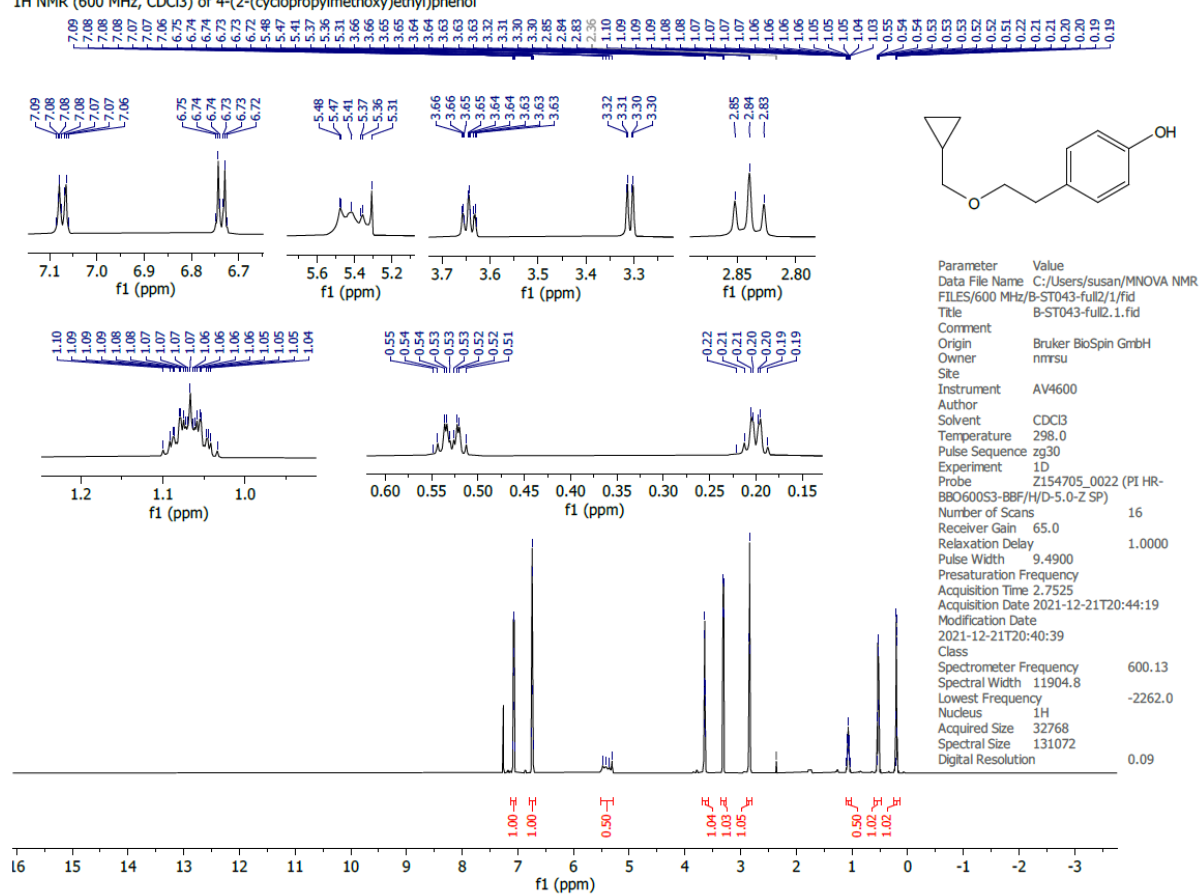


## SUPPLEMENTARY MATERIALS

### SPECTROSCOPIC DATA

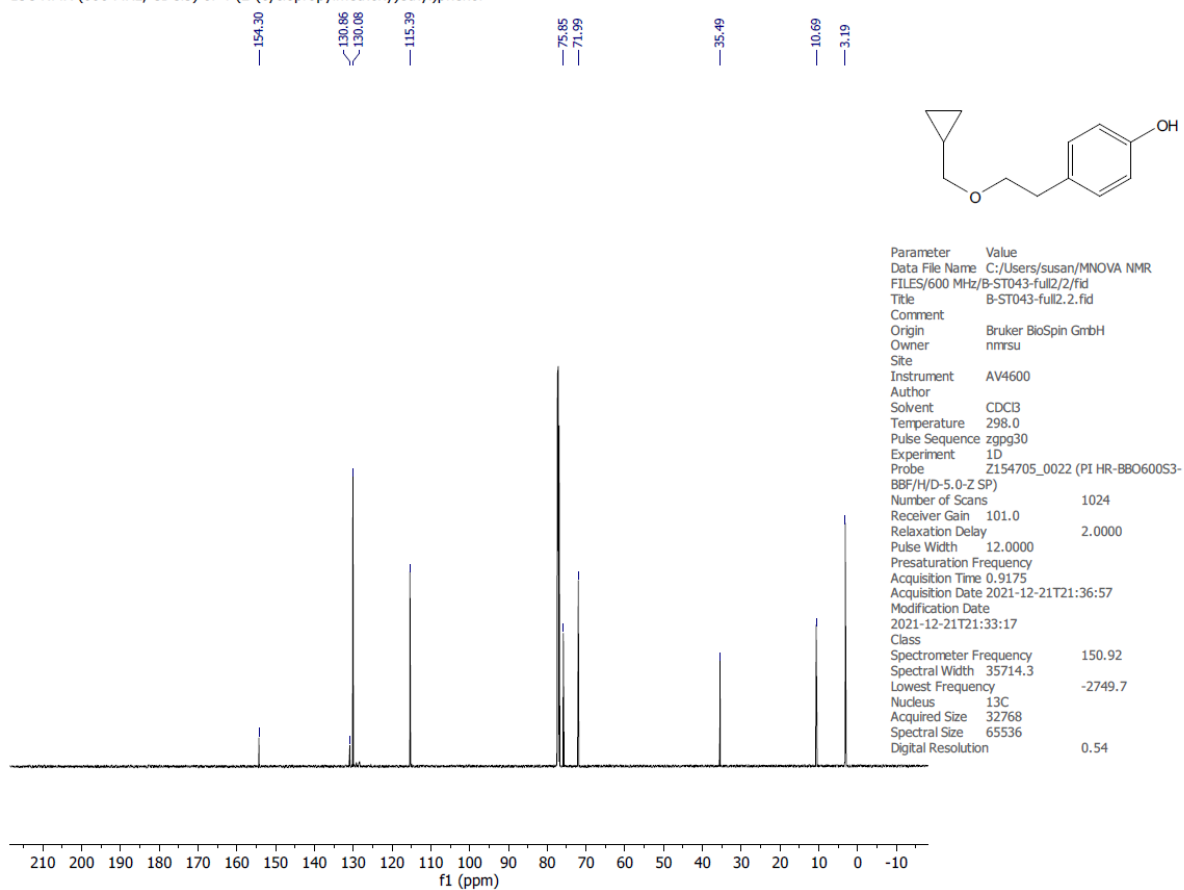
#### 4-(2-(Cyclopropylmethoxy)ethyl)phenol (**2**)

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol



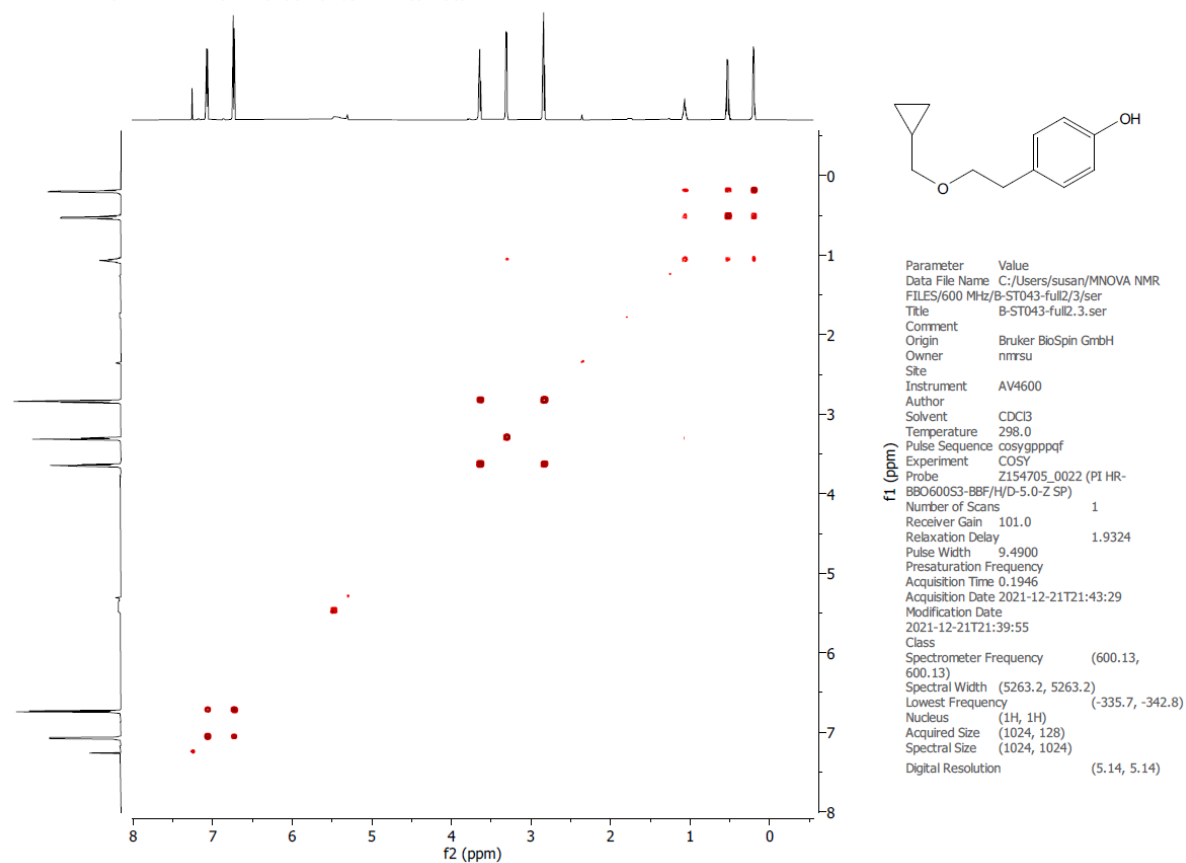
**Figure S1.** <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol (**2**).

<sup>13</sup>C NMR (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol



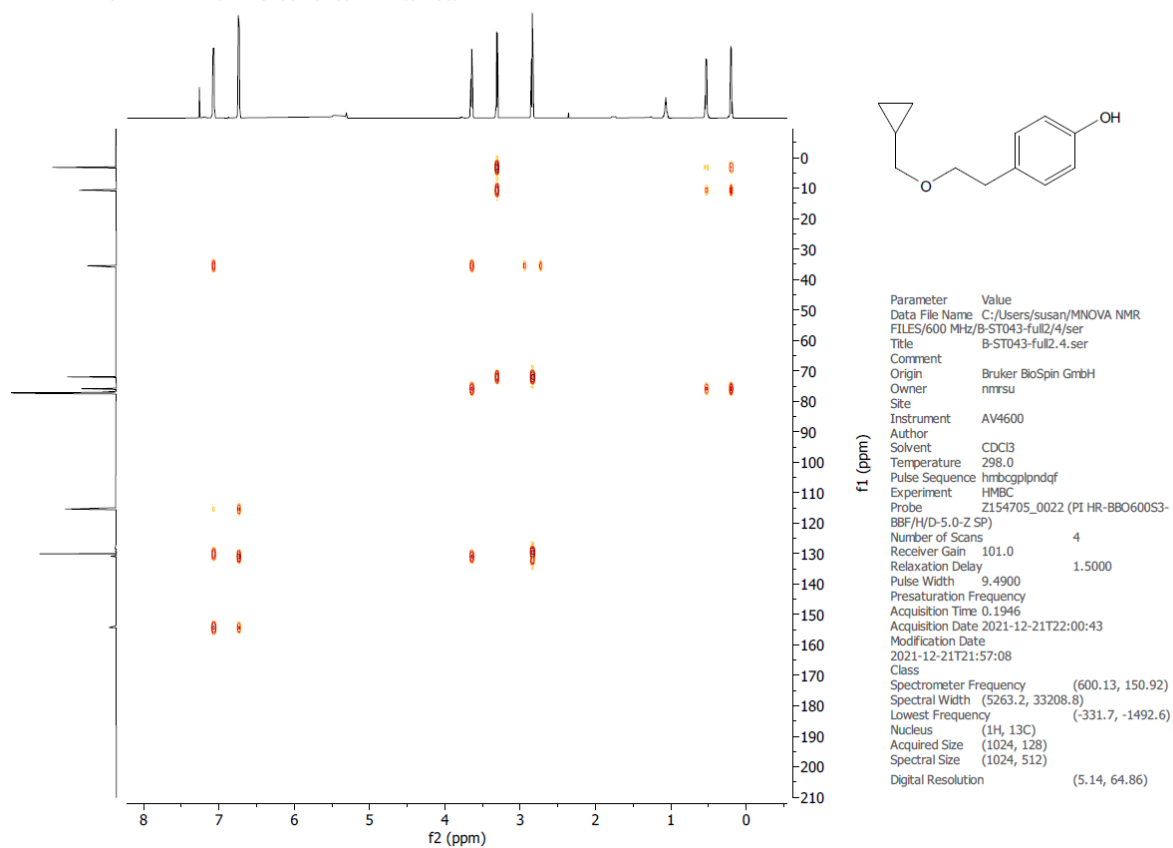
**Figure S2.** <sup>13</sup>C NMR spectrum (150 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol (2).

H-H COSY NMR (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol



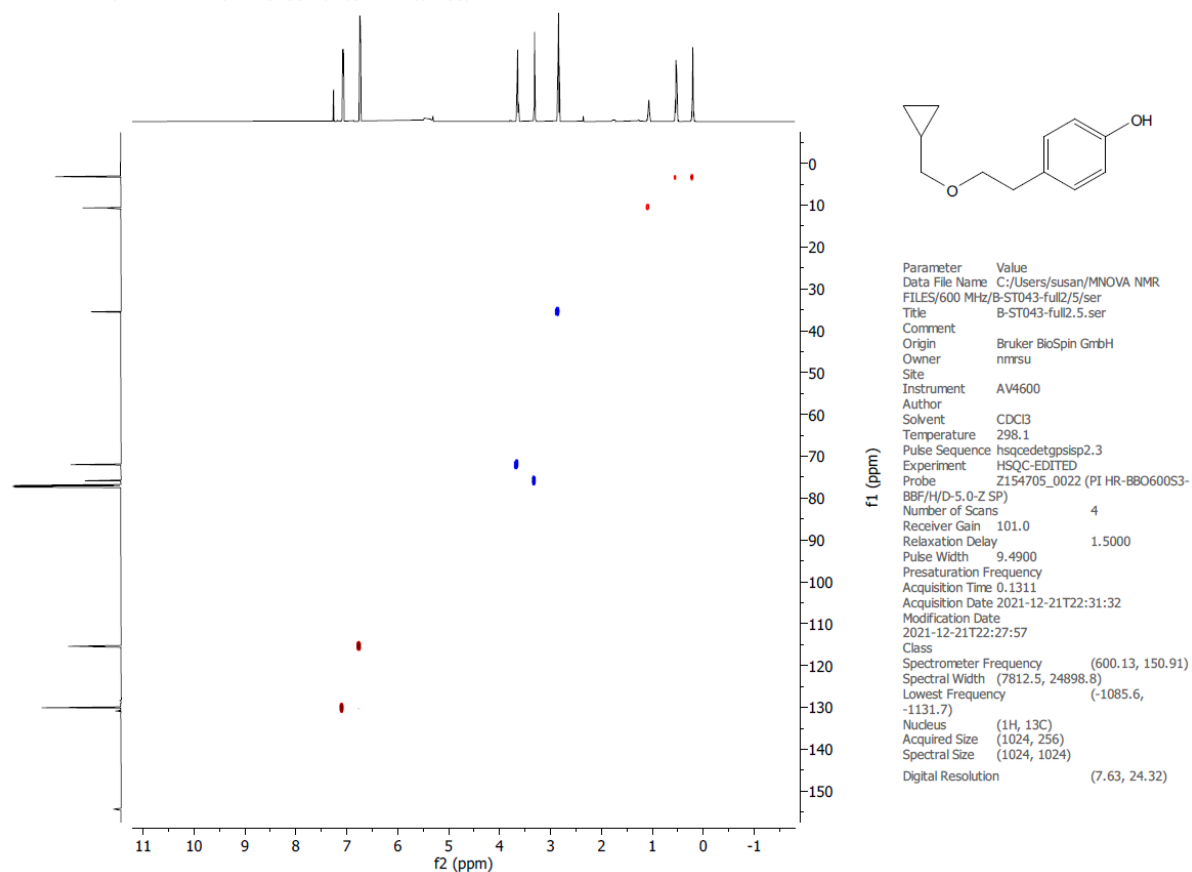
**Figure S3.** COSYNMR spectrum (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol (2).

