

Supporting information for

**Enantioselective synthesis of substituted  $\alpha$ -aminophosphonates catalysed  
by D-glucose-based crown ethers: Pursuit of the origin of the stereoselectivity**

Truong Son Pham,<sup>a</sup> Zsolt Rapi,<sup>a</sup> Péter Bakó,<sup>a</sup> Imre Petneházy,<sup>a</sup>

András Stirling<sup>b</sup> and Zsuzsa Jászay<sup>a</sup>

<sup>a</sup>*Department of Organic Chemistry and Technology, Budapest University of Technology and Economics,  
PO Box 91, 1521 Budapest, Hungary*

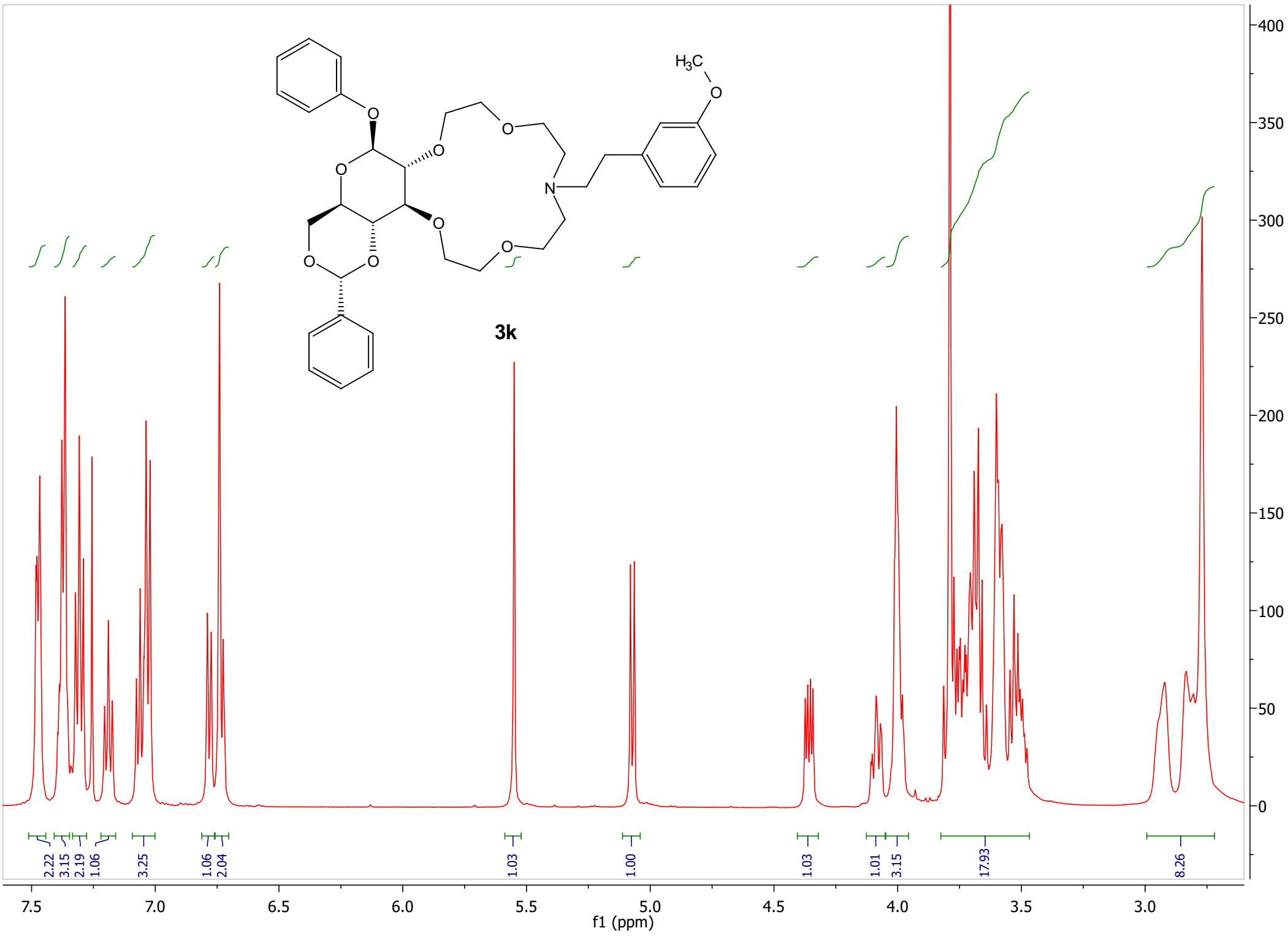
<sup>b</sup>*Institute of Organic Chemistry, Research Centre for Natural Sciences, Hungarian Academy of Sciences,  
Budapest, Hungary*

