

Section 1: General information

Materials sources:

All reagents for chemistry steps were obtained from Sigma or Acros. SuperFi DNA polymerase (Invitrogen), 2'-deoxyribonucleoside triphosphates (dNTP, set of dATP, dTTP, dGTP, dCTP, New England Biolabs), and T4 DNA ligase (New England Biolabs), were used as provided. Oligonucleotides (Integrated DNA Technologies) were obtained as desalted lyophilate and used without additional purification. Fmoc-Cys(STmp)-OH, Sulfo-Cy5-azide were obtained from Sigma. Sulfo-Cy5-DBCO and monoBromobimane (mBBr) were obtained from Lumiprobe and Thermofisher, respectively. Filter plates (MultiScreen Solvinert 0.45 μ m Hydrophobic PTFE) and BIS-Tris propane were purchased from EMD Millipore. 40% Acrylamide/Bis (19:1) was purchased from Bio-Rad.

Note: mBBr should be stored at -80°C in DMF. DMF or DMSO solutions of this dye lose efficiency over time. It is recommended to do titrations to find the optimal dye concentration for staining, if it was stored for an extended period.

Buffers

- BIS-Tris propane ligation buffer (BTPLB): 50 mM NaCl, 10 mM MgCl₂, 1 mM ATP, 0.02% Tween 20, 10 mM bis-tris, pH 7.6
- BIS-Tris propane wash buffer (BTPWB): 50 mM NaCl, 0.04% Tween 20, 10 mM bis-tris, pH 7.6
- BIS-Tris propane breaking buffer (BTPBB): 100 mM NaCl, 10 mM ethylenediaminetetraacetic acid, 1% SDS, 1% Tween 20, 10 mM bis-tris, pH 7.6
- Click reaction buffer (CRB): 50% DMSO, DI water, 1M triethylammonium acetate, 0.04% Tween 20, pH 7.4. Note: Mix DMSO and DI water (smells fishy) and then adjust pH (7.4) by addition of 1M TEAA buffer.
- 2X-PBS: 0.4 g/L KCl, 0.48 g/L KH₂PO₄, 16 g/L NaCl, 2.88 g/L Na₂HPO₄ (anhydrous), pH 7.4.
- 2X-PBST: 2X-PBS, 0.2% Tween-20.
- Annealing buffer: 1 mM BTP, pH 7.6, 50 mM NaCl

Note: CRB was made fresh prior to each N3-hDNA click reaction

Oligonucleotide sequences

Name	Sequence (5' - 3')
ABM062	/5AmMC6/GTGGCACAACAACCTGGCGGGCAAAC
ABM063	GCCGCCAGTCCTGCTCGCTTCGCTAC
ABM96	CGCCAGGGTTTTCCAGTCACGACCAACCACCCAAACCACAAACCCAAACCC CAAACCCAACACACAACAACAGCCGCCAGTCCTGCTCGCTTCGCTAC
ABM99	GTGGCACAACAACCTG
ABM100	CCTCTCTATGGGCAGTCGGTGATGTGGCACAACAACCTGGCGGGCAAAC
CES1	GTTTTCCAGTCACGAC
U6-Rev	GACTATCATATGCTTACCGT

