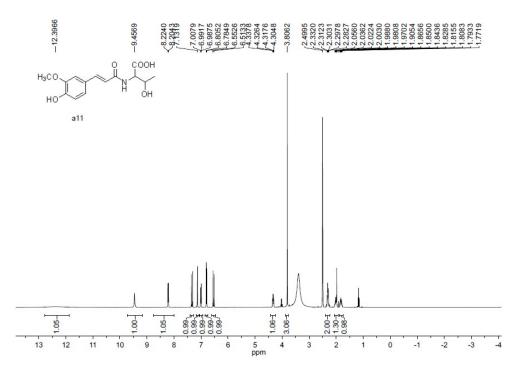




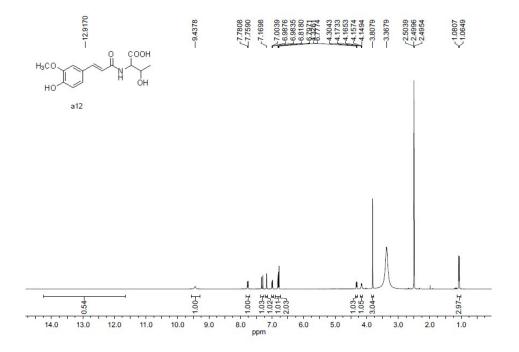


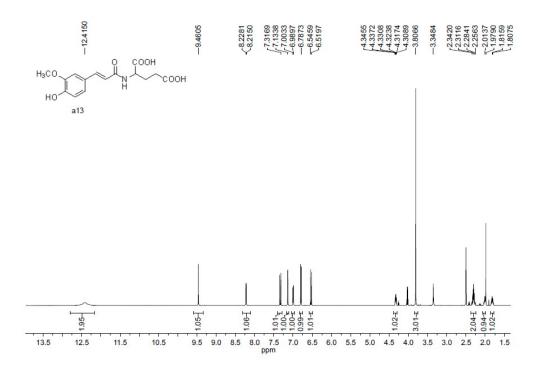


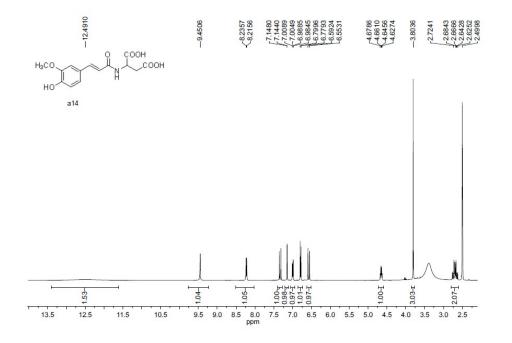


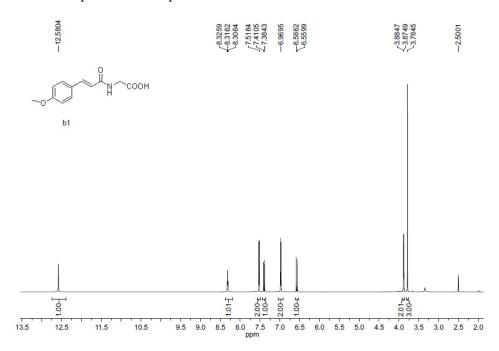


<sup>1</sup>H NMR spectra of compound a12

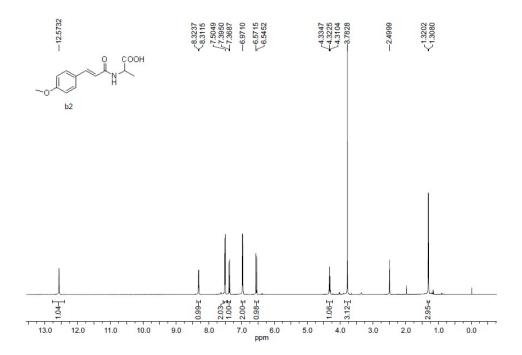


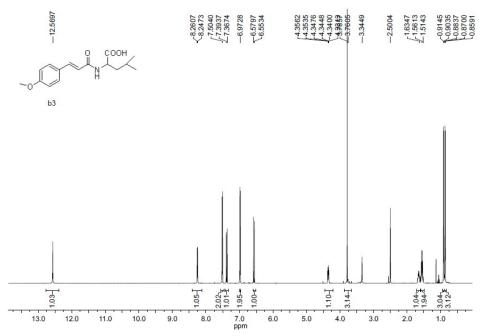