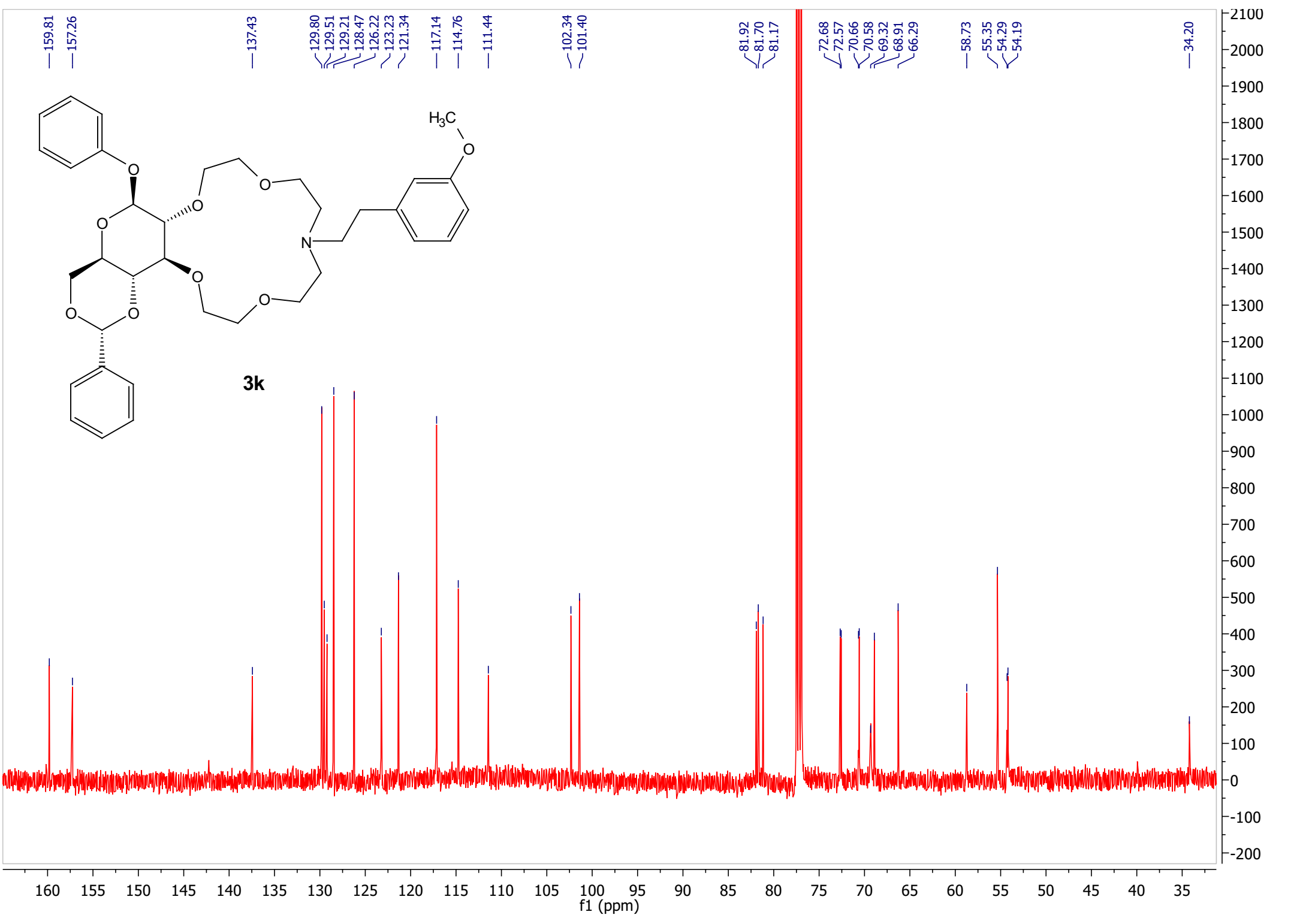
Content

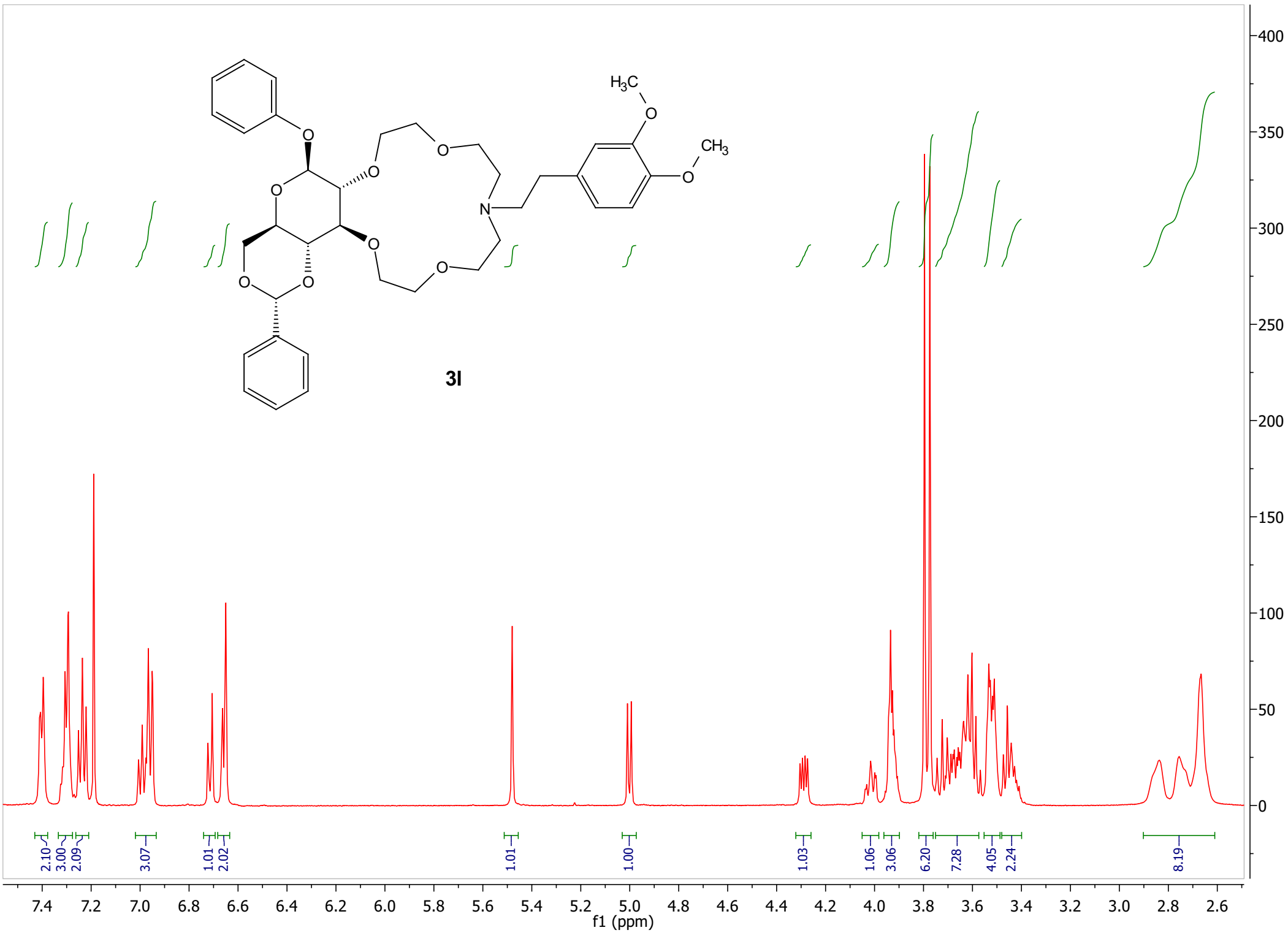
<sup>1</sup>H and <sup>13</sup>C NMR spectra of crown ether **3k**