Frag_Fwd-1107[+]	/5Phos/GCCGCCAGTCCTGCTCGCTTCGCTACATGGCAGAAGGA
Frag_Fwd-1107[-]	/5Phos/TGATCCTTCTGCCATGTAGCGAAGCGAGCAGGACTGGGCGGCGG
Frag_2209/1306/2406/1506[+]	/5Phos/TCATTCTTCATGTTATAGAGCCCTACATTTCAATTCATAGAGCC
Frag_2209/1306/2406/1506[-]	/5Phos/GCGGGCTCTATGAATTGAAATGTAGGGCTCTATAACATGAAGAA
Frag_2604/1707/2802[+]	/5Phos/CGCAACCCTACGTACAGAAGGATGGAACCTCAATCTAAGAGGCA
Frag_2604/1707/2802[-]	/5Phos/CTTTGCCTCTTAGATTGAGGTTCCATCCTTCTGTACGTAGGGTT
Frag_1901/2A01/Rev[+]	/5Phos/AAGCCTCCTAAGCCTGTTTGCCCGCCAGTTGTTGTGCCAC
Frag_1901/2A01/Rev[-]	/5Phos/GTGGCACAACAACCTGGCGGGCAAACAGGCTTAGGAGG
ABM99_2A07-Rev	GTGGCACAACAACCTGGCGGGCAAACAGGCCCGGAGGGCTT
P5_Univ_Fwd-2	AATGATACGGCGACCACCGAGATCTACACTCTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNGCCGCCAGTCCTGCTCGCTTCGCTAC
Illumina Index 1	CAAGCAGAAGACGGCATAACGAGATCGTGATGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCTGTGGCACAACAACCTGGCGGGCAAAC
Illumina Index 2	CAAGCAGAAGACGGCATAACGAGATACATCGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCTGTGGCACAACAACCTGGCGGGCAAAC
Illumina Index 3	CAAGCAGAAGACGGCATAACGAGATGCCTAAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCTGTGGCACAACAACCTGGCGGGCAAAC
Illumina Index 4	CAAGCAGAAGACGGCATAACGAGATTGGTCAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCTGTGGCACAACAACCTGGCGGGCAAAC

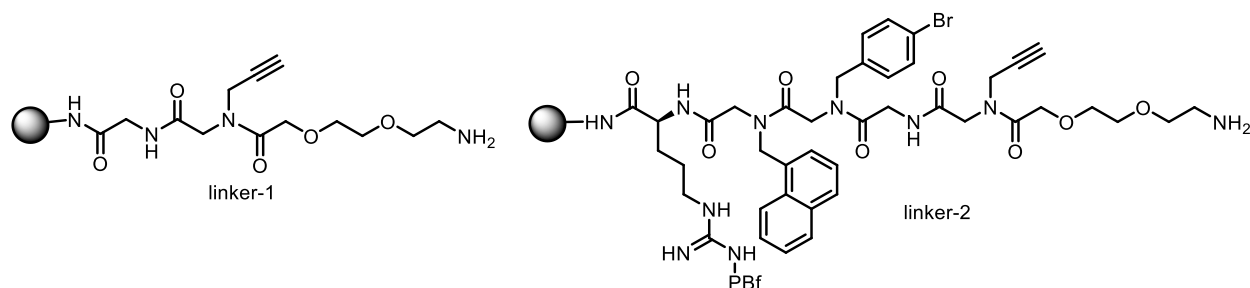
Section 2: Methods

2A: General solid phase synthesis protocol

Compounds were synthesized on TentaGel resin using general SPS protocol described below.

Linker-1, used for FACS studies and DEL synthesis, was synthesized on 10 µm TentaGel M NH₂ resin (Rapp-Polymere ,0.23 mmol/g). Linker-2, for mass analysis, was synthesized on 160 µm TentaGel MB RAM resin (0.41 mmol/g). TentaGel rink amide resin (160 µm, 0.41 mmol/g, 0.2 mmol, 50 mg, Rapp-Polymere) was transferred to a fritted spin-column (Mobicol Classic, large filter, 10 µm pore size) and swelled in DMF (1 h, RT). Fmoc was removed with 20% piperidine in DMF (3x resin volume after swelling, 500 µL) at RT for 10 minutes, twice. It was then washed thoroughly with DMF, DCM and DMF, and successively coupled with either amino acids or peptoid units. In general, acids (5 times of resin capacity, 1.0 mmol) were pre-activated at RT for 5 minutes with DIC/Oxyma/Collidine (1.4/1.0/1.0 mmol) in DMF, added to the resin, incubated at 37°C for one hour, and washed with DMF, DCM (5 times each, 5x resin volume). Fmoc was removed where applicable.

Figure S1: Linkers used in FACS and LCMS study



For peptoid units, bromoacetic acid (BAA) (1.0 M, DMF) and DIC (0.9 M) were added to the resin separately, vortexed, and incubated at 37°C for 1hr. Resin was washed thoroughly with DMF, DCM, and DMF and then sonicated in DMF for 2 minutes before further reactions. Amine (1.0 M, 1.5x resin volume, 500 μ L DMF) was added successively and incubated at 37°C for 3 hrs., with agitation. **Note:** Too concentrated BAA+DIC solution had incomplete addition. Longer reaction time (~1hr) with lower conc resulted better yield.