C-H HMBC NMR (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol



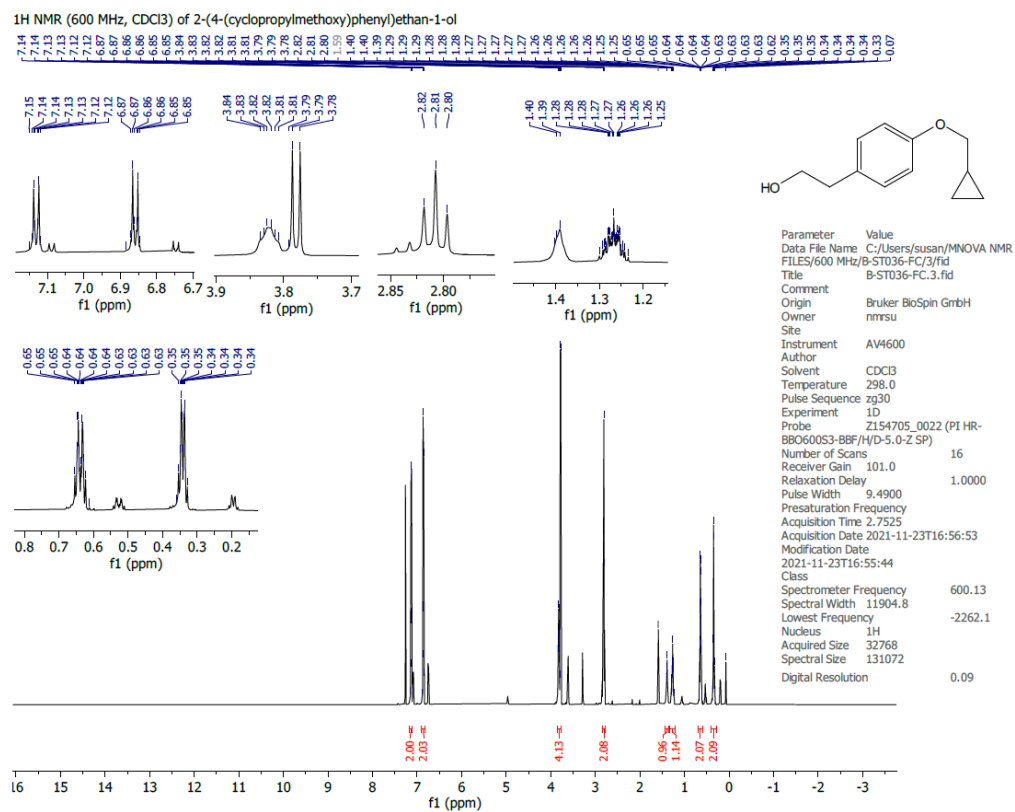
**Figure S4.** HMBC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol (**2**).

C-H HSQC NMR (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol



**Figure S5.** HSQC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 4-(2-(cyclopropylmethoxy)ethyl)phenol (**2**).

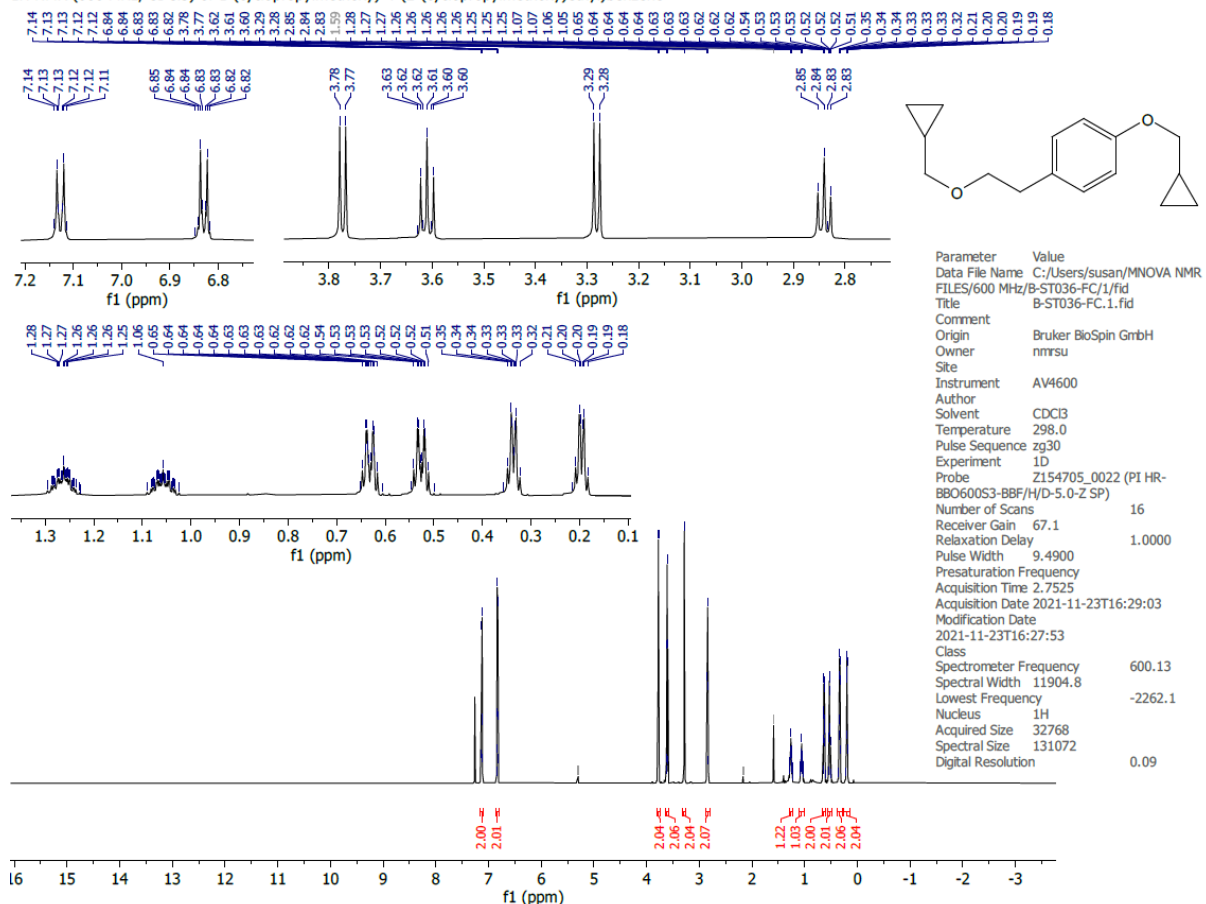
2-(4-(Cyclopropylmethoxy)phenyl)ethan-1-ol (**2b**)



**Figure S6.** <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2-(4-(cyclopropylmethoxy)phenyl)ethan-1-ol (**2b**).

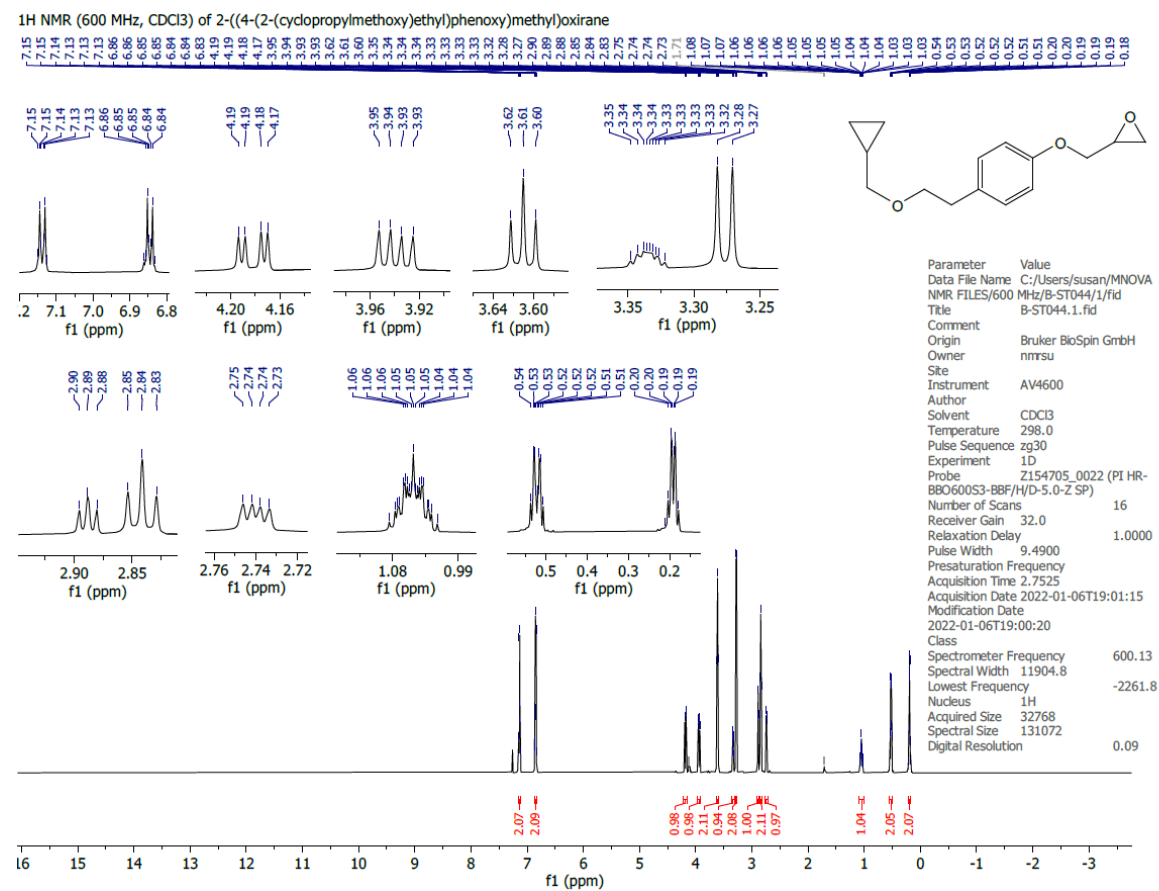
*1-(Cyclopropylmethoxy)- 4-(2-(cyclopropylmethoxy)ethyl)benzene (2c)*

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 1-(cyclopropylmethoxy)-4-(2-(cyclopropylmethoxy)ethyl)benzene



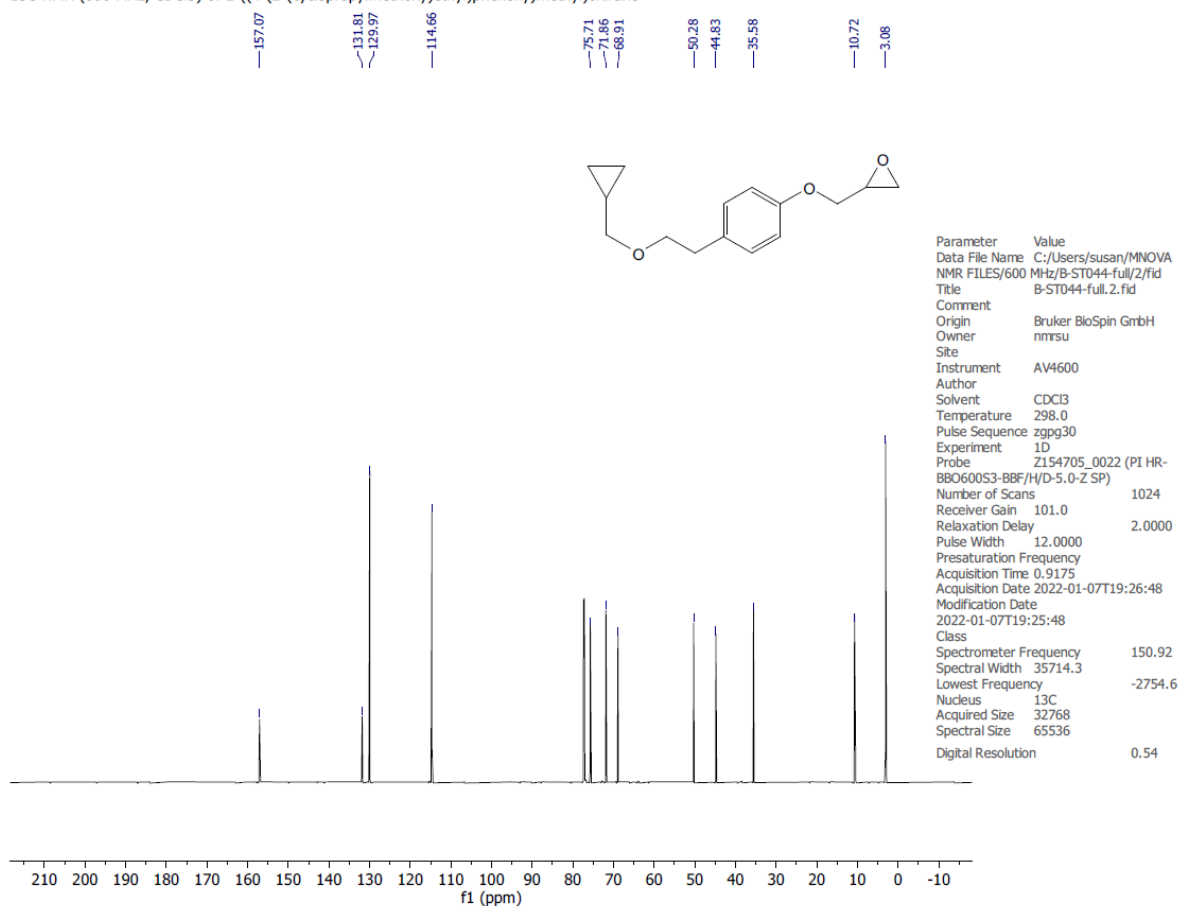
**Figure S7.** <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-(cyclopropylmethoxy)- 4-(2-(cyclopropylmethoxy)ethyl)benzene (2c).

2-((4-(2-(Cyclopropylmethoxy)ethyl)phenoxy)-methyl)oxirane (**3**)



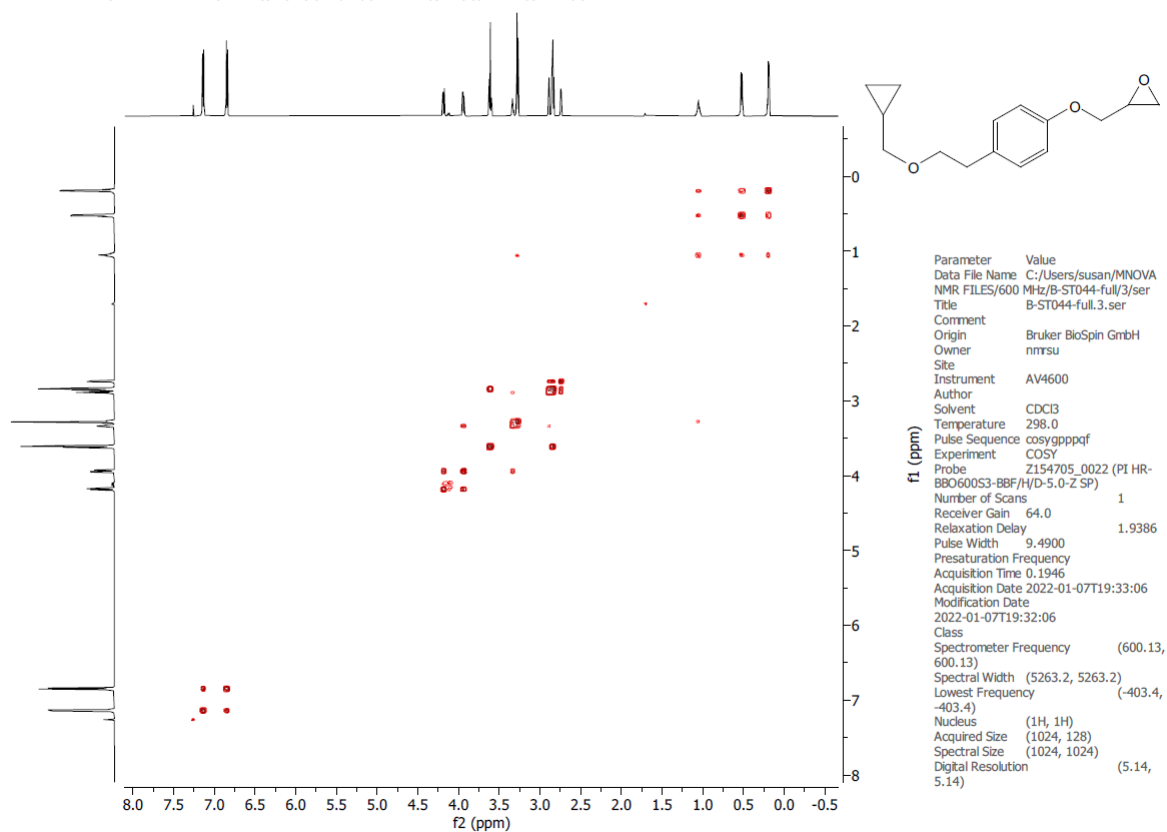
**Figure S8.** <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)-methyl)oxirane (**3**).