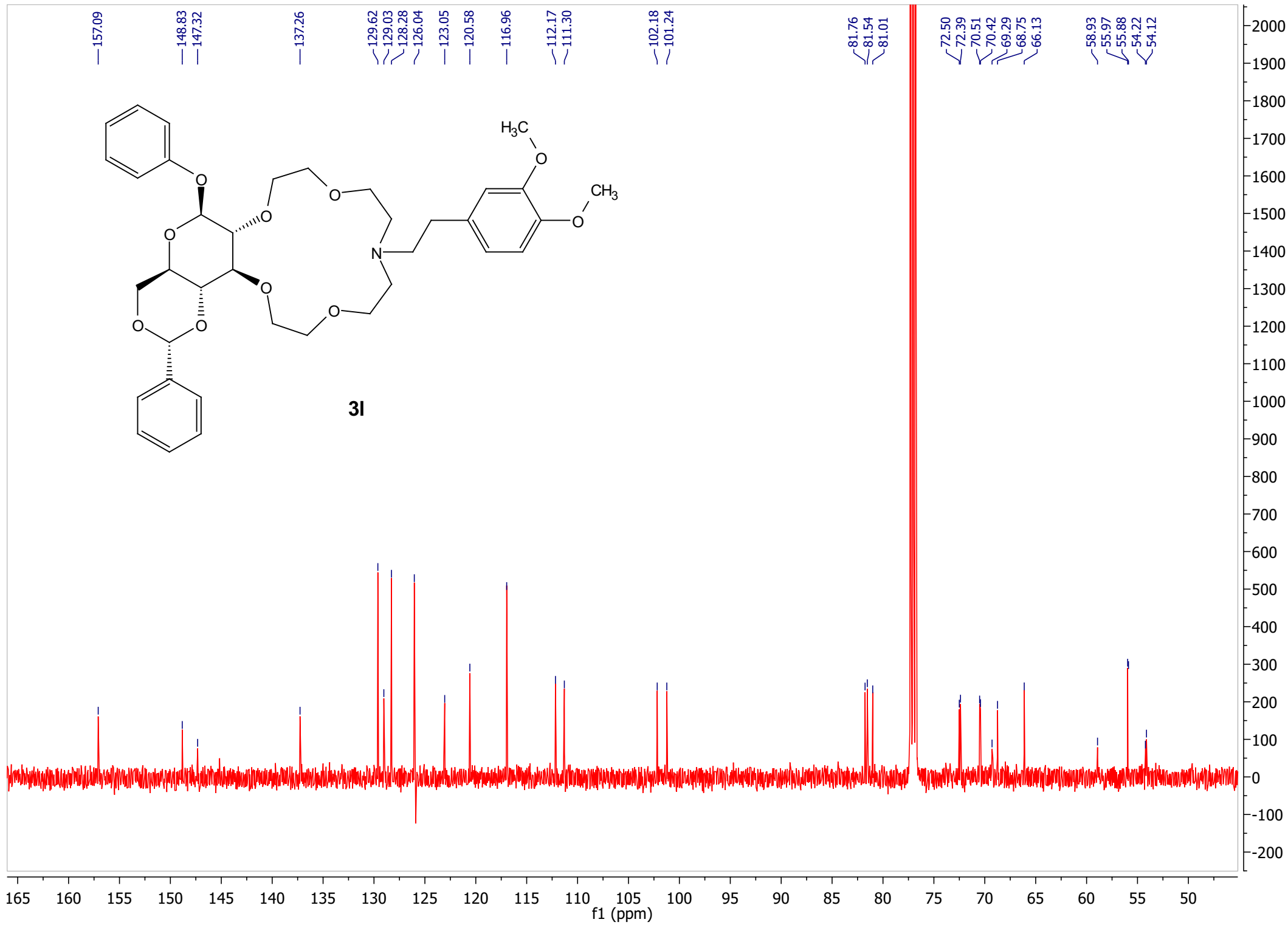
<sup>1</sup>H and <sup>13</sup>C NMR spectra of crown ether **3l**