Linker-2 was synthesized upon addition of Fmoc-Arg(Pbf)-OH, BAA, 1-Naphthylmethyl amine, BAA, 4-bromobenzyl amine, Fmoc-Gly-OH, BAA, Propargyl amine, and Fmoc-EEAC, respectively, after swelling and Fmoc removal.

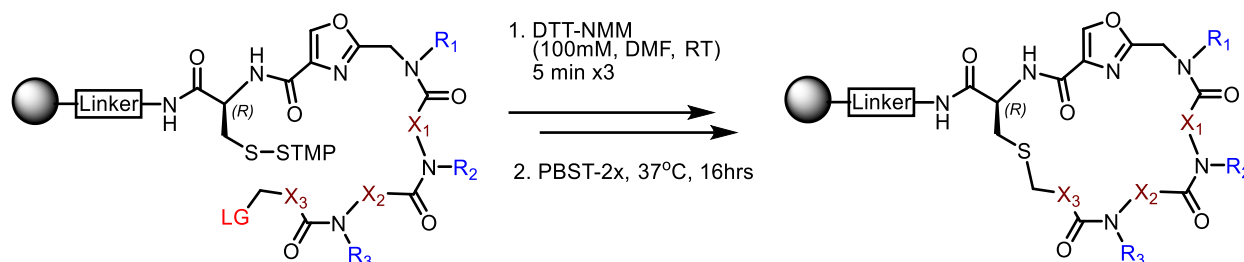
Linker-1 was synthesized upon addition of Fmoc-Gly-OH, BAA, Propargyl amine, and Fmoc-EEAC respectively.

2B: STMP group removal, cyclization and staining with mBBr.

After synthesis of linear precursor was complete, resin was washed 3 times each with MeOH, DCM and DMF. Mixture of DTT and N-methylmorpholine base (100 mM each in DMF) was added (500 μ L for 50 mg, 10 μ m beads, 150 μ L for 0.5 mg of 10 μ m beads in plate), incubated for 5 min at RT, washed with DMF & DCM and repeated for two more times. Beads were washed 3 times each with DMF, 50% DMF-PBS and PBS buffer. It was suspended in PBST (pH = 7.6) and incubated at 37°C for 8-16 hrs. for cyclization. For large scale preparation N-Methylmorpholine (100 mM in DMF) was used for cyclization.

After desired time of cyclization, mBBr (150.0 μ L, 3.0 mM in DMF, 0.5 mg, 10 μ m bead) was added in filter plate (MultiScreen Solvinert 0.45 μ m Hydrophobic PTFE) and incubated at 37°C for one hour (9.0 mM, 2 hrs. when DNA tags are present). It was then washed with DMF, DCM, MeOH, suspended in PBST, and filtered into BD FACS tube for flow cytometry.

Figure S2: Standard protocol for OBOC thioether macrocyclization



2C: Copper based click (CuAAC) reaction to attach Cy5-azide dye and headpiece-DNA.

Cy5-azide dye was clicked to the alkyne in the linker region via CuAAC reaction before thiol deprotection, according to the Table **T2**. A similar procedure was followed for the azido-headpiece DNA (N3-hDNA).

In general, resin was suspended in freshly prepared CRB buffer (pH = 7.4) for one hour before the click reaction. CuSO₄·5H₂O (500 mM in water) and Tris[(1-benzyl-1H-1,2,3-triazol-4-yl)methyl]amine (TBTA, 50 mM in DMSO) were mixed in a 1:1 molar ratio, in CRB buffer, to obtain a blue colored solution. To this was added 50% of the required Na-ascorbate. The solution was then incubated for 5 min at 37°C to prepare the click-mix. A second solution containing the azide-click partner and the remaining Na-ascorbate was then added to the click-mix, vortexed, added to the resin, and incubated at 37°C for 2-4 hrs. After the reaction was complete, the resin was washed with organic solvent (DMF, DCM, MeOH), then extensively with aqueous buffer (BTP-WB & BTP-BB) and was suspended in BTP-BB (breaking buffer) overnight to remove copper salt before further reactions. BTP-BB solution turns blueish after overnight suspension.