<sup>13</sup>C NMR (600 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)methyl)oxirane



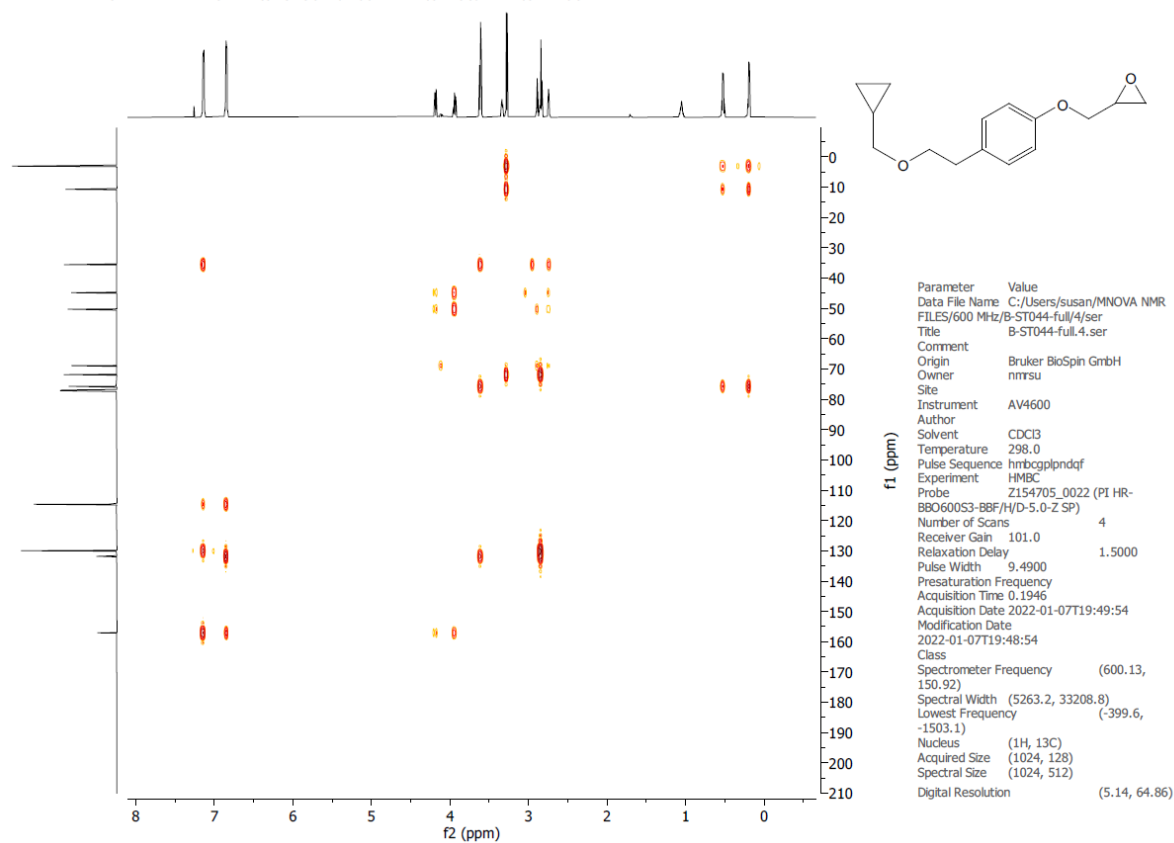
**Figure S9.** <sup>13</sup>C NMR spectrum (150 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)-methyl)oxirane (**3**).

H-H COSY NMR (600 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)methyl)oxirane



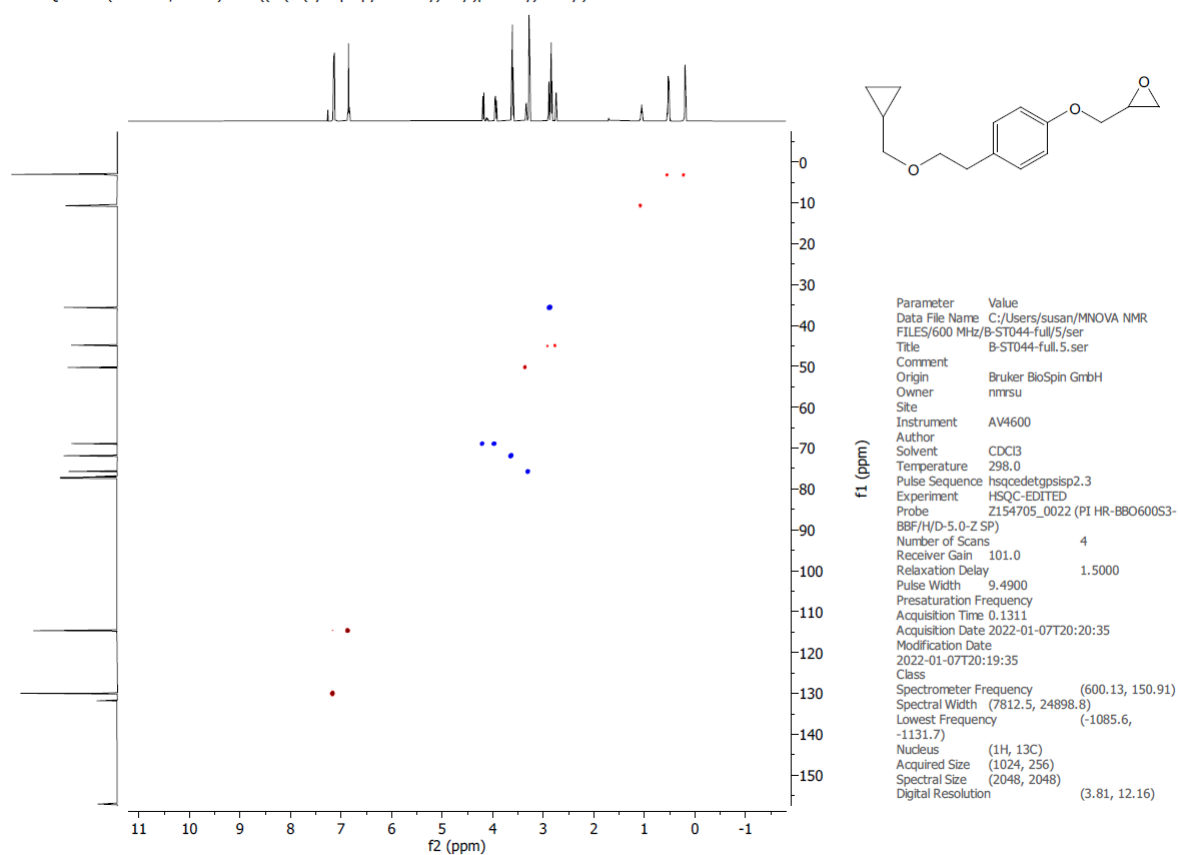
**Figure S10.** COSY NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)-methyl)oxirane (**3**).

C-H HMBC NMR (600 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)methyl)oxirane



**Figure S11.** HMBC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)-methyl)oxirane (**3**).

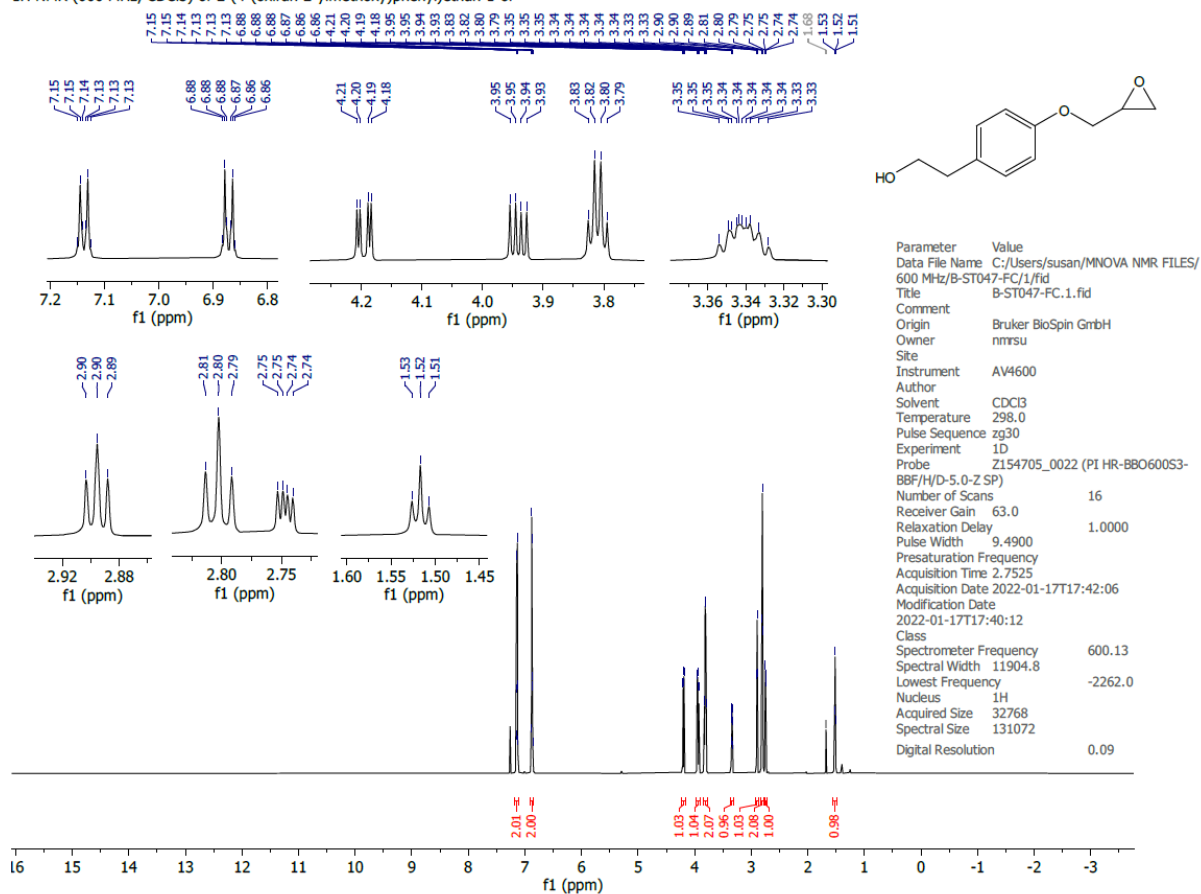
C-H HSQC NMR (600 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)methyl)oxirane



**Figure S12.** HSQC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2-((4-(2-(cyclopropylmethoxy)ethyl)phenoxy)-methyl)oxirane (**3**).

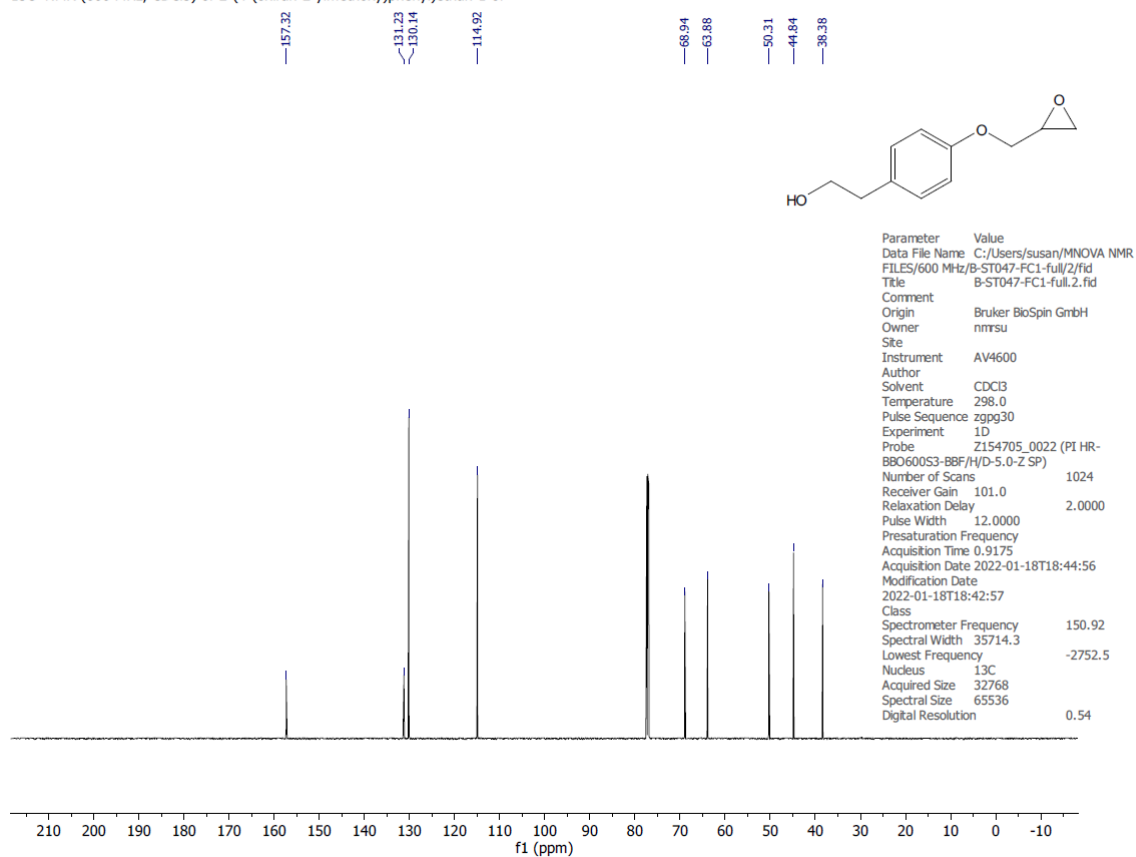
2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol (**4**)

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol



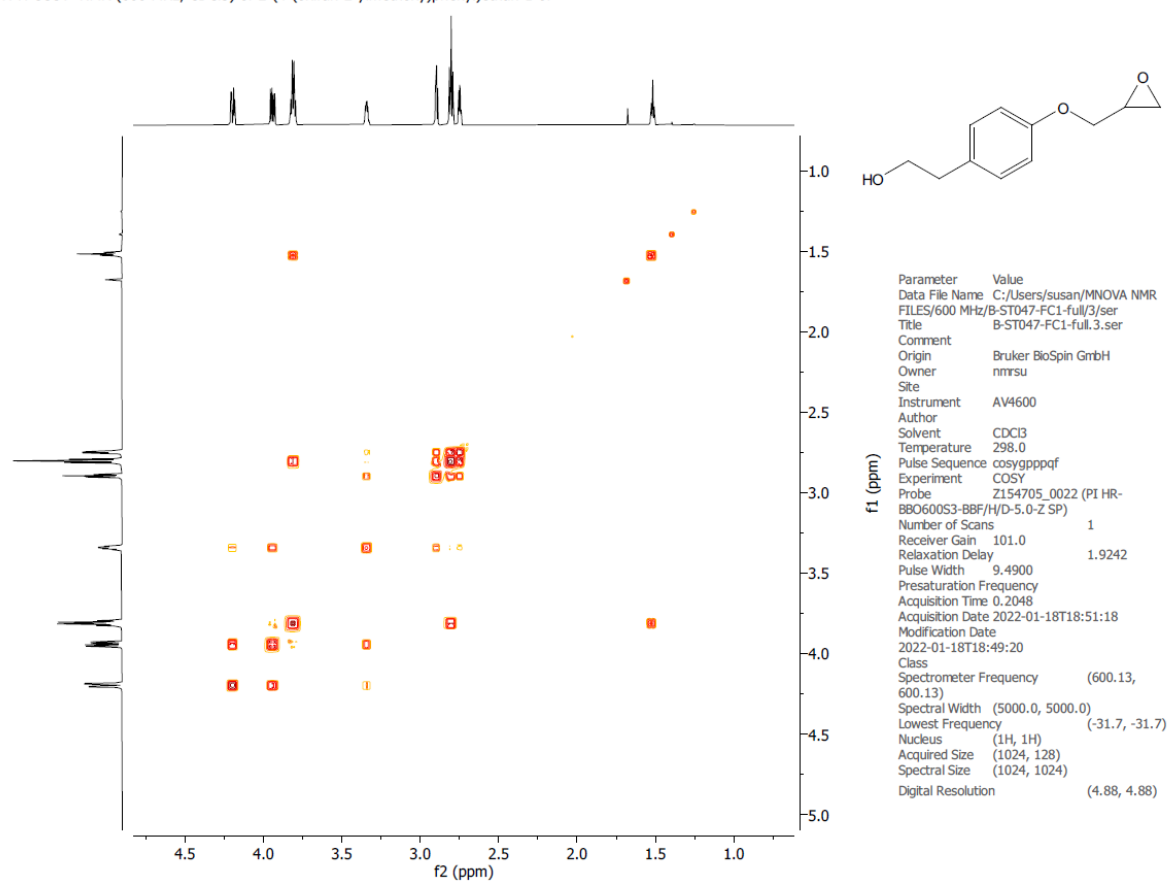
**Figure S13.** <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol (**4**).

<sup>13</sup>C NMR (600 MHz, CDCl<sub>3</sub>) of 2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol



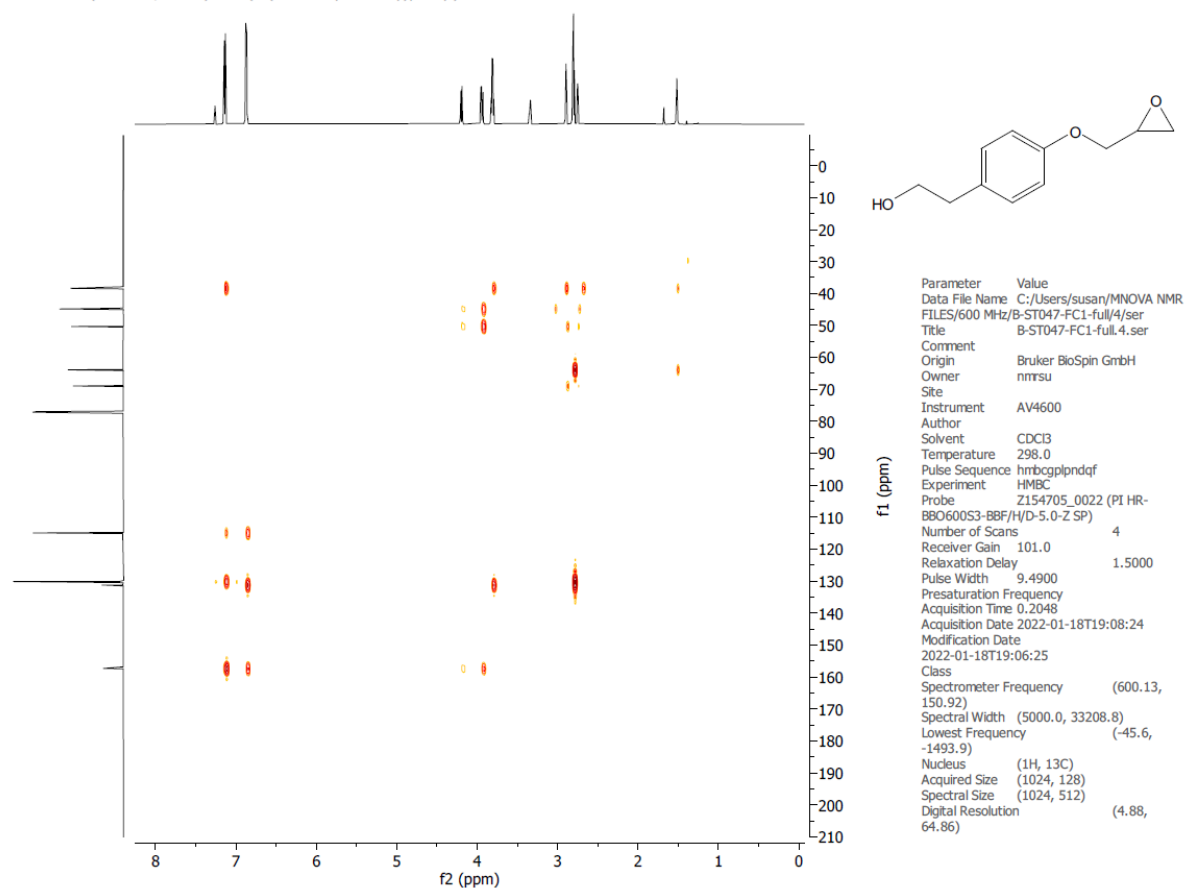
**Figure S14.** <sup>13</sup>C NMR spectrum (150 MHz, CDCl<sub>3</sub>) of 2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol (**4**).