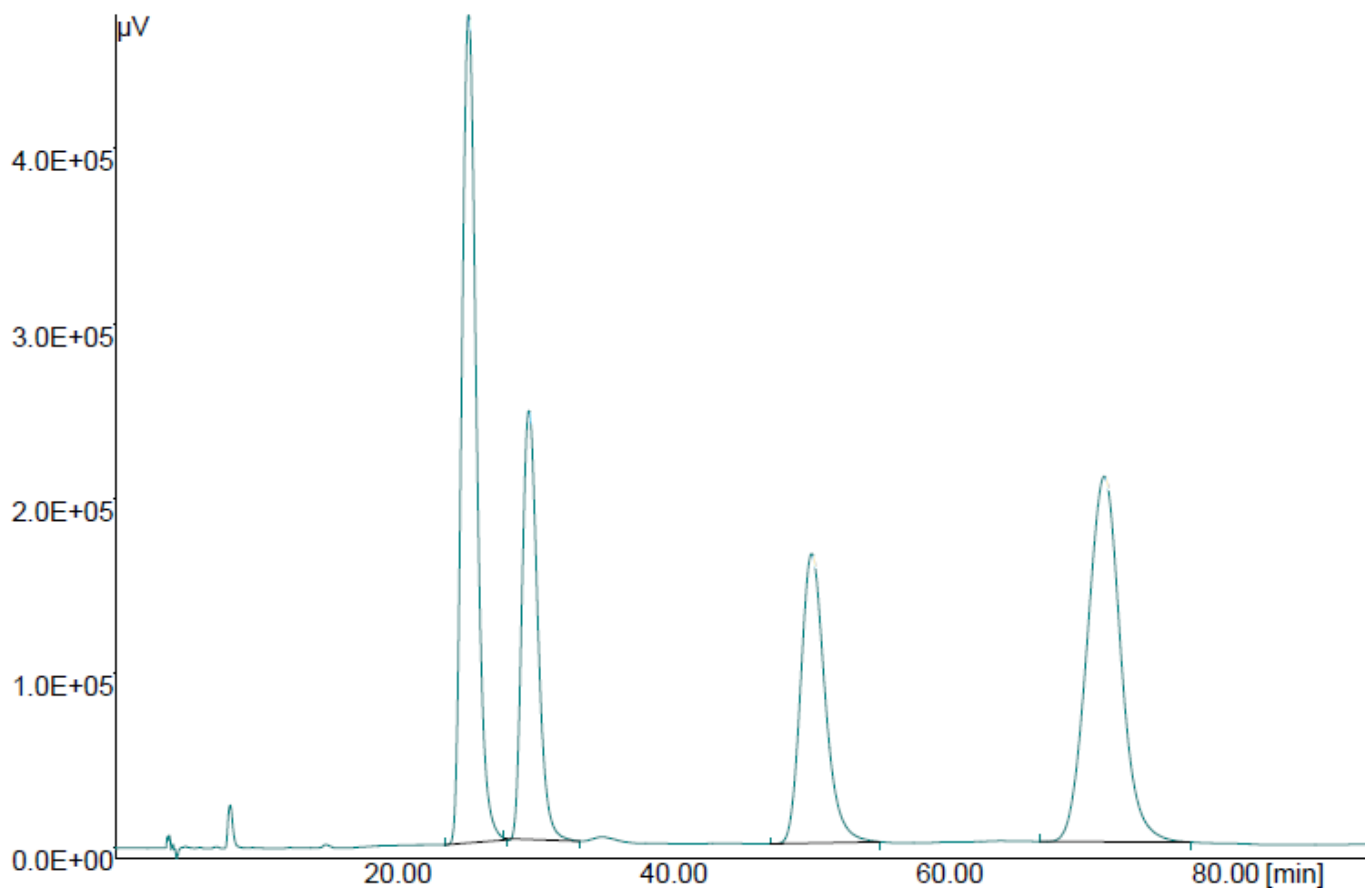
Selected HPLC spectra of compound **4g**