For dye addition, DMSO solution of Cy5-N₃ was added (final conc 0.11mM) to the click-mix and incubated for 2 hrs. at 37°C.

Headpiece DNA was added to batches of 30.0 mg Linker-1 beads in 2.0 ml Bio-Rad spin column fitted with a 10 μm filter. The click-mix was prepared according to Table **T1**, then incubated at 37°C for 5 min before being added to the resin. A solution of N₃-HDNA (3.0 mM, H₂O, 0.008 equiv. of resin capacity) was then added to the click-mix, vortexed, and incubated for 4 hrs. at 37°C.

Figure S3: General protocol to attach Cy5-azide dye and Azido headpiece DNA to the linker-alkyne

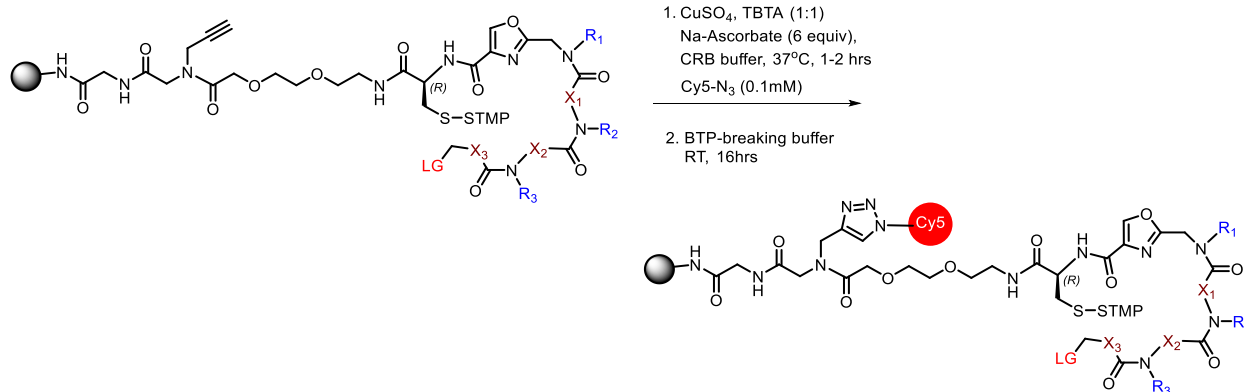


Table T1: General protocol for coupling Azido-HDNA with linker-1 beads via CuAAC reaction.

Azido-HDNA addition						
Reagents	Stock (mM)	equiv	mmols		amount	unit
Beads (10 uM) ~ loading 0.23			0.0069		30.00	mg
CuSO ₄ (H ₂ O)	500	1.000	0.0069		13.80	ul
TBTA (DMSO)	50	1.000	0.0069		138.00	ul
Azido-peg-HDNA in TEAA buffer	3.1	0.008	0.0000552		17.81	ul
Na-Ascorbate (H ₂ O)	500	6.000	0.0414		82.80	ul
CRB buffer					1747.59	ul
Total rxn vol					2000.00	ul

Table T2: General protocol for coupling Cy5-azide dye with linker beads via CuAAC reaction.

Cy5-N ₃ dye addition						
Reagents	Stock (mM)	equiv	mmols	Cy5(mM)	amount	unit
Beads (10 uM) ~ loading 0.23			0.000115		0.50	mg
CuSO ₄ (H ₂ O)	500	1.000	0.000115		0.23	ul
TBTA (DMSO)	50	1.000	0.000115		2.30	ul
Cy5-N ₃ (DMSO)	12			0.11	1.38	ul
Na-Ascorbate (H ₂ O)	500	6.000	0.00069		1.38	ul
CRB buffer					144.72	ul
Total rxn vol					150.00	ul