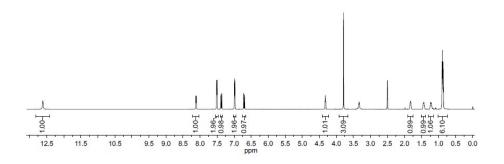


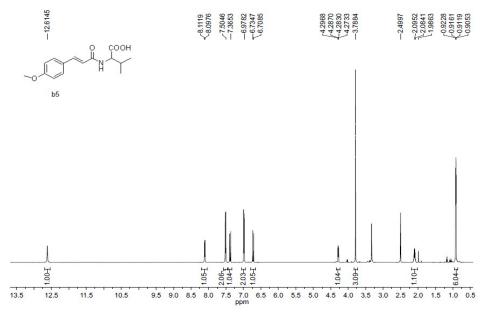
### $^{1}H$ NMR spectra of compound $\mathbf{b2}$



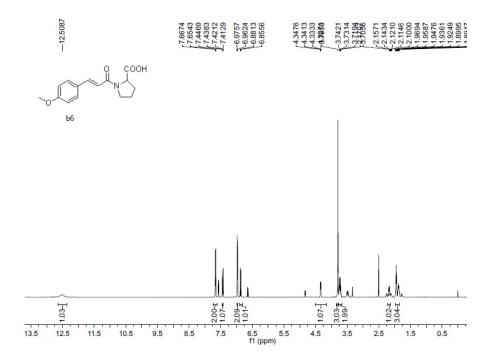




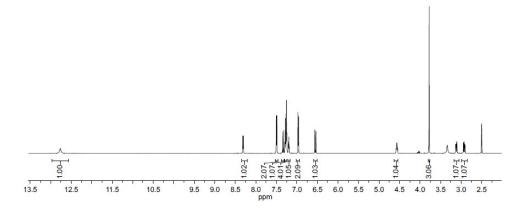


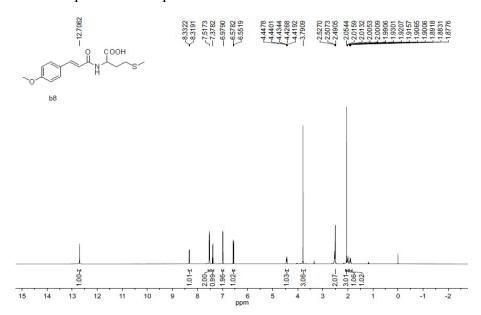


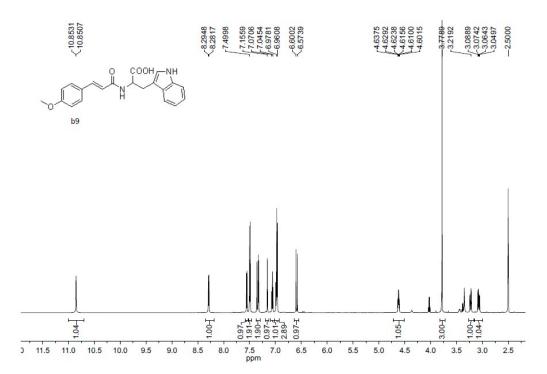
<sup>1</sup>H NMR spectra of compound **b6** 