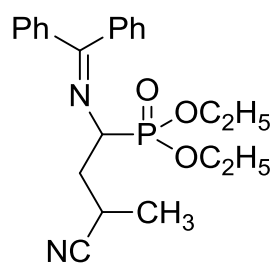


File name: SON-33-1-8-11003.CH1

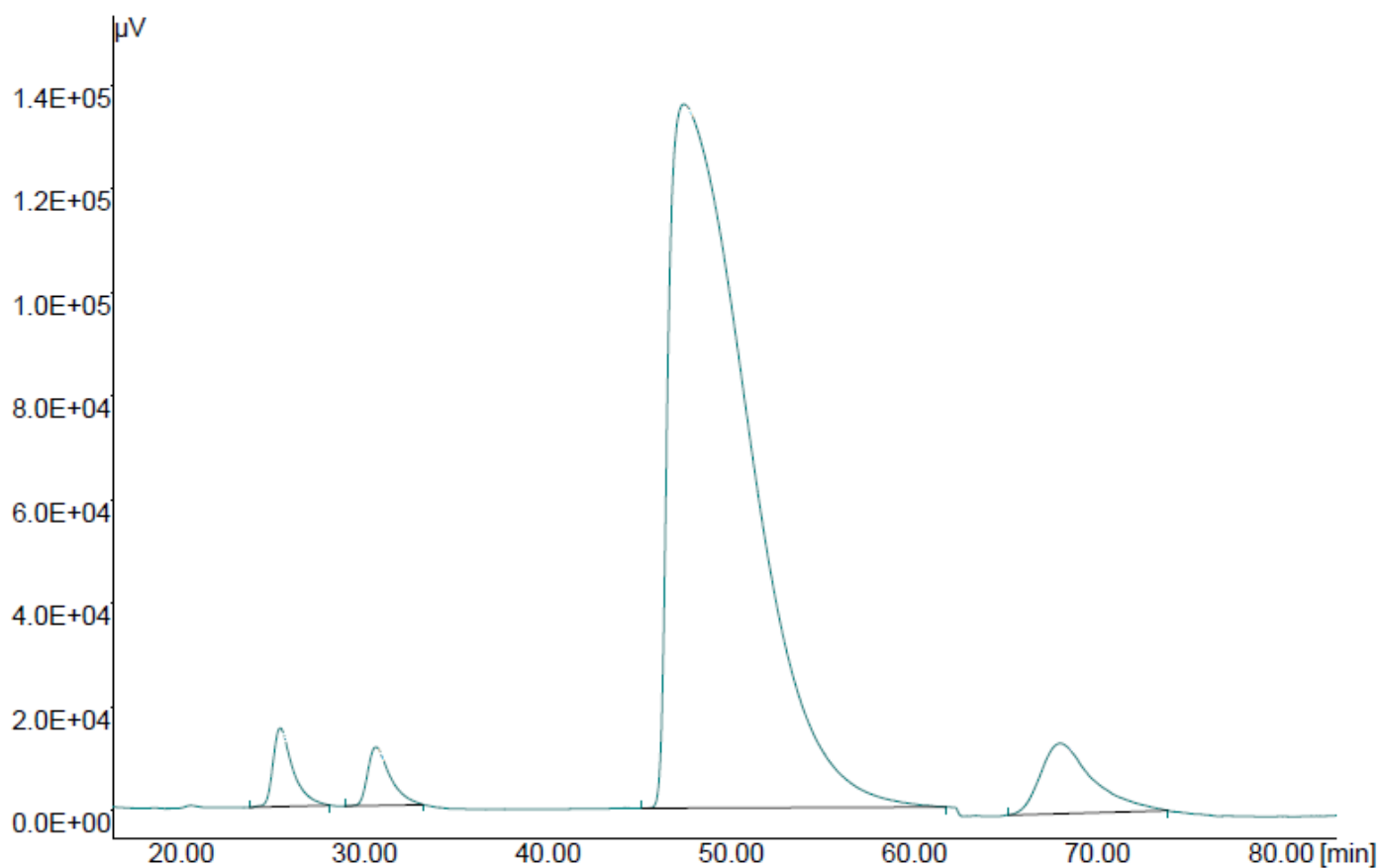
Info AD-H hexane:2-propanol 95:5, 0.8 ml/min, 256 nm, 5 °C

Peak	RT	Area [μV.Sec]	Quantity
#1	25.608	34074746.863	0.000
#2	29.983	18886855.204	0.000
#3	50.483	20043098.045	0.000
#4	71.692	34984089.834	0.000

Total Area of Peak = 107988789.950 [μV.Sec]