2D: General two-color staining protocol without a DNA tag

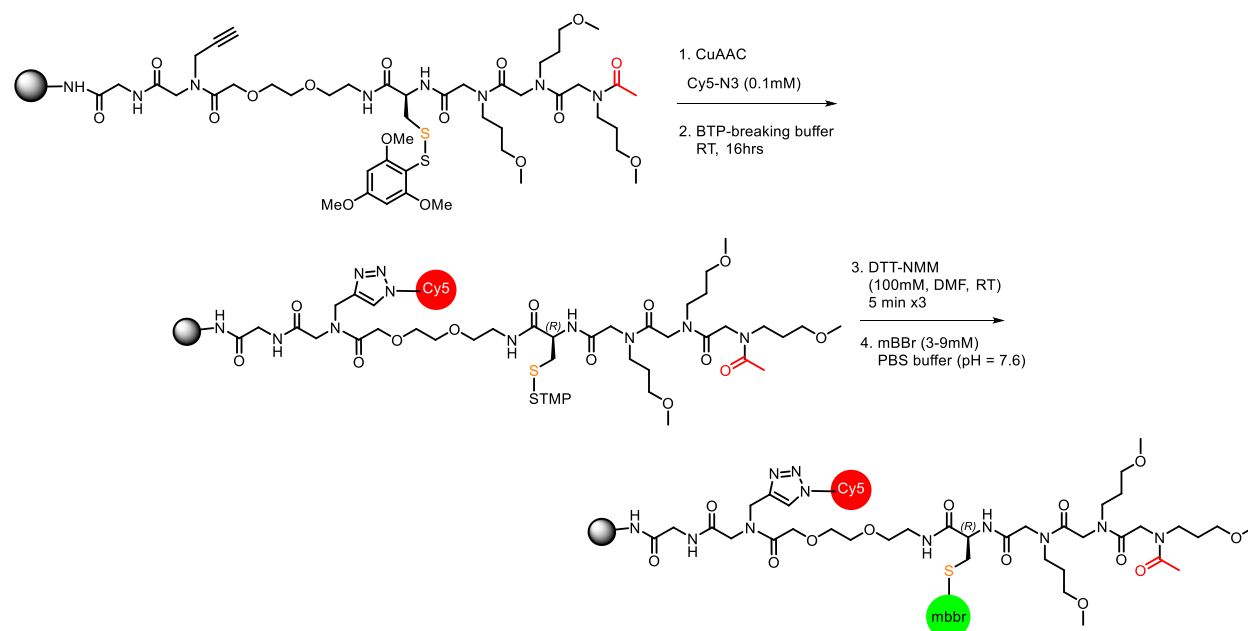
Cy5-azide dye was attached to the alkyne part of linear precursor via CuAAC reaction before thiol-protecting group was removed (Section 2C). Click-mix was prepared for total amount of resin according to Table T2, incubated at 37°C for 5 min, added to the resin (for filter plates, 150 µL, 0.5 mg/well) and incubated at 37°C for 2 hrs. Thiol-protecting STMP group was removed (Section 2B) using 100 mM DTT-NMM, washed, and solvent exchanged to PBST buffer for cyclization. Resin was washed with 2X-PBS and re-suspended in

2X-PBS buffer and DMF solution of mBBr (final conc. 3.0 mM, 150.0 μ L for 0.5mg, 10 μ m beads) was added. It was incubated at 37°C for one hour before washing with DMF, DCM and DMF.

This general protocol was applied for staining control molecules and 64 scaffolds in the absence of DNA tags. For DNA-tagged control compound **2** & **3**, Cy5-azide dye (0.11 mM final conc. added 2 hrs. after N₃-HDNA addition) was clicked together with Azido-HDNA (0.002 equiv.), prior to thiol deprotection, at 37°C for 4 hrs. After thiol deprotection, the resin was transitioned to PBST, then a DMF solution of mBBr (final conc. 9.0 mM, PBST) was added and incubated for 2 hrs. at 37°C. It was then washed with MeOH, DCM and DMF.

For staining in the presence of DNA tags, please see Section 6.

Figure S4: Two-color staining protocol without encoding DNA tags.