H-H COSY NMR (600 MHz, CDCl<sub>3</sub>) of 2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol



**Figure S15.** COSY NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol (4).

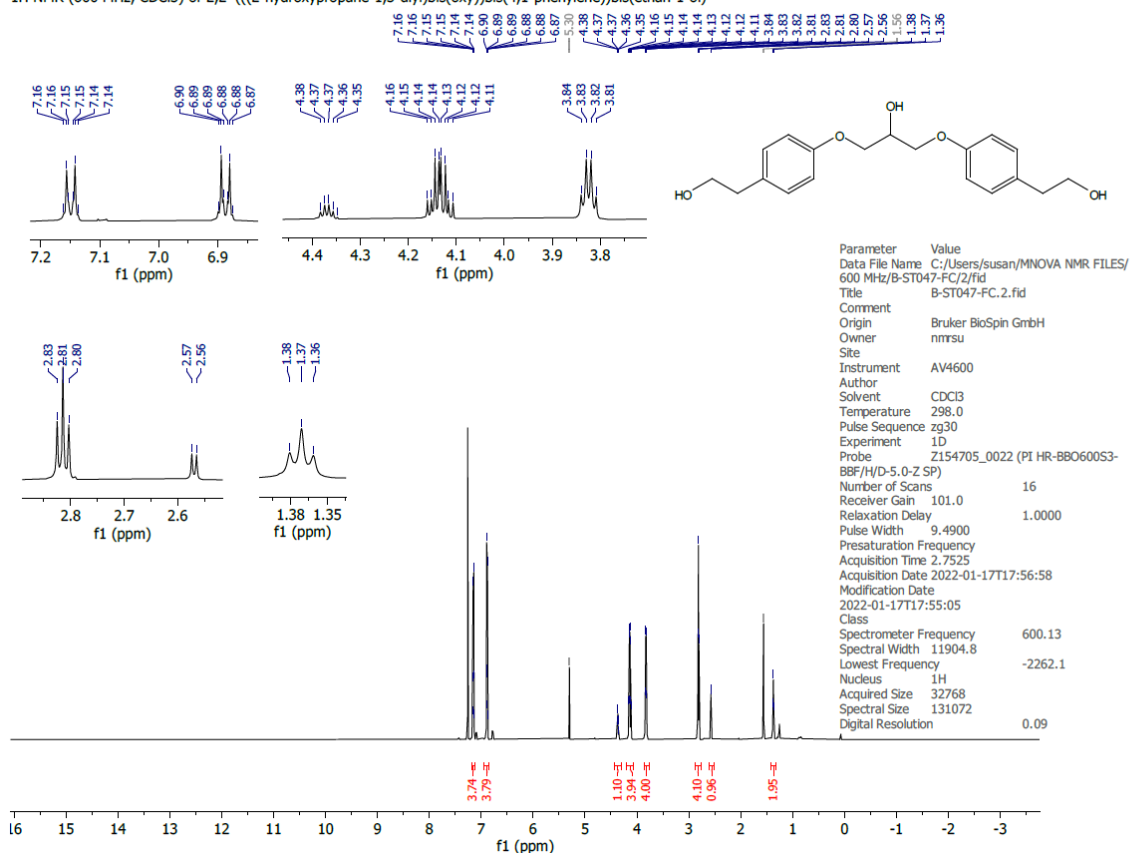
HMBC NMR (600 MHz, CDCl<sub>3</sub>) of 2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol



**Figure S16.** HMBC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2-(4-(oxiran-2-ylmethoxy)phenyl)ethan-1-ol (**4**).

2,2'-(((2-Hydroxypropane-1,3-diyl)bis(oxy)))bis(4,1-phenylene))bis(ethan-1-ol)

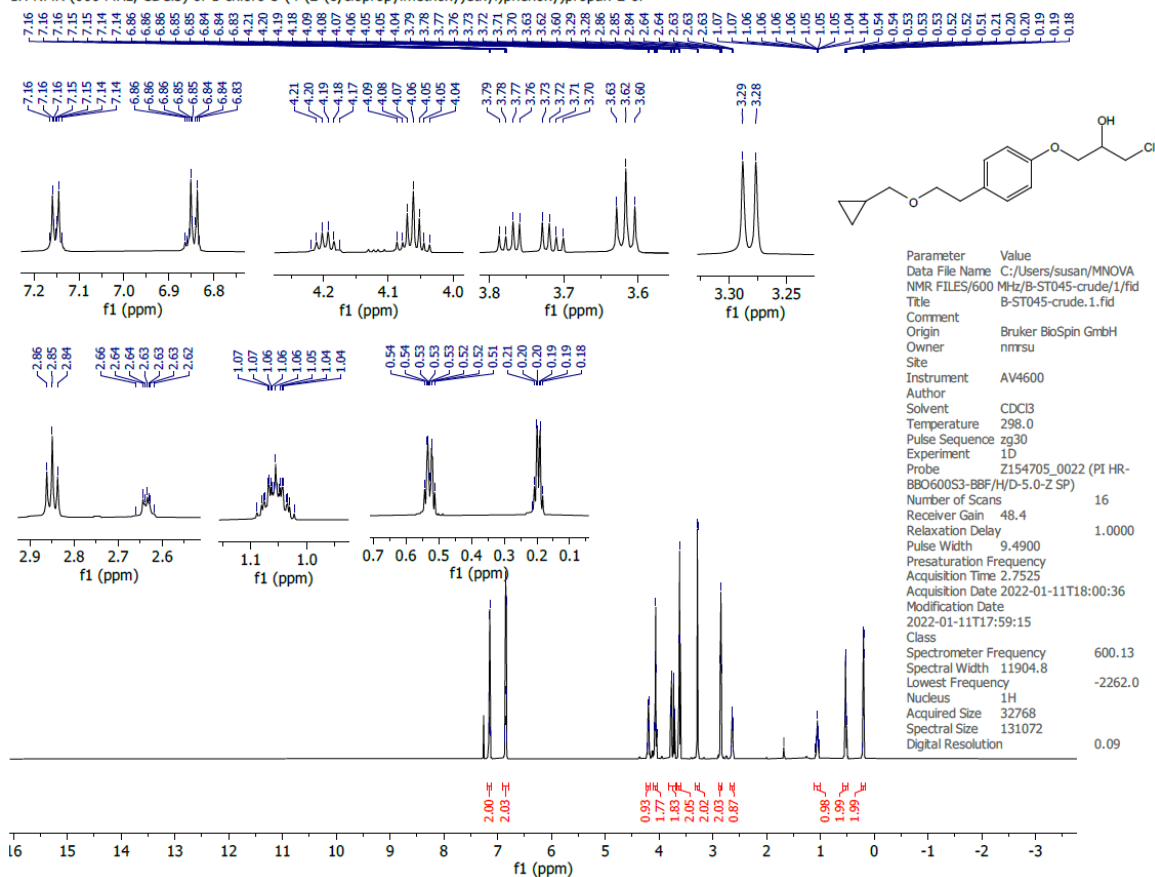
<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 2,2'-(((2-hydroxypropane-1,3-diyl)bis(oxy)))bis(4,1-phenylene))bis(ethan-1-ol)



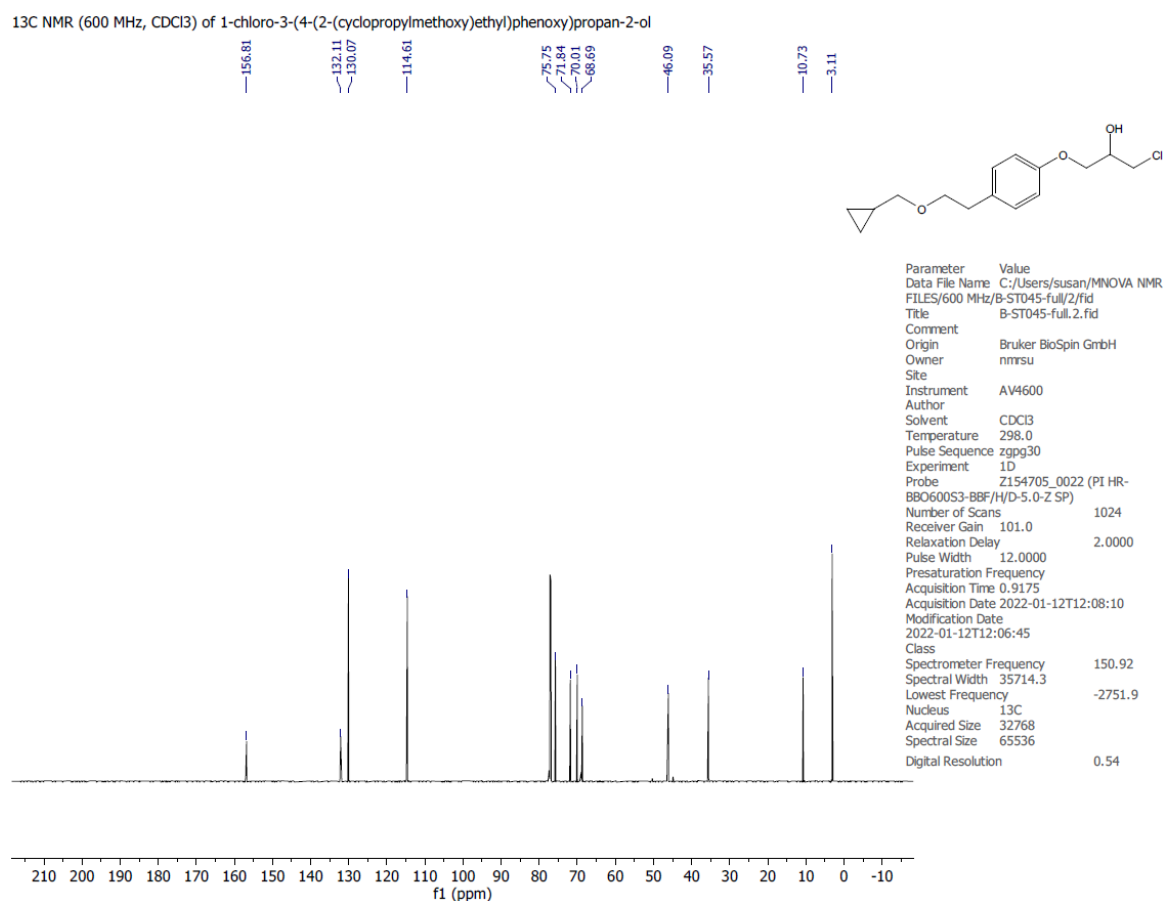
**Figure S17.** <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 2,2'-(((2-hydroxypropane-1,3-diyl)bis(oxy)))bis(4,1-phenylene))bis(ethan-1-ol).

1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5a**)

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol

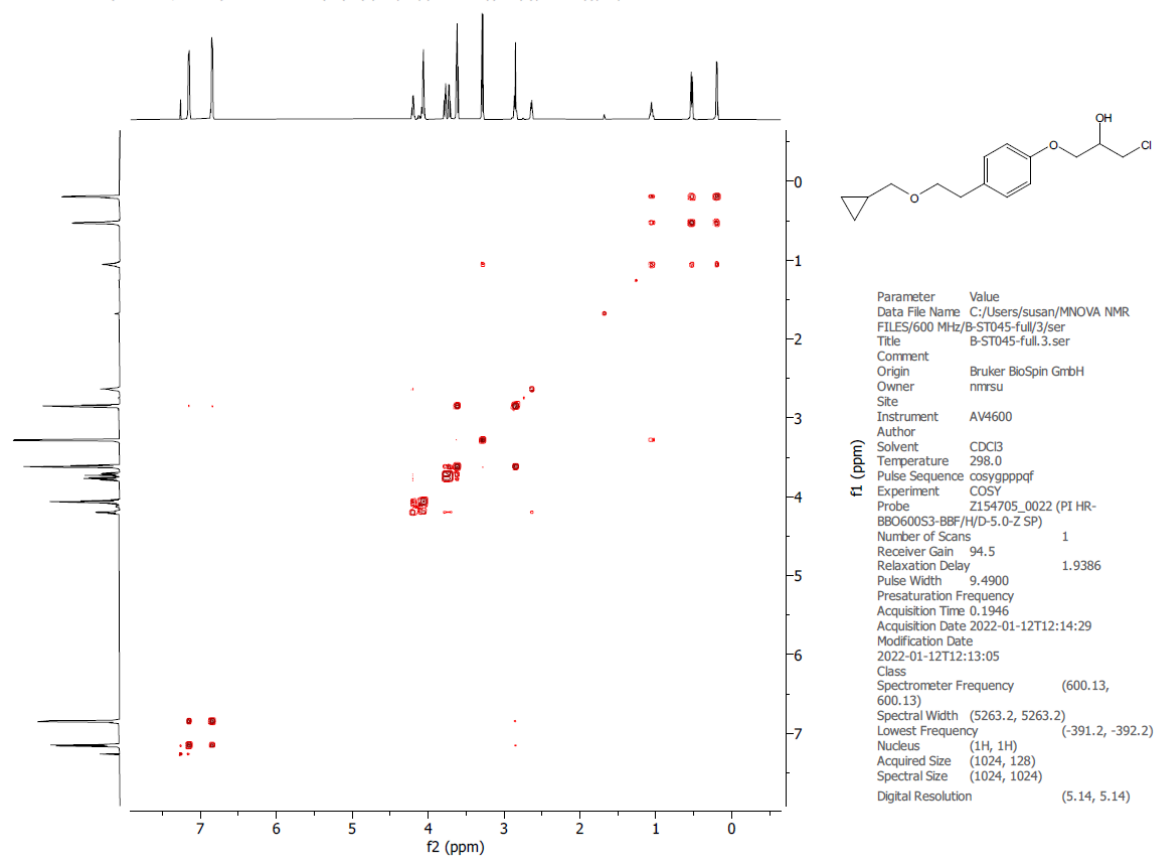


**Figure S18.** <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5a**).



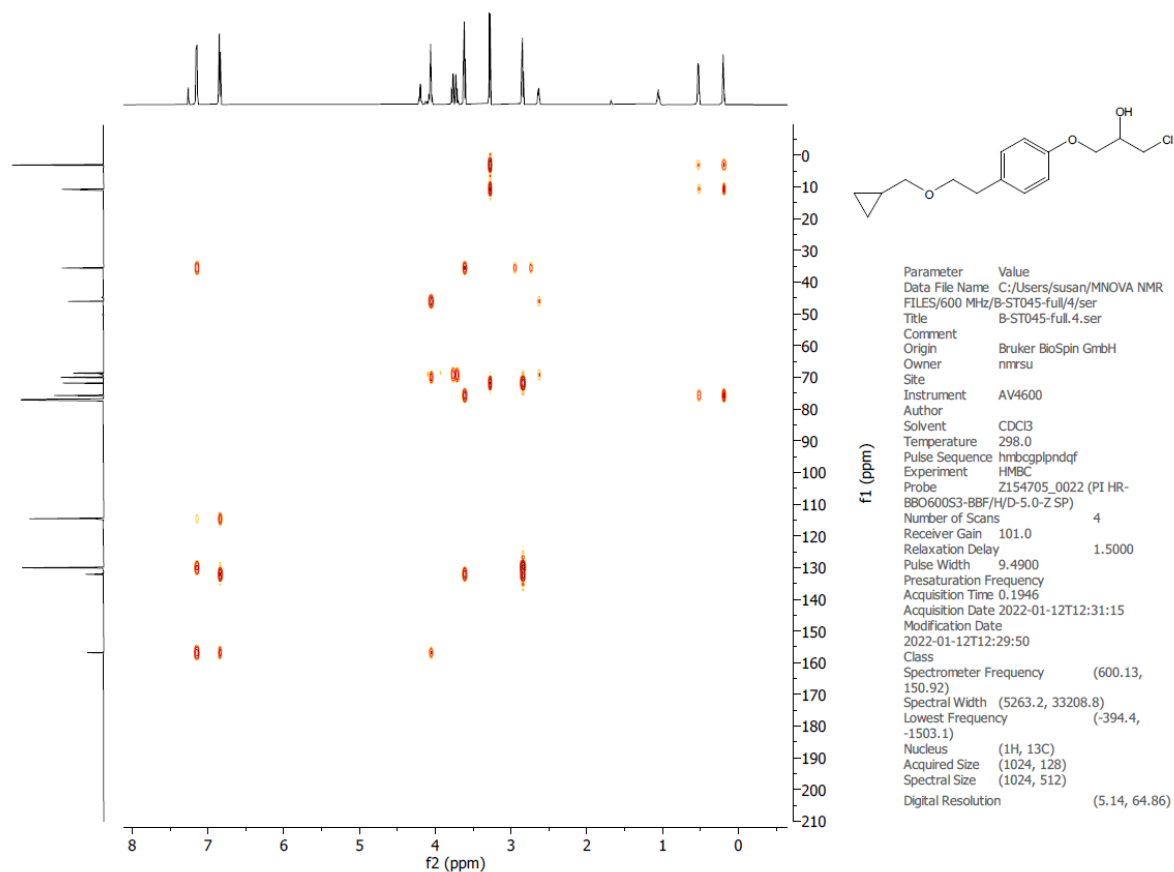
**Figure S19.** <sup>13</sup>C NMR spectrum (150 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5a**).