racemic **4g**

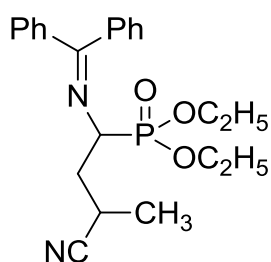


File name: SON-524006.CH1

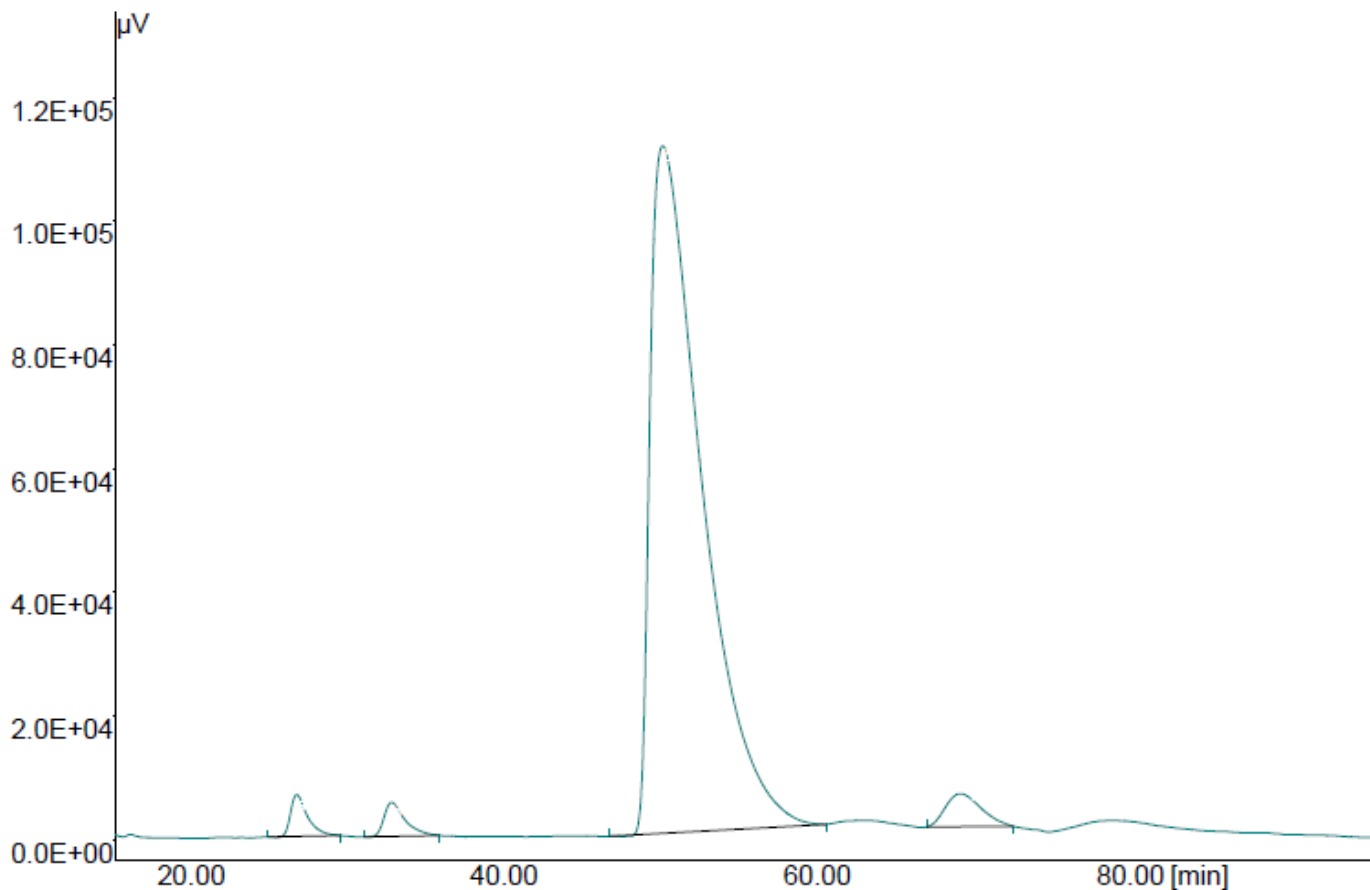
Info AD-H hexane:2-propanol 95:5, 0.8 ml/min 256 nm, 5 °C

Peak	RT	Area [ $\mu\text{V}\cdot\text{Sec}$ ]	Quantity
#1	25.750	1128392.750	0.000
#2	30.975	945450.500	0.000
#3	47.775	40702611.909	0.000
#4	68.342	2671928.250	0.000

Total Area of Peak = 45448383.409 [ $\mu\text{V}\cdot\text{Sec}$ ]