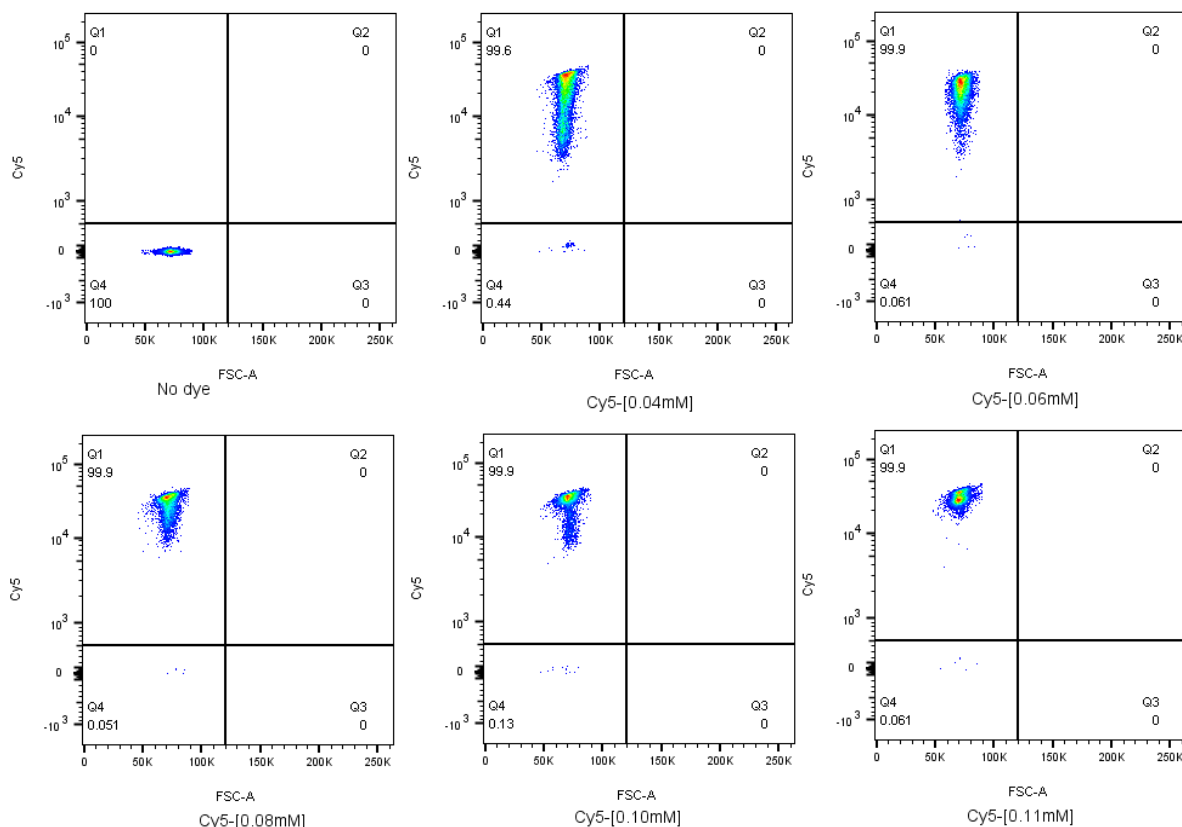
2E: DNA Ligations

DNA fragments are ordered as pairs of single-stranded DNA oligonucleotides, which are then annealed to form double-stranded fragments. The individual oligos are re-suspended at 1600 μ M, mixed at equimolar ratios to 800 μ M, then diluted to 80 μ M in annealing buffer before being denatured and annealed (95°C, 2 min., -0.1°C/s to 25°C). The annealed oligos are mostly complementary but do have small 5' or 3' overhangs to permit directional ligation. The DNA fragments with complementary overhangs are then ligated to build the DNA barcode. Final ligation reactions included: 1X BTPLB, each dsDNA encoding fragment at an equimolar ratio to bead-bound HDNA, 2 μ l T4 DNA ligase per mg of beads. Incubated at RT, with gentle agitation, 4 hours.