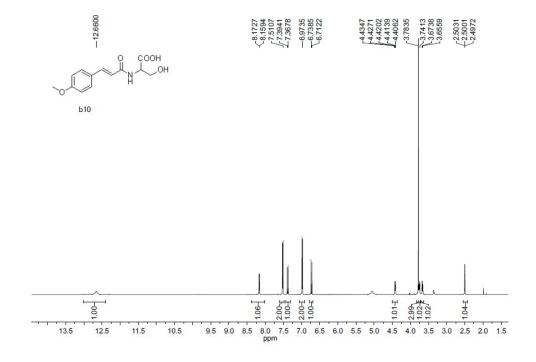


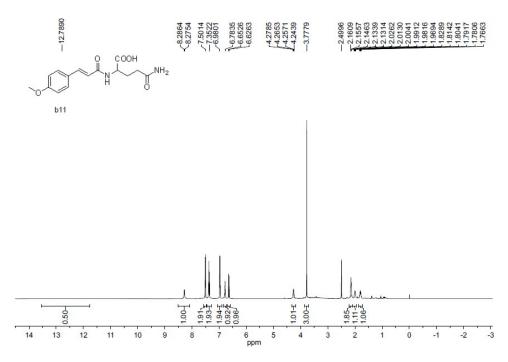


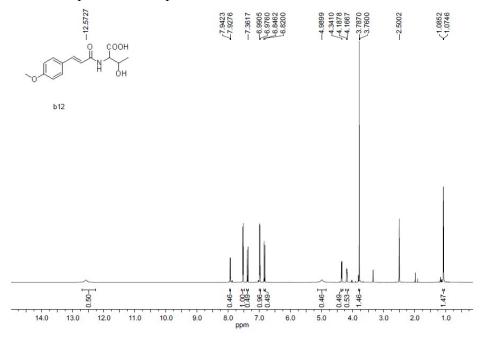


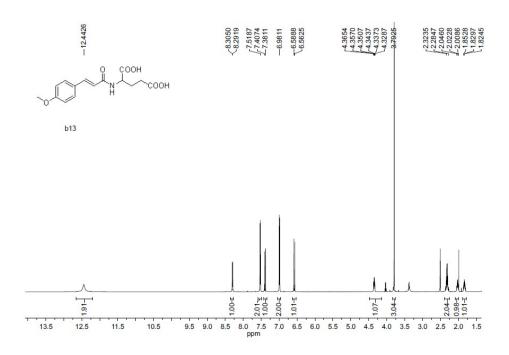


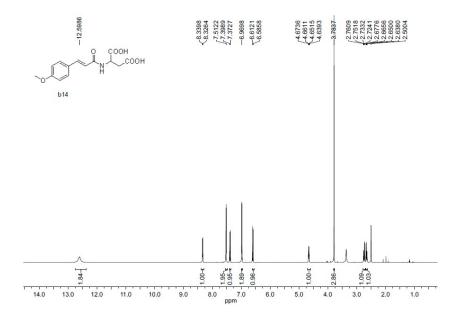




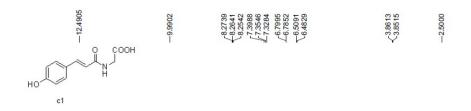


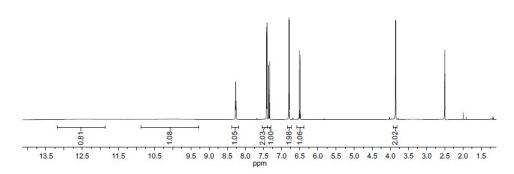






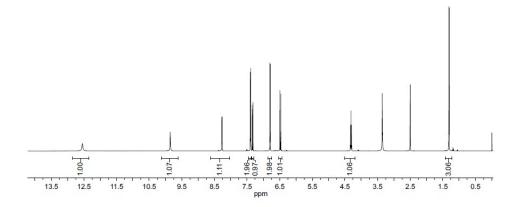
#### $^{1}H$ NMR spectra of compound c1



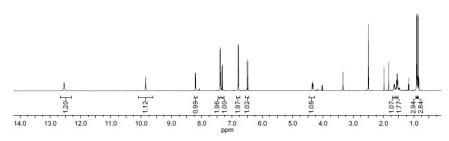


<sup>1</sup>H NMR spectra of compound **c2** 

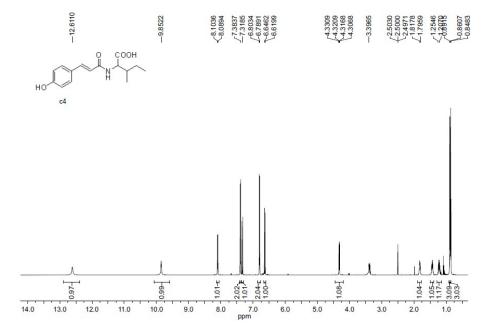


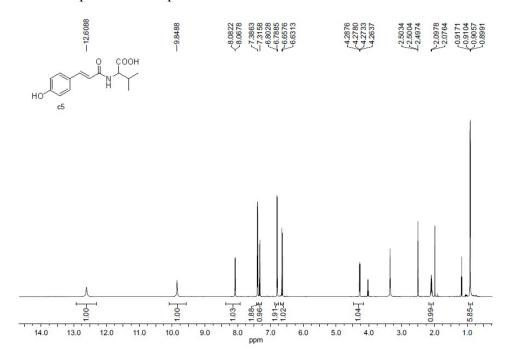






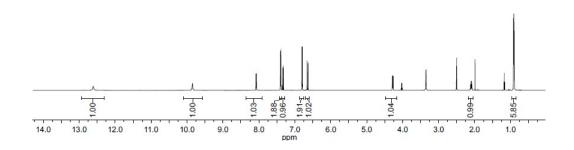
<sup>1</sup>H NMR spectra of compound **c4** 