H-H COSY NMR (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol



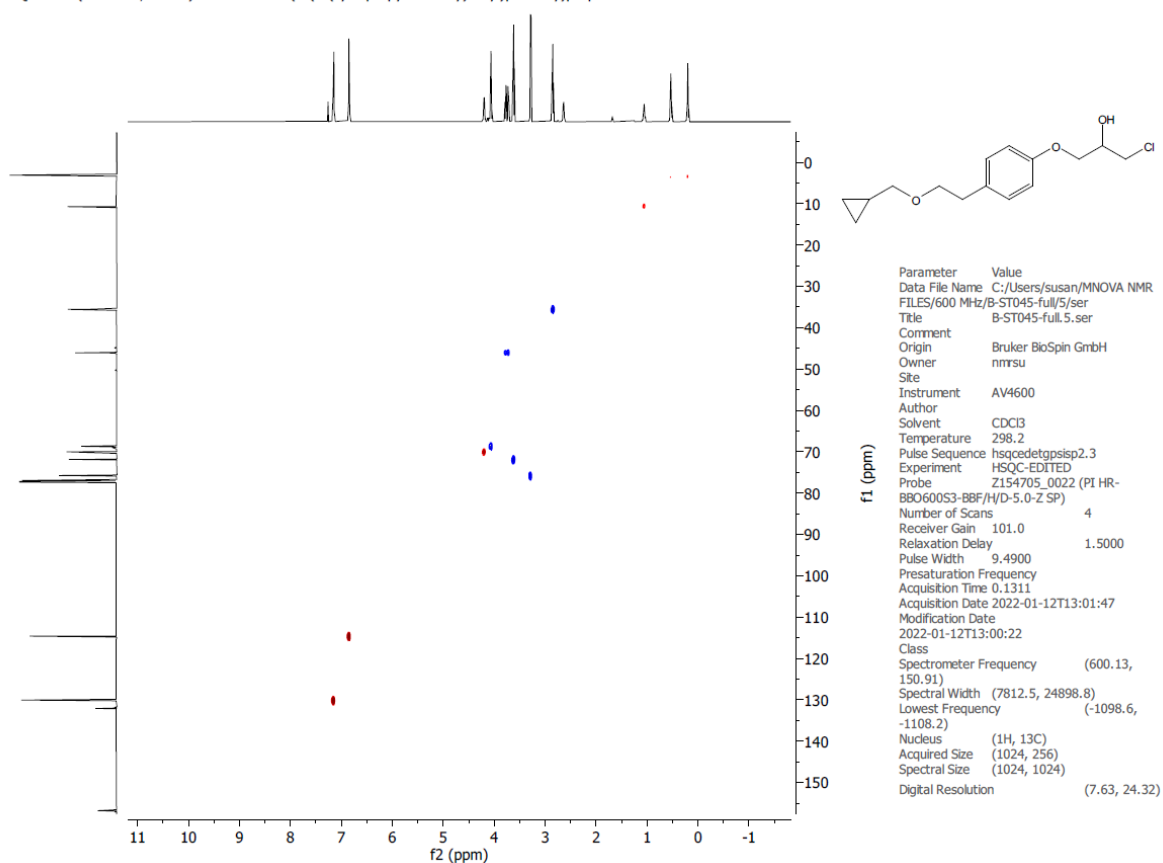
**Figure S20.** COSY NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5a**).

HMBC NMR (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol



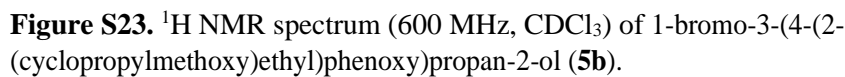
**Figure S21.** HMBC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5a**).

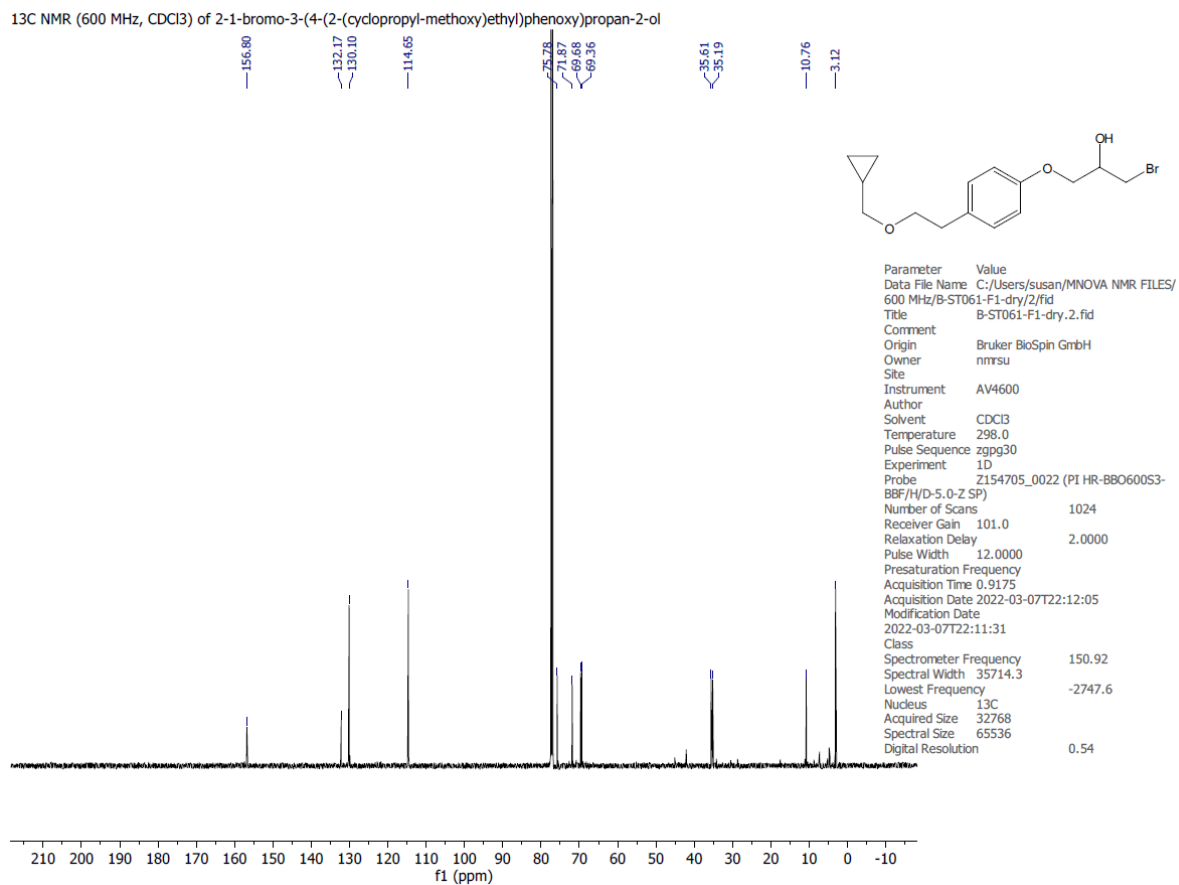
HSQC NMR (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol



**Figure S22.** HSQC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5a**).

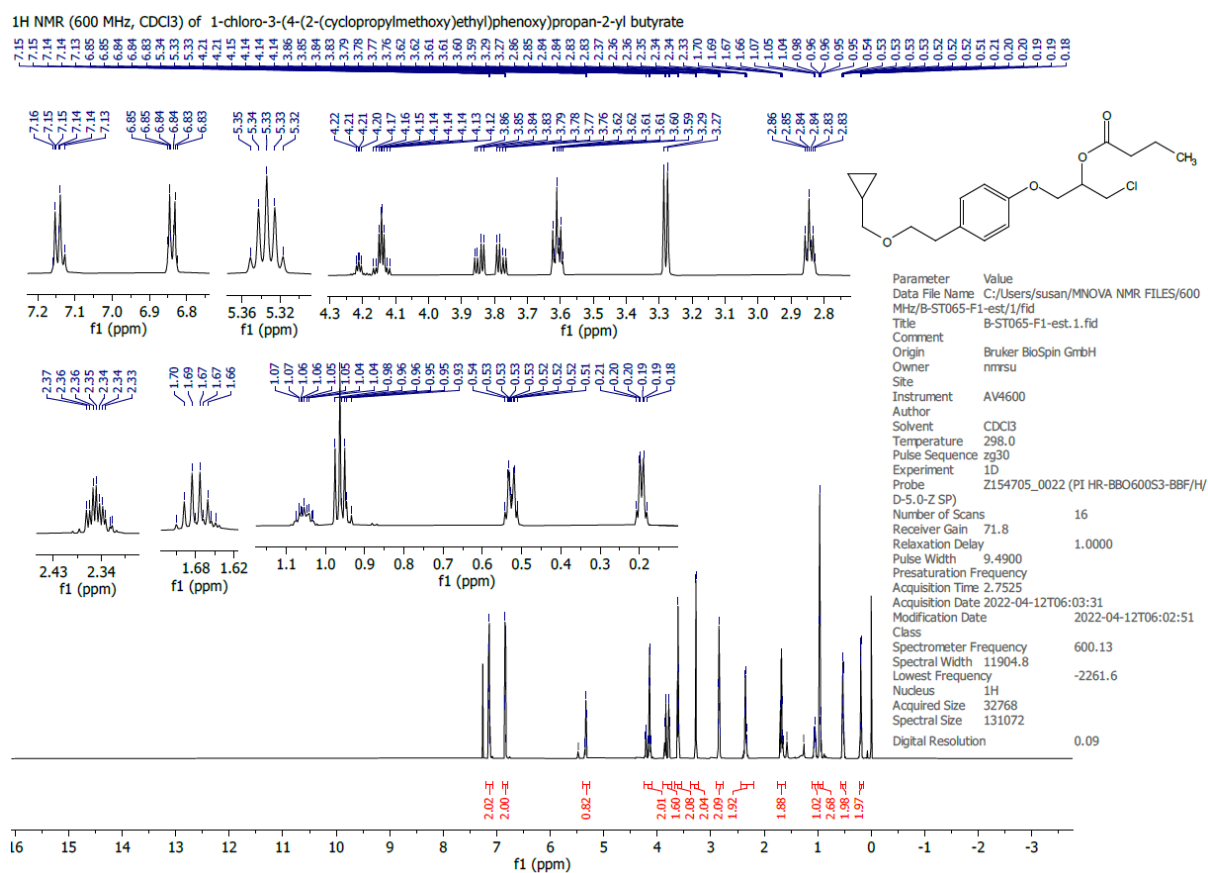
<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 2-1-bromo-3-(4-(2-(cyclopropyl-methoxy)ethyl)phenoxy)propan-2-ol



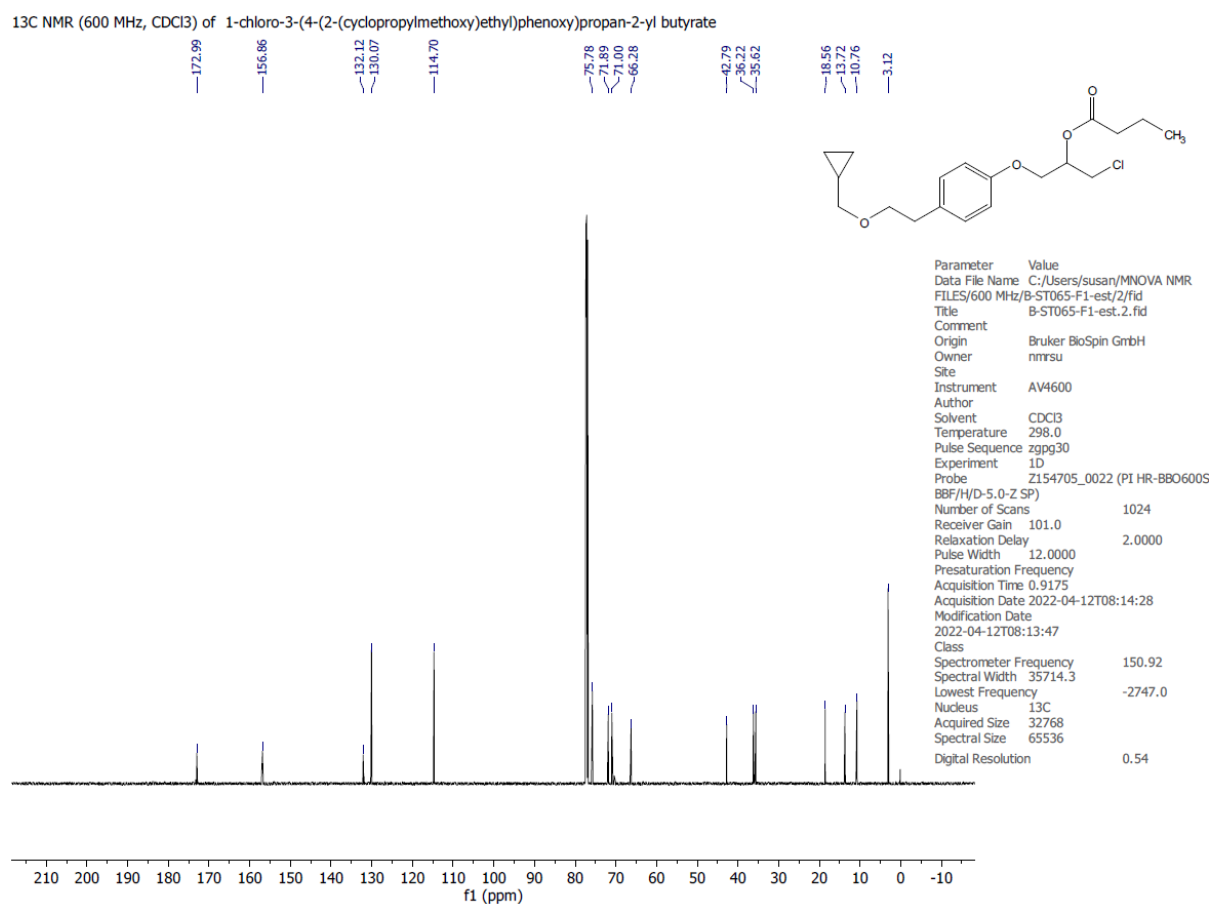


**Figure S24.** <sup>13</sup>C NMR spectrum (150 MHz, CDCl<sub>3</sub>) of 1-bromo-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5b**).