Section 3: Two-color staining and fluorescence measurements of control compounds

3A. Titration of Cy5-azide dye: Control compound **3** (0.5 mg, 0.11 μmol s, 10 μm TentaGel M NH_2 resin) was transferred to separate wells in a filter plate (MultiScreen SolvInert 0.45 μm Hydrophobic PTFE) and suspended in CRB for one hour. Following general protocol described in section **2C**, click-mix solution was prepared in CRB according to Table **T2** and was added to each well ($\sim 150 \mu\text{L}$). DMSO solution of Cy5-azide dye was added for final concentrations of (0.04 – 0.11 mM) and incubated for 2 hrs. at 37°C. Beads were washed, suspended in PBST, and filtered into BD FACS tube ($\sim 20,000$ beads). Fluorescence intensity of these beads was measured (Red channel) to ensure it is under the linear range of flow cytometer. It appeared that the final Cy5 dye concentration of 0.11 mM is optimal and will be used in later studies.

Figure S5: Cy5-dye titration with compound 3.



3B. Optimization of mBBr concentration

Resin displaying control compound **2** (0.5 mg, 0.11 μmol s, 10 μm TentaGel M NH_2 resin) was transferred to separate wells in a filter plate. The thiol-protecting STmp group was removed (Section **2B**) and the resin was washed and transitioned to PBST (pH = 7.6). A solution of mBBr (23.0 mM, in DMF) dye was added

to each well for final concentrations of 1.0 – 7.0 mM. The plate was then incubated at 37°C for one hour. It was washed with DMF, DCM, MeOH, and DMF-PBST (50%) buffer, re-suspended in PBST and filtered into BD FACS tubes (~20,000 beads) for FACS analysis (BV510).

Figure S6: Monobromobimane (mBBR) dye titration with compound 2.

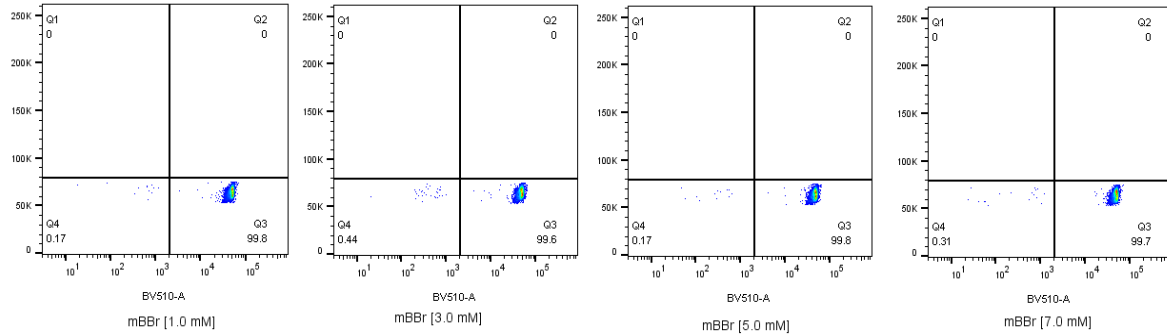
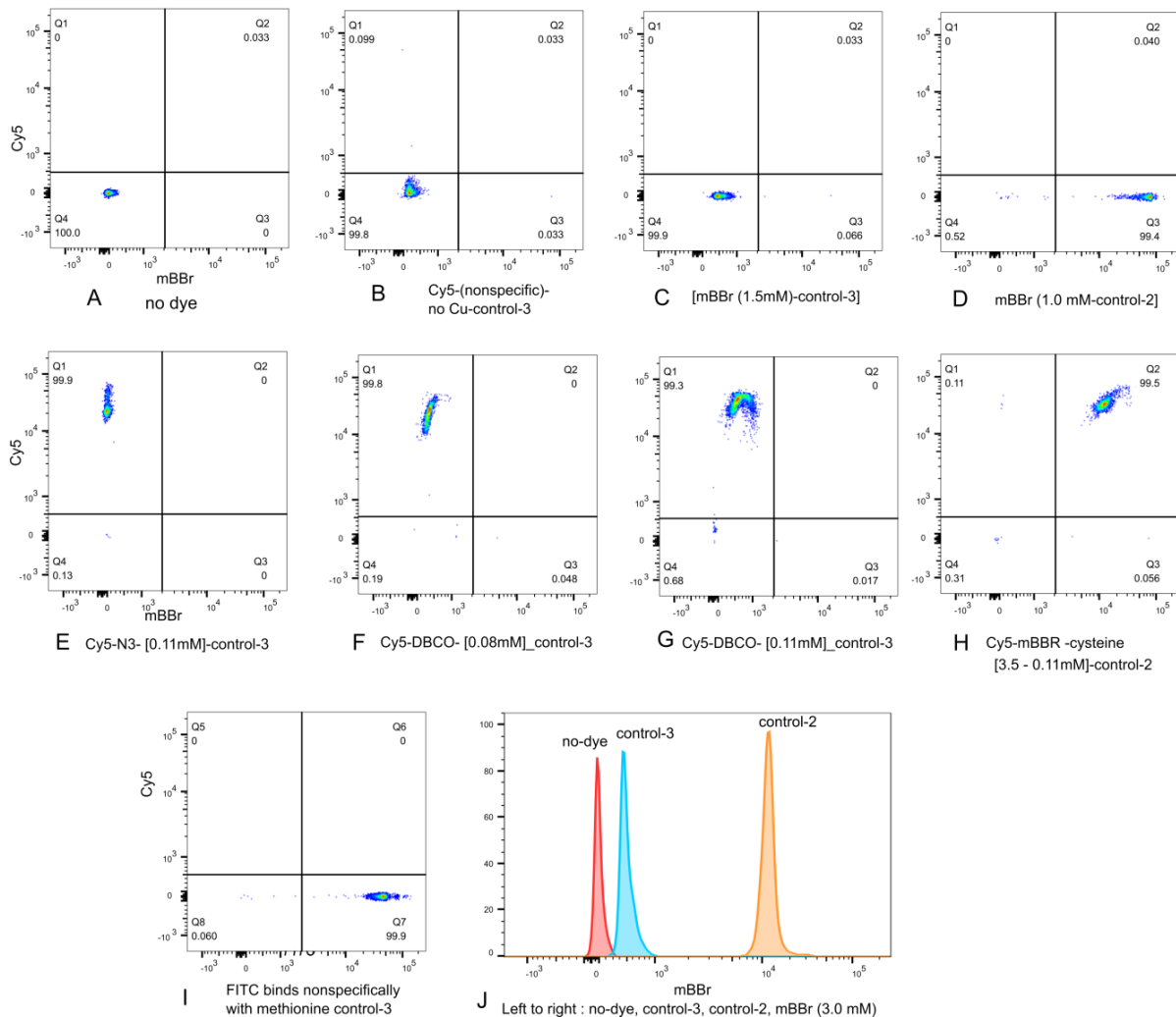