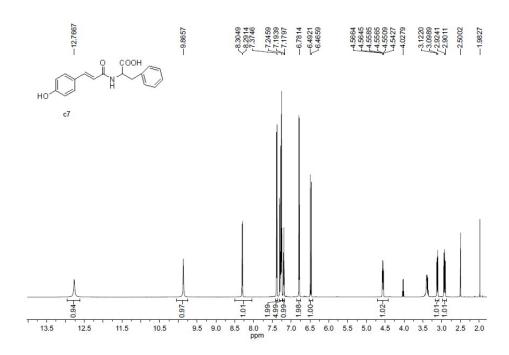


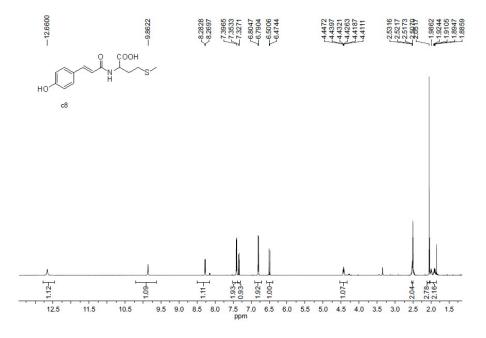


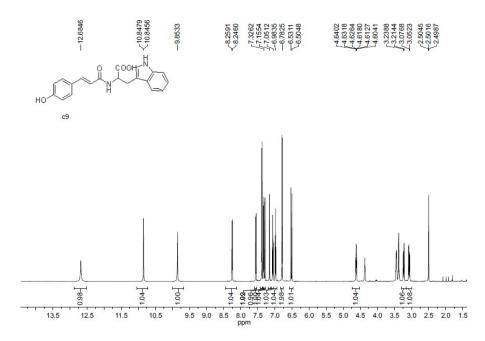
#### $^{1}\text{H}$ NMR spectra of compound $\mathbf{c6}$





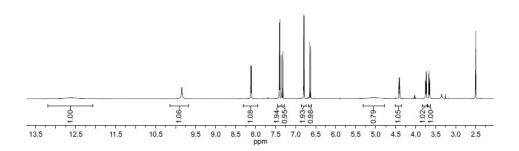


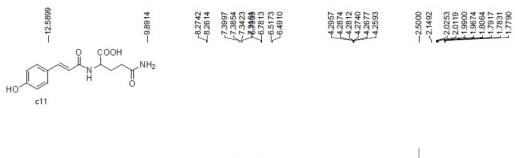


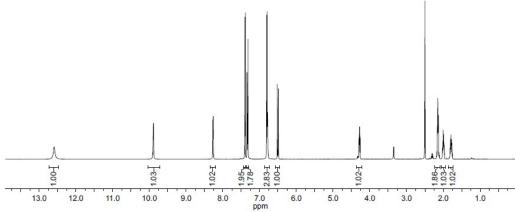


 $^{1}\text{H}$  NMR spectra of compound  $\mathbf{c10}$ 

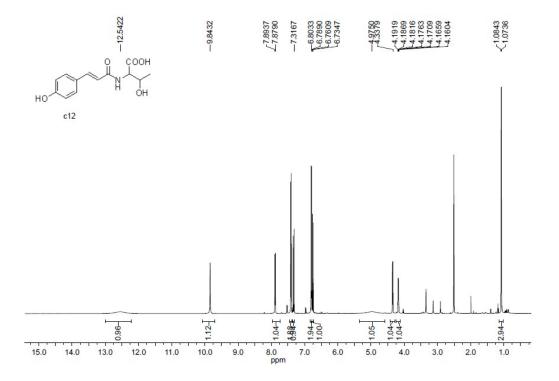




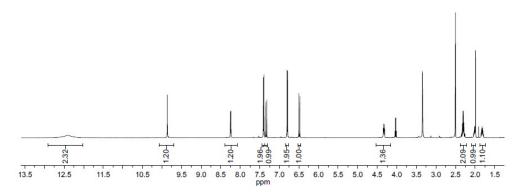




<sup>1</sup>H NMR spectra of compound **c12** 







<sup>1</sup>H NMR spectra of compound **c14** 