*1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butanoate, 6a*

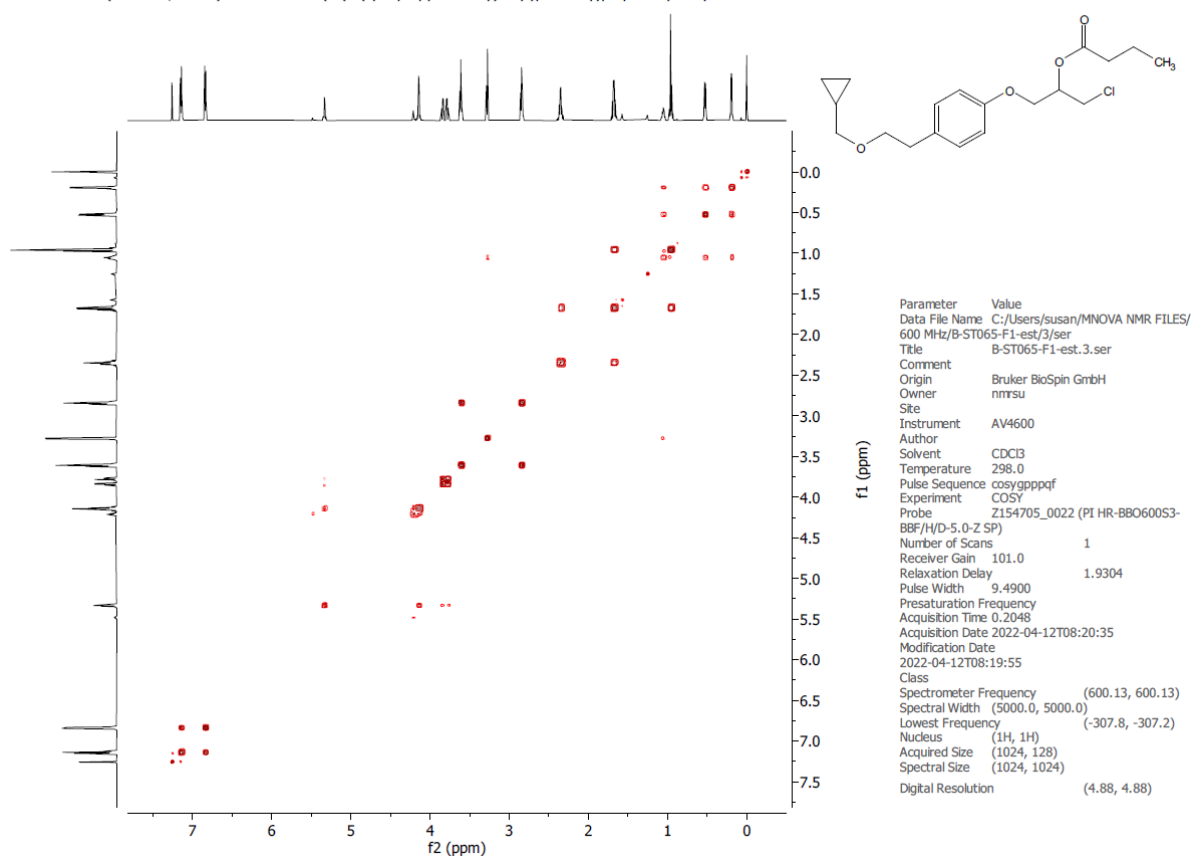


**Figure S25.** <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butanoate (**6a**).



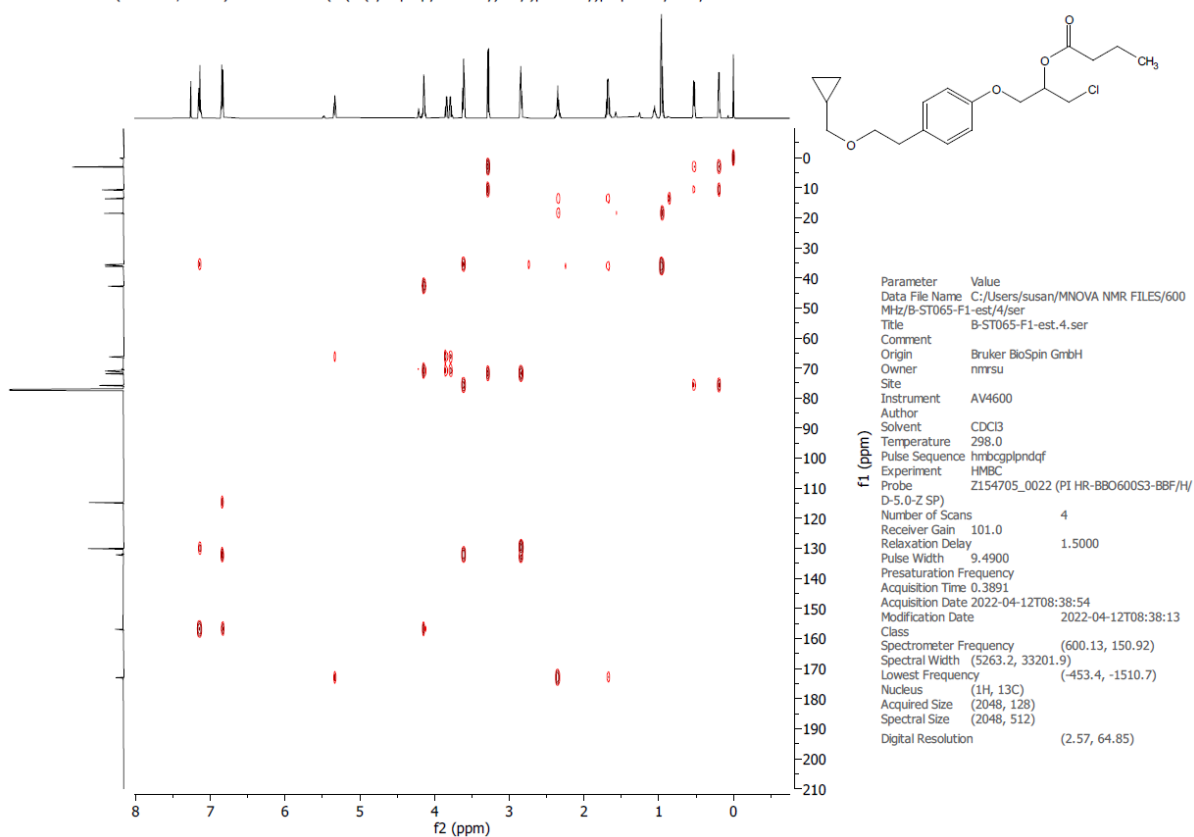
**Figure S26.** <sup>13</sup>C NMR spectrum (150 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butanoate (**6a**).

H-H COSY NMR (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butyrate



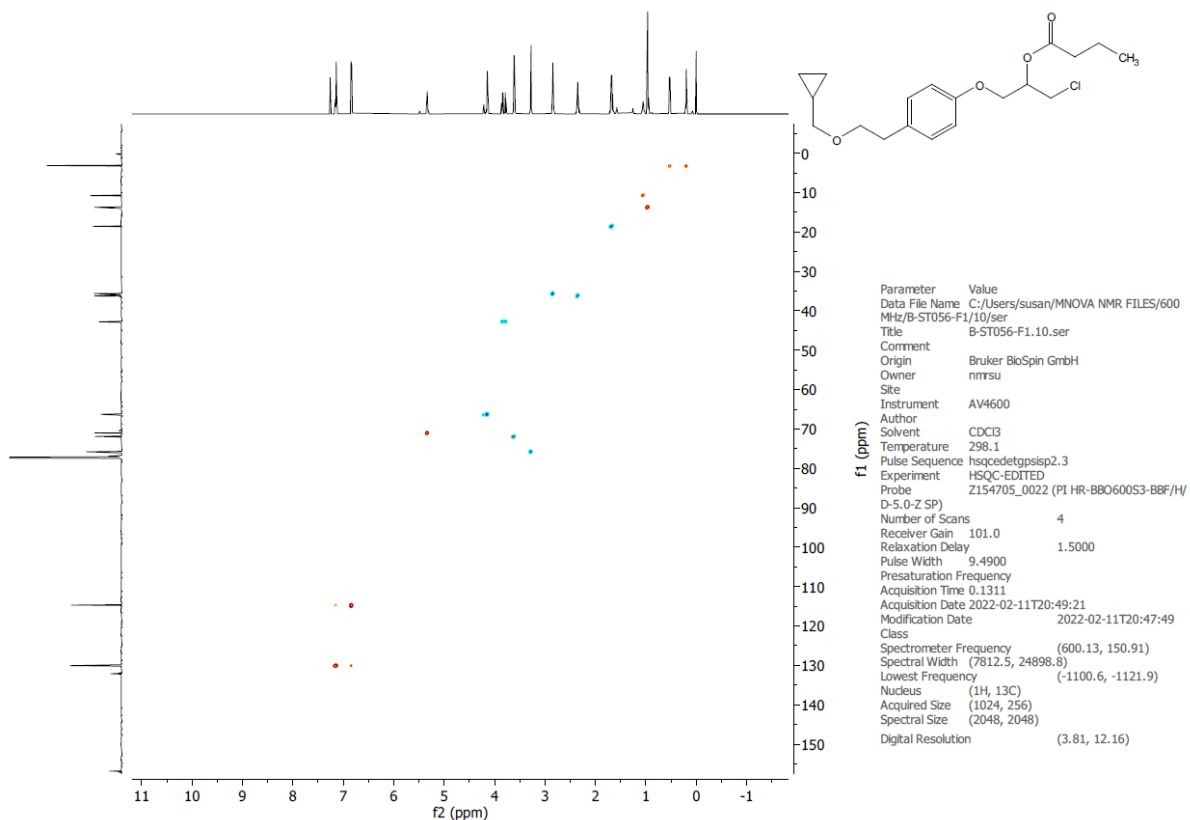
**Figure S27.** COSY NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butanoate (**6a**).

C-H HMBC NMR (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butyrate



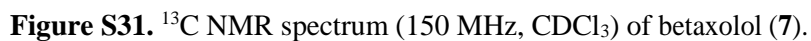
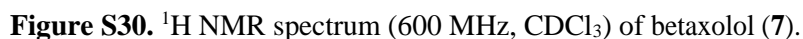
**Figure S28.** HMBC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butanoate (**6a**).

C-H HSQC NMR (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butyrate

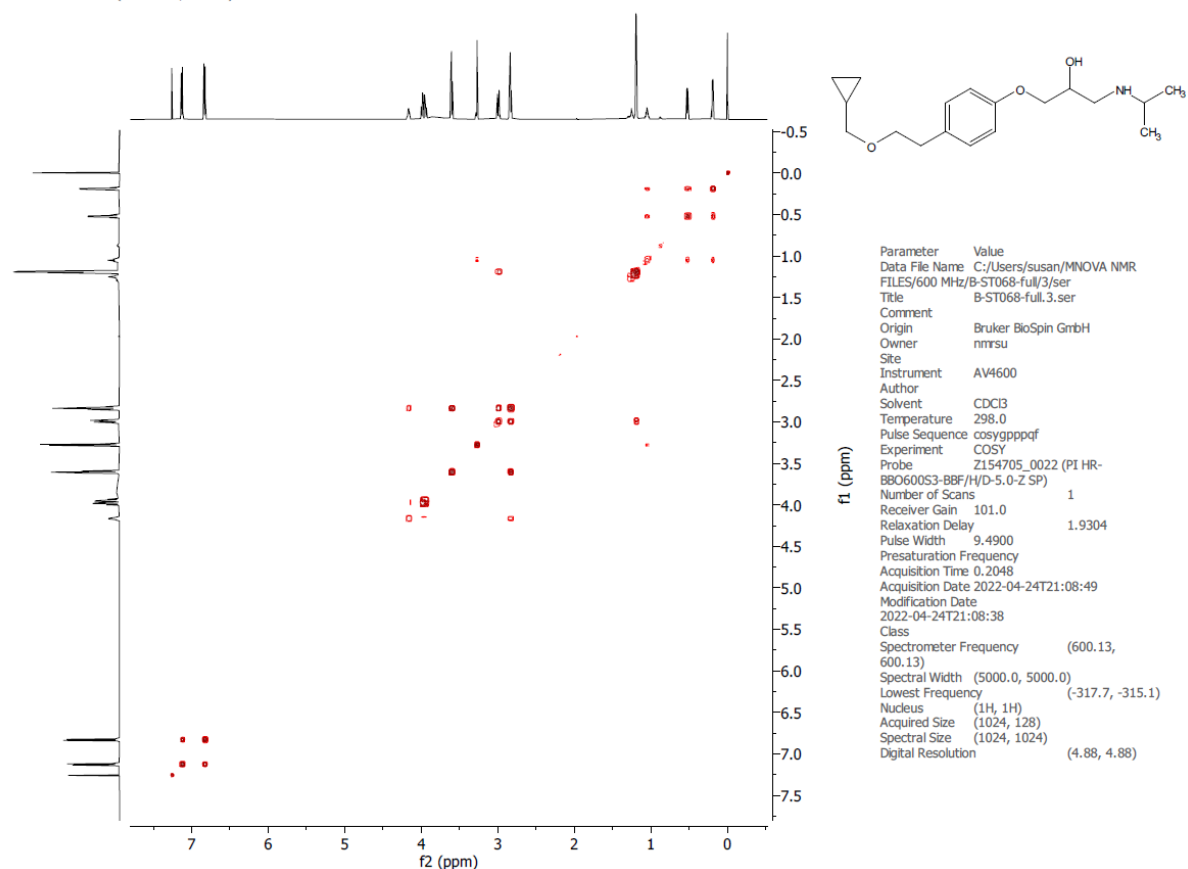


**Figure S29.** HSQC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of 1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butanoate (**6a**).

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of betaxolol

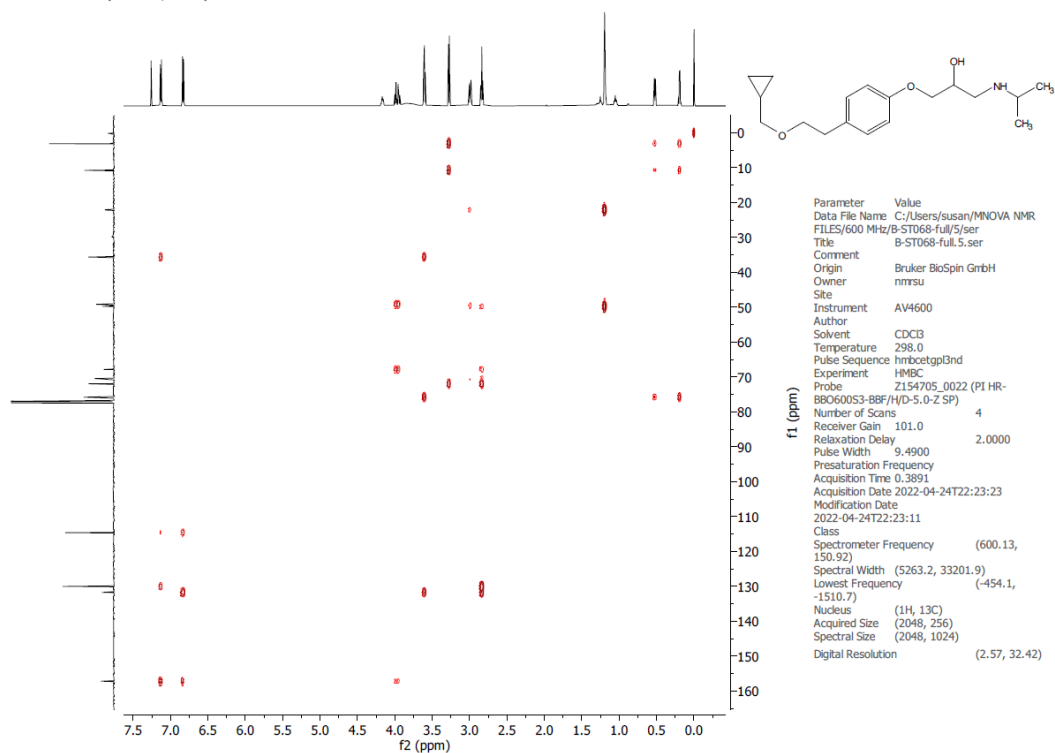


H-H COSY NMR (600 MHz, CDCl<sub>3</sub>) of betaxolol



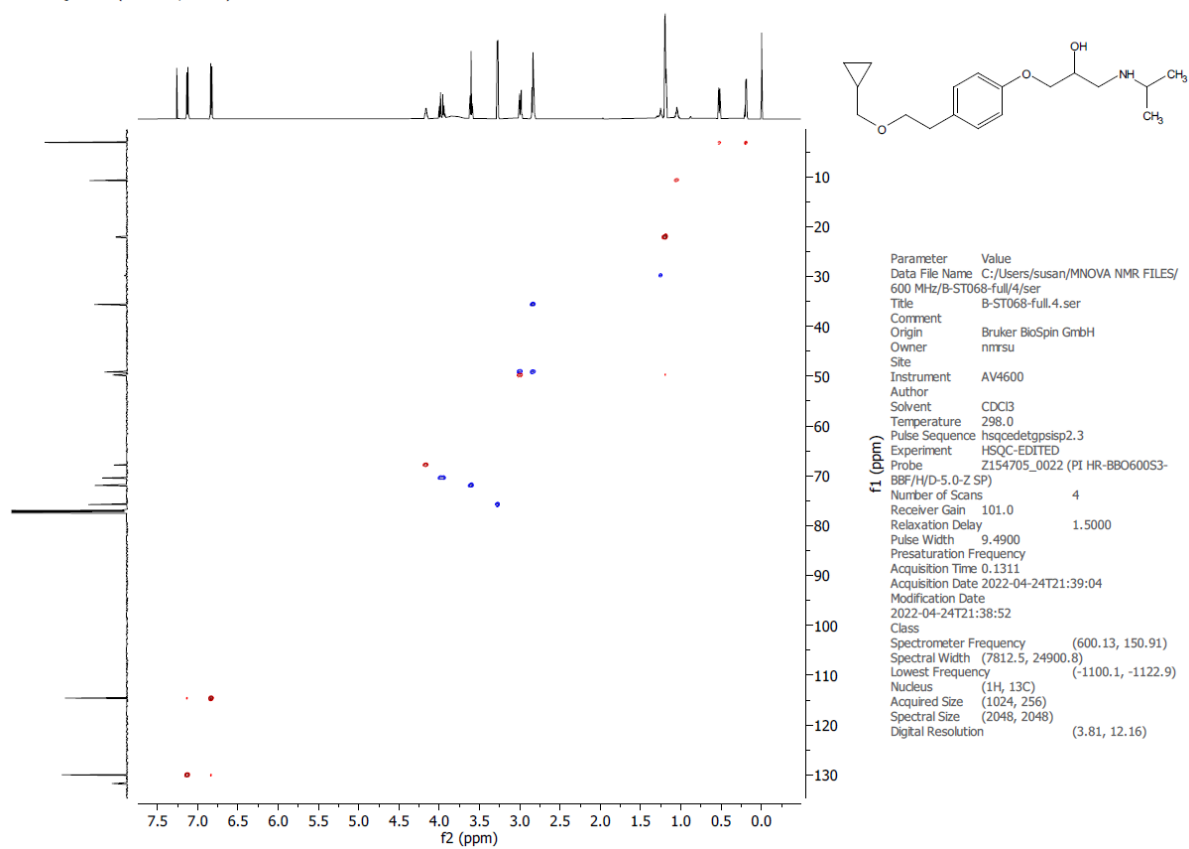
**Figure S32.** COSY NMR spectrum (600 MHz, CDCl<sub>3</sub>) of betaxolol (**7**).