**4g** with crown ether **3k** (60 min)

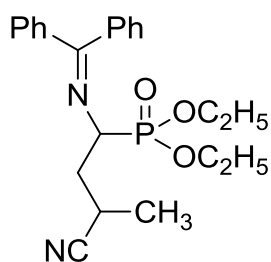


File name: SON-524008.CH1

Info AD-H hexane:2-propanol 95:5, 0.8 ml/min 256 nm, 5 °C

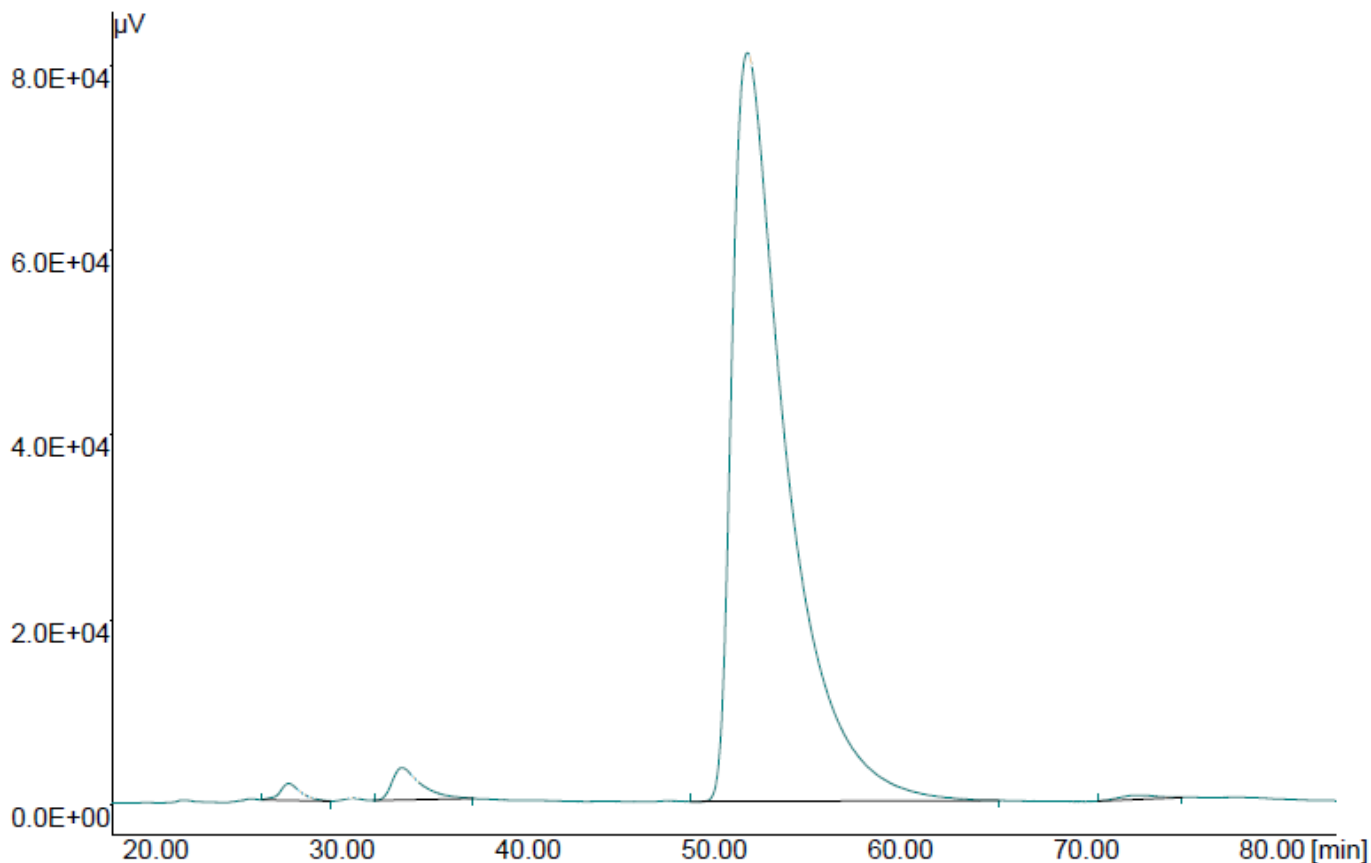
Peak	RT	Area [ $\mu\text{V}\cdot\text{Sec}$ ]	Quantity
#1	27.192	495352.250	0.000
#2	33.250	503523.948	0.000
#3	50.575	25484911.306	0.000
#4	69.592	837930.500	0.000

Total Area of Peak = 27321718.004 [ $\mu\text{V}\cdot\text{Sec}$ ]



**4g** with crown ether **3k** (240 min)



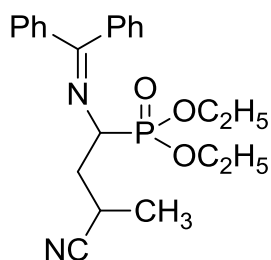


File name: SON-526001.CH1

Info AD-H hexane:2-propanol 95:5, 0.8 ml/min 256 nm, 5 °C

Peak	RT	Area [ $\mu\text{V}\cdot\text{Sec}$ ]	Quantity
#1	27.508	138509.000	0.000
#2	33.608	373788.250	0.000
#3	52.150	16359514.543	0.000
#4	73.258	59359.598	0.000

Total Area of Peak = 27321718.004 [ $\mu\text{V}\cdot\text{Sec}$ ]



**4g** with crown ether **31**