C-H HMBC NMR (600 MHz, CDCl<sub>3</sub>) of betaxolol



**Figure S33.** HMBC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of betaxolol (**7**).

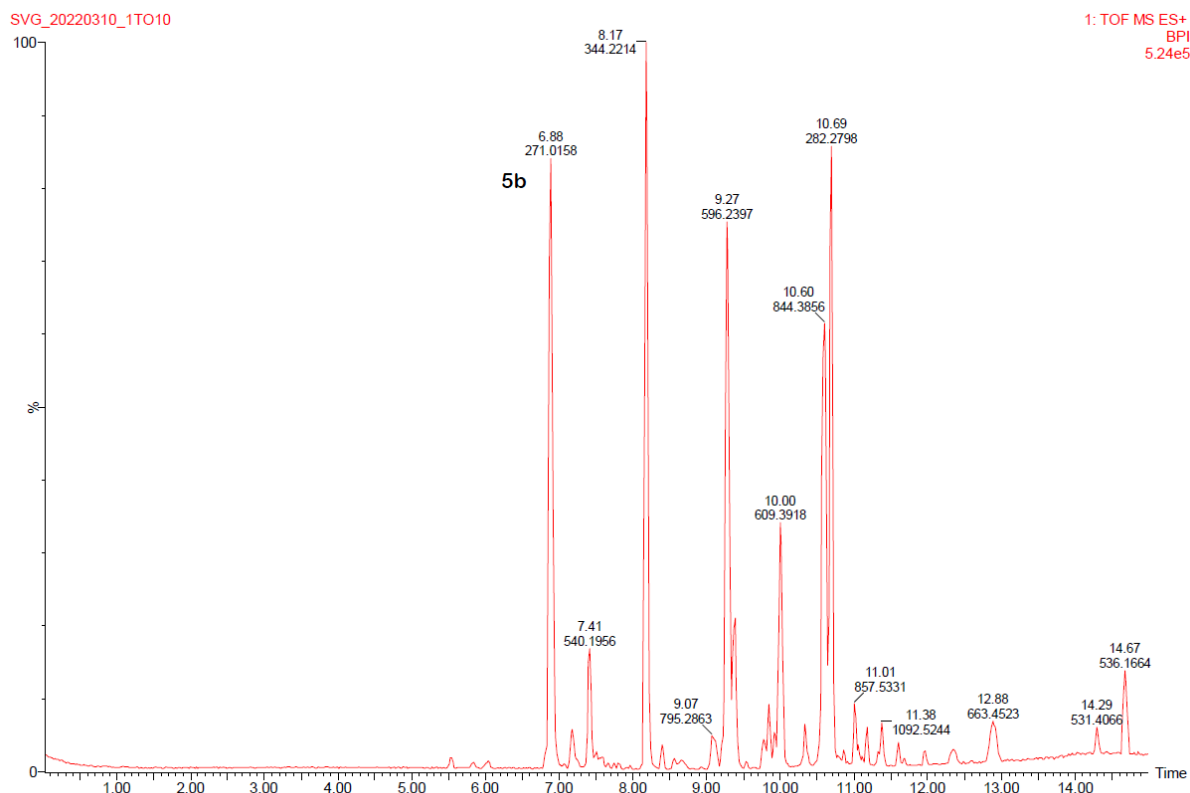
C-H HSQC NMR (600 MHz, CDCl<sub>3</sub>) of betaxolol



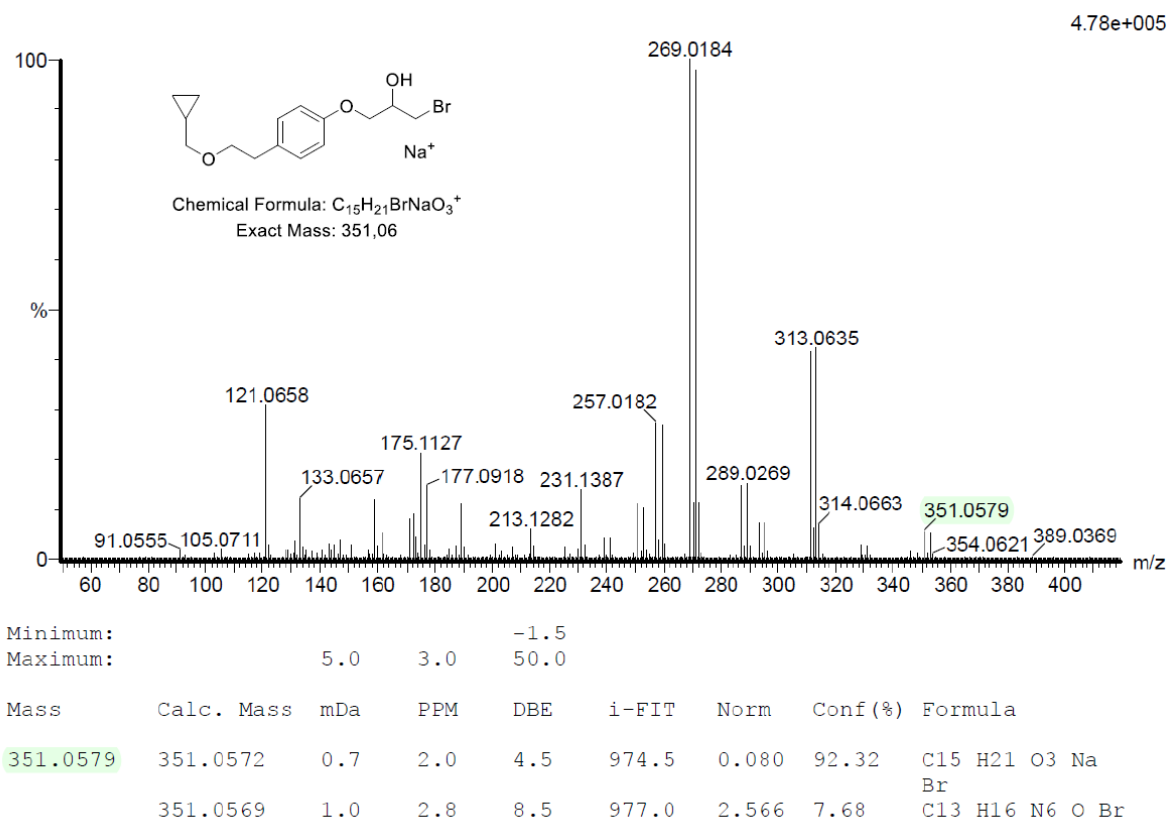
**Figure S34.** HSQC NMR spectrum (600 MHz, CDCl<sub>3</sub>) of betaxolol (**7**).

## LC-MS DATA

### *1-bromo-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (5b)*



**Figure S35.** LC-MS chromatogram of 1-bromo-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5b**). Performed on an ACQUITY UPLC HSS T3 column (100 mm x 2.1 mm ID, 100 Å x 1.8 µm film thickness) with a mobile phase of A: water with 0.12% NH<sub>4</sub>OH and B: MeCN, flow rate: 0.25 mL min<sup>-1</sup>. The analyses were run with a gradient of 10-100% B for 12 min, 2 min hold, then 100-10% B for 1 min. Total time 15.0 min. Quadrupole time of flight mass analyzer (QTOF; SYNAPT-G2S) with a ZSpray EIS ion source (Waters, Milford, USA).



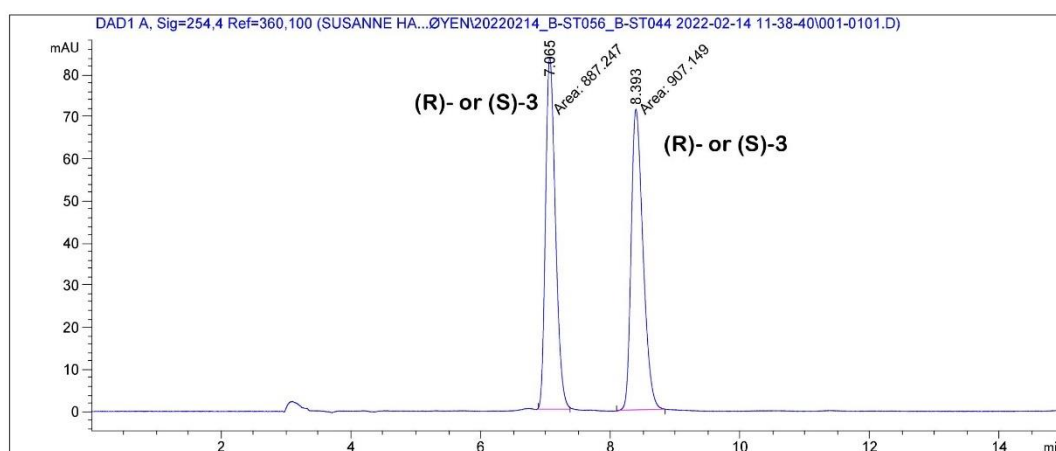
**Figure S36.** TOF MS ES<sup>+</sup> spectrum for 5b with  $m/z = 351.0572$   $[M+Na]^+$ , from LC-MS analysis shown in Figure S18, at  $t_R = 6.9$  min.

## CHIRAL HPLC DATA

### 2-((4-(2-(Cyclopropylmethoxy)ethyl)phenoxy)-methyl)oxirane (**3**)

Data File C:\CHEM32\...SEN TROØYEN\20220214\_B-ST056\_B-ST044 2022-02-14 11-38-40\001-0101.D  
Sample Name: B-ST044-epoxide

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Acq. Operator   : Susanne                      Seq. Line :    1
Acq. Instrument : Instrument 1                  Location  : Vial 1
Injection Date  : 14.02.2022 11:58:53          Inj       :    1
                                           Inj Volume: 10 µl
Acq. Method     : C:\Chem32\1\DATA\SUSANNE HANSEN TROØYEN\20220214_B-ST056_B-ST044 2022-02-14
                                           11-38-40\KIRAL_SHT_1.M
Last changed    : 14.02.2022 11:38:23 by Susanne
Analysis Method : C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220214_B-ST056_B-ST044 2022-02-14
                                           11-38-40\001-0101.D\DA.M (KIRAL_SHT_1.M)
Last changed    : 05.04.2022 05:27:00 by Lucas
Method Info     : Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm
                                           Solventer: Heksan + ipa
=====
```



#### Area Percent Report

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=====
Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
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Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	7.065	MM	0.1769	887.24689	83.58057	49.4454
2	8.393	MM	0.2115	907.14948	71.47255	50.5546

Totals : 1794.39636 155.05312

\*\*\* End of Report \*\*\*

**Figure S37.** Chiral HPLC chromatogram of **3**. The analysis was performed on a Chiralcel OD-H column with *n*-hexane and *i*-PrOH (90:10) as eluent and 1 mL/min flow, and with a

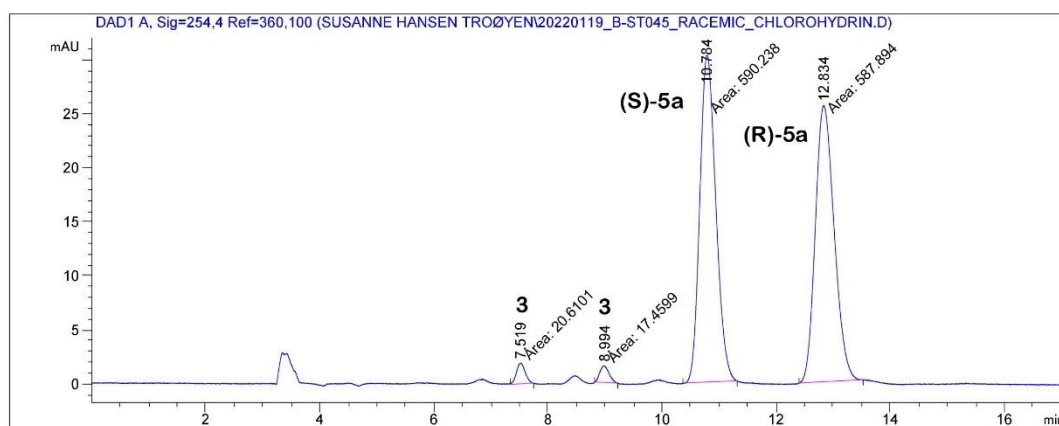
detection wavelength of 254 nm. The retention times obtained are  $t_R((S)\text{-}\mathbf{3}) = 9.4$  min and  $t_R((R)\text{-}\mathbf{3}) = 7.1$  min.

### 1-Chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (**5a**)

Data File C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220119\_B-ST045\_RACEMIC\_CHLOROHYDRIN.D  
Sample Name: Racemic chlorohydrin

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Acq. Operator   : Susanne
Acq. Instrument : Instrument 1                      Location : Vial 3
Injection Date  : 19.01.2022 11:17:33              Inj Volume : 10 µl
                                                    Inj Volume : 10 µl
Acq. Method     : C:\CHEM32\1\METHODS\ELISABETH JACOBSEN\KIRAL_SHT_1.M
Last changed    : 19.01.2022 10:42:03 by Susanne
                  (modified after loading)
Analysis Method : C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220119_B-ST045_RACEMIC_
                  CHLOROHYDRIN.D\DA.M (KIRAL_SHT_1.M)
Last changed    : 05.04.2022 05:29:44 by Lucas
Method Info     : Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm
                  Solventer: Heksan + ipa

Sample Info     : 90% n-hexane 10% IPA 1mL/min
=====
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#### Area Percent Report

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Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
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Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	7.519	MM	0.1778	20.61008	1.93238	1.6946
2	8.994	MM	0.1877	17.45990	1.55045	1.4356
3	10.784	MM	0.3249	590.23779	30.28229	48.5312
4	12.834	MM	0.3828	587.89429	25.59438	48.3385

Totals : 1216.20205 59.35949

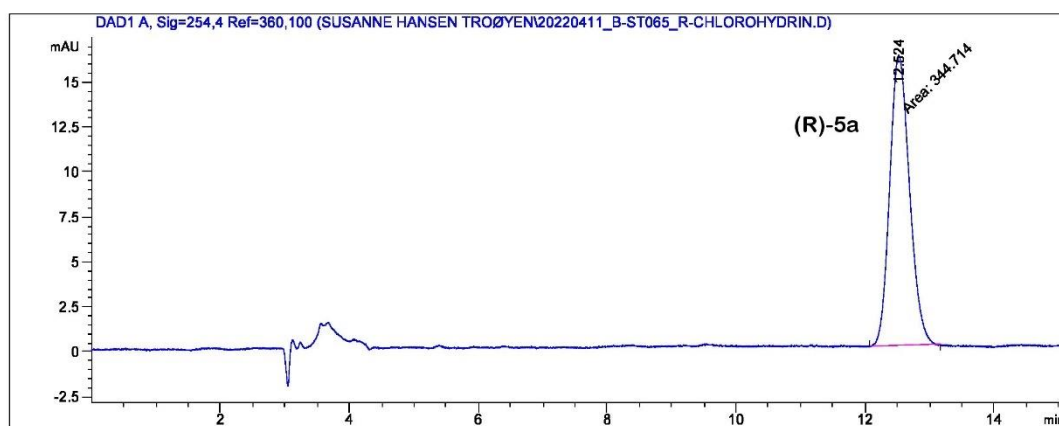
\*\*\* End of Report \*\*\*

**Figure S38.** Chiral HPLC chromatogram of **5a**. The analysis was performed on a Chiralcel OD-H column with *n*-hexane and *i*-PrOH (90:10) as eluent and 1 mL/min flow, and with a detection wavelength of 254 nm. The retention times obtained are  $t_R((S)\text{-5a}) = 10.8$  min,  $t_R((R)\text{-5a}) = 12.8$  min.

*(R)*-1-Chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol, (*R*)-**5a**

Data File C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220411\_B-ST065\_R-CHLOROHYDRIN.D  
Sample Name: B-ST065-F2-chlorohydr

```
=====
Acq. Operator   : Susanne
Acq. Instrument : Instrument 1                      Location : Vial 2
Injection Date  : 11.04.2022 03:10:18              Inj Volume : 10 µl
Acq. Method     : C:\CHEM32\1\METHODS\ELISABETH JACOBSEN\KIRAL_SHT_1.M
Last changed    : 11.04.2022 03:10:01 by Susanne
Analysis Method : C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220411_B-ST065_R-CHLOROHYDRIN.D\
                  DA.M (KIRAL_SHT_1.M)
Last changed    : 11.04.2022 04:23:38 by Lucas
Method Info     : Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm
                  Solventer: Heksan + ipa
Sample Info     : 90% hexane 10% IPA CALB chlorohydrin after FC
=====
```



Area Percent Report

```
=====
Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
```

Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	12.524	MM	0.3556	344.71445	16.15702	100.0000

Totals : 344.71445 16.15702

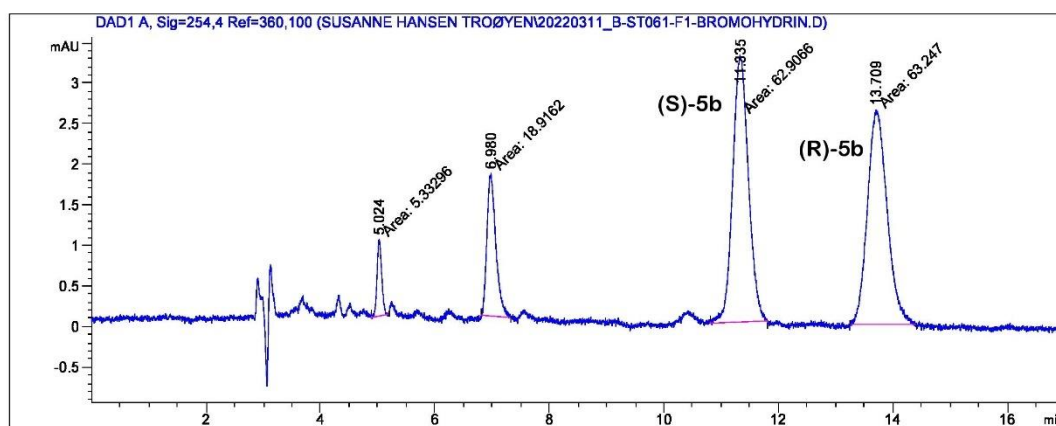
\*\*\* End of Report \*\*\*

**Figure S39.** Chiral HPLC chromatogram of (*R*)-**5a**. The analysis was performed on a Chiralcel OD-H column with *n*-hexane and *i*-PrOH (90:10) as eluent and 1 mL/min flow, and with a detection wavelength of 254 nm. The retention time is  $t_R((R)\text{-5a}) = 12.5$  min.

*1-Bromo-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol (5b)*

Data File C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220311\_B-ST061-F1-BROMOHYDRIN.D  
Sample Name: B-ST061-F1-bromohydrin

```
=====
Acq. Operator   : Susanne
Acq. Instrument : Instrument 1                      Location : Vial 2
Injection Date  : 11.03.2022 11:06:03              Inj Volume : 10 µl
Acq. Method     : C:\CHEM32\1\METHODS\ELISABETH JACOBSEN\KIRAL_SHT_1.M
Last changed    : 11.03.2022 11:05:48 by Susanne
Analysis Method : C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220311_B-ST061-F1-BROMOHYDRIN.D\
                  DA.M (KIRAL_SHT_1.M)
Last changed    : 05.04.2022 05:32:26 by Lucas
                  (modified after loading)
Method Info     : Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm
                  Solventer: Heksan + ipa
Sample Info     : 90% n-hexane 10% IPA sep bromohydrin (betaxolol)
=====
```



Area Percent Report

```
=====
Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
```

Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	5.024	MM	0.0940	5.33296	9.45676e-1	3.5458
2	6.980	MM	0.1792	18.91615	1.75959	12.5770
3	11.335	MM	0.3189	62.90660	3.28753	41.8254
4	13.709	MM	0.3981	63.24703	2.64774	42.0518

Totals : 150.40274 8.64054

\*\*\* End of Report \*\*\*

**Figure S40.** Chiral HPLC chromatogram of **5b**. The analysis was performed on a Chiralcel OD-H column with *n*-hexane and *i*-PrOH (90:10) as eluent and 1 mL/min flow, and with a detection wavelength of 254 nm. The retention times are  $t_R((S)\text{-}\mathbf{5b}) = 11.3$  min,  $t_R((R)\text{-}\mathbf{5b}) = 13.7$  min.

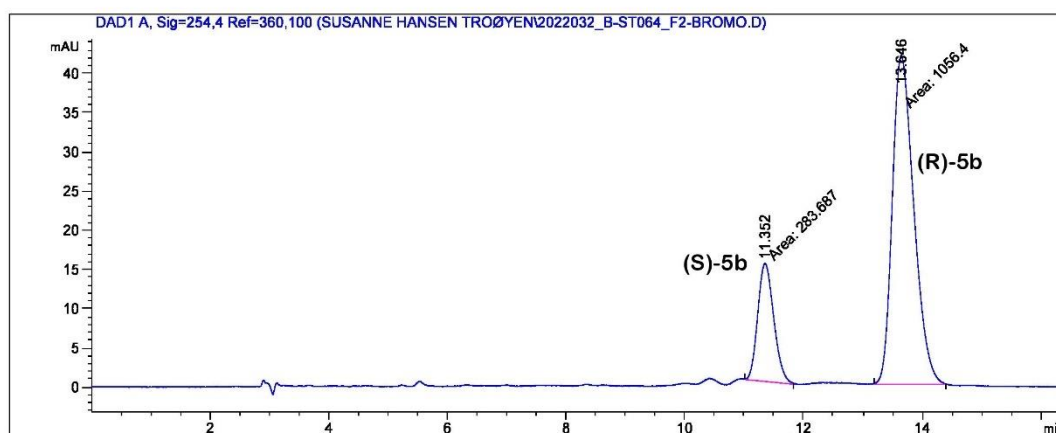
*(R)*-1-Bromo-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-ol, (*R*)-**5b**

Data File C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\2022032\_B-ST064\_F2-BROMO.D  
Sample Name: B-ST064-bromohydrin

=====

Acq. Operator	: Susanne	
Acq. Instrument	: Instrument 1	Location : Vial 2
Injection Date	: 06.04.2022 02:15:03	
		Inj Volume : 10 µl
Acq. Method	: C:\CHEM32\1\METHODS\ELISABETH JACOBSEN\KIRAL_SHT_1.M	
Last changed	: 06.04.2022 02:13:47 by Susanne	
Analysis Method	: C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\2022032_B-ST064_F2-BROMO.D\DA.M	
Last changed	: 06.04.2022 02:35:35 by Lucas	
Method Info	: Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm	
	Solventer: Heksan + ipa	
Sample Info	: 90% n-hexane 10% IPA bromohydrin after purification from calb	

=====



Area Percent Report

Sorted By : Signal  
Multiplier : 1.0000  
Dilution : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	11.352	MM	0.3137	283.68704	15.07188	21.1694
2	13.646	MM	0.4198	1056.39661	41.94152	78.8306

Totals : 1340.08365 57.01341

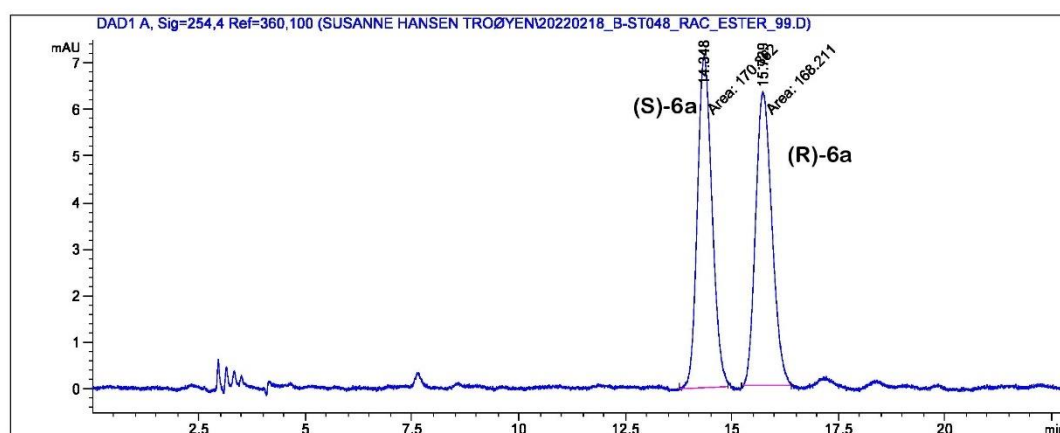
\*\*\* End of Report \*\*\*

**Figure S41.** Chiral HPLC chromatogram of enantiomerically enriched (*R*)-**5b**. The analysis was performed on a Chiralcel OD-H column with *n*-hexane and *i*-PrOH (90:10) as eluent and 1 mL/min flow, and with a detection wavelength of 254 nm. The retention times are  $t_R((S)\text{-}\mathbf{5b}) = 11.3$  min,  $t_R((R)\text{-}\mathbf{5b}) = 13.6$  min.

*1-chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butanoate (6a)*

Data File C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220218\_B-ST048\_RAC\_ESTER\_99.D  
Sample Name: B-ST048\_rac\_ester

```
=====
Acq. Operator   : Susanne
Acq. Instrument : Instrument 1                      Location : Vial 1
Injection Date  : 18.02.2022 10:28:50              Inj Volume : 10 µl
Acq. Method     : C:\CHEM32\1\METHODS\ELISABETH JACOBSEN\KIRAL_SHT_CALB_GRAD_2.M
Last changed    : 18.02.2022 10:07:37 by Susanne
Analysis Method : C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220218_B-ST048_RAC_ESTER_99.D\DA.
M (KIRAL_SHT_CALB_GRAD_2.M)
Last changed    : 05.04.2022 05:33:10 by Lucas
Method Info     : Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm
                  Solventer: Heksan + ipa
Sample Info     : 99% hexane 1% IPA betaxolol racemic ester separation.
=====
```



Area Percent Report

```
=====
Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
```

Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.348	MM	0.3991	170.36200	7.11436	50.3177
2	15.729	MM	0.4442	168.21086	6.31114	49.6823

Totals : 338.57286 13.42550

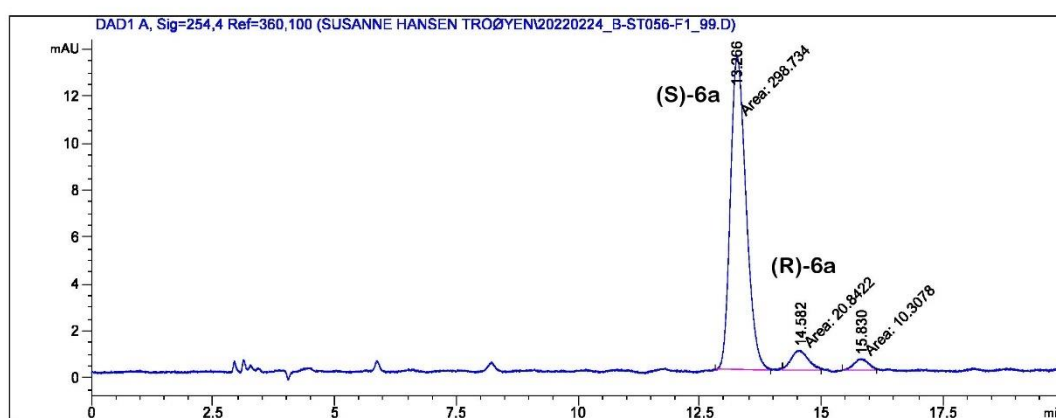
\*\*\* End of Report \*\*\*

**Figure S42.** Chiral HPLC chromatogram of **6a**. The analysis was performed on a Chiralcel OD-H column with *n*-hexane and *i*-PrOH (99:1) as eluent and 1 mL/min flow, and with a detection wavelength of 254 nm. The retention times are  $t_R((S)\text{-6a}) = 14.4$  min,  $t_R((R)\text{-6a}) = 15.7$  min.

*(S)*-1-Chloro-3-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)propan-2-yl butanoate, (*S*)-**6a**

Data File C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220224\_B-ST056-F1\_99.D  
Sample Name: B-ST056-ester

```
=====
Acq. Operator   : Susanne
Acq. Instrument : Instrument 1                      Location : Vial 1
Injection Date  : 24.02.2022 09:20:30              Inj Volume : 10 µl
Acq. Method     : C:\CHEM32\1\METHODS\ELISABETH JACOBSEN\KIRAL_SHT_CALB_GRAD.M
Last changed    : 24.02.2022 08:50:42 by Susanne
Analysis Method : C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220224_B-ST056-F1_99.D\DA.M (
KIRAL_SHT_CALB_GRAD.M)
Last changed    : 13.04.2022 10:35:51 by Lucas
                (modified after loading)
Method Info     : Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm
                Solventer: Heksan + ipa
Sample Info     : 99% n-hexane 1% IPA sep of ester from CALB kinetic res
                (gradient)
=====
```



Area Percent Report

```
=====
Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
```

Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.266	MM	0.3738	298.73386	13.31897	90.5573
2	14.582	MM	0.4106	20.84216	8.45972e-1	6.3180
3	15.830	MM	0.3478	10.30780	4.93923e-1	3.1247

Totals : 329.88381 14.65887

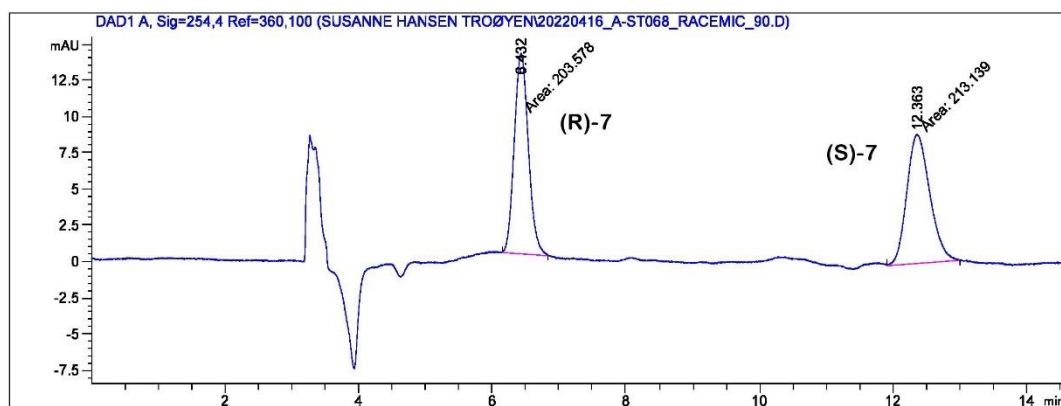
\*\*\* End of Report \*\*\*

**Figure S43.** Chiral HPLC chromatogram of enantiomerically enriched (*S*)-**6a**. The analysis was performed on a Chiralcel OD-H column with *n*-hexane and *i*-PrOH (99:1) as eluent and 1 mL/min flow, and with a detection wavelength of 254 nm. The retention times are  $t_R((S)\text{-6a}) = 13.3$  min,  $t_R((R)\text{-6a}) = 14.6$  min.

## Betaxolol (7)

Data File C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220416\_A-ST068\_RACEMIC\_90.D  
Sample Name: B-68-rac

```
=====
Acq. Operator   : Susanne
Acq. Instrument : Instrument 1                      Location : Vial 3
Injection Date  : 16.04.2022 05:26:23              Inj Volume : 10 µl
Acq. Method     : C:\CHEM32\1\METHODS\ELISABETH JACOBSEN\KIRAL_3_DEA.M
Last changed    : 16.04.2022 05:25:46 by Susanne
Analysis Method : C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220416_A-ST068_RACEMIC_90.D\DA.M
                  (KIRAL_3_DEA.M)
Last changed    : 16.04.2022 05:42:44 by Lucas
Method Info     : Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm
                  Solventer: Heksan + ipa
Sample Info     : 90% hexane 10% IPA w 2% DEA betaxolol sep, in IPA
=====
```



### Area Percent Report

```
=====
Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
```

Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	6.432	MM	0.2452	203.57849	13.83809	48.8529
2	12.363	MM	0.3992	213.13907	8.89915	51.1471

Totals : 416.71756 22.73724

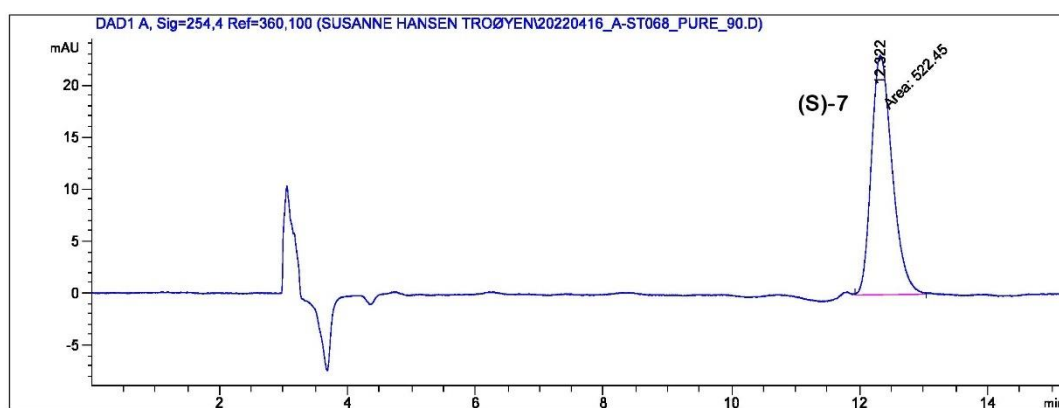
\*\*\* End of Report \*\*\*

**Figure S44.** Chiral HPLC chromatogram of **7**. The analysis was performed on a Chiralcel OD-H column with *n*-hexane:*i*-PrOH:diethylamine (90:9.8:0.2) as eluent and 1 mL/min flow, and with a detection wavelength of 254 nm. The retention times are  $t_R((R)\text{-}7) = 6.4$  min,  $t_R((S)\text{-}7) = 12.4$  min.

(S)-Betaxolol, (S)-7

Data File C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220416\_A-ST068\_PURE\_90.D  
Sample Name: B-68

```
=====
Acq. Operator   : Susanne
Acq. Instrument : Instrument 1                      Location : Vial 2
Injection Date  : 16.04.2022 04:49:28              Inj Volume : 10 µl
Acq. Method     : C:\CHEM32\1\METHODS\ELISABETH JACOBSEN\KIRAL_3_DEA.M
Last changed    : 16.04.2022 04:48:38 by Susanne
Analysis Method : C:\CHEM32\1\DATA\SUSANNE HANSEN TROØYEN\20220416_A-ST068_PURE_90.D\DA.M (
KIRAL_3_DEA.M)
Last changed    : 16.04.2022 05:57:49 by Lucas
Method Info     : Kiral separasjon med Chiralcel OD-H kolonne 250x4.6mm, 5µm
                  Solventer: Heksan + ipa
Sample Info     : 90% hexane 10% IPA w 2% DEA betaxolol sep, in IPA
=====
```



Area Percent Report

```
=====
Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
```

Signal 1: DAD1 A, Sig=254,4 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	12.322	MM	0.3781	522.44952	23.03251	100.0000

Totals : 522.44952 23.03251

\*\*\* End of Report \*\*\*

**Figure S45.** Chiral HPLC chromatogram of (S)-7. The analysis was performed on a Chiralcel OD-H column with *n*-hexane:*i*-PrOH:diethylamine (90:9.8:0.2) as eluent and 1 mL/min flow, and with a detection wavelength of 254 nm. The retention time is  $t_R((S)\text{-}7) = 12.3$  min.