Figure S7: Summary for staining compound 2 & 3 with Cy5, mBBR and FITC dyes



After staining with mBBr, control compound **2**, which represents a linear model, fluoresces brightly in the green channel while compound **3** (cyclic model) shows almost no fluorescence (Figure S7, Panel C vs D) indicating high specificity of mBBr with free thiols but not with thioethers. In contrast, compound **2** & **3** both fluoresce brightly after staining with Fluorescein-5-Maleimide (FITC, panel I) which indicates FITC binds to the beads nonspecifically and therefore cannot be used in this assay. The sulfo-CY5 dyes tested did not show non-specific binding to the resin.

For two color staining, resin displaying compound **2** was first stained with Cy5 dye, followed by thiol deprotection and staining with mBBr. In the presence of Cy5, a higher amount of mBBr (3.5 mM, Panel H) was required to achieve similar fluorescence intensity without the Cy5 dye, although fluorescence compensation was not required. Under identical staining conditions as with mBBr, compound **2** fluoresces 100-fold more than compound **3** (Panel J).

Note: It was observed that, for fresh mBBr, a lower concentration (1.0- 3.0 mM) is optimal. However, over time mBBr loses efficiency and titration should be repeated to find the optimal dye concentration.

Section 4: Cyclization progress of DDA scaffold via LCMS/FACS

Scaffold **DDA** was synthesized on both 10 (linker-1) & 160 (linker-2) μm beads separately in spin columns (10 μm filter) after adding Fmoc-Cys-(STmp)-OH, 2-(Chloromethyl)oxazole-4-carboxylic acid (3x) and 3-(Chloromethyl)-benzoic acid respectively following the general SPS protocol (Section 2A). 3-methoxypropyl amine was used in all **X1-3** position (Figure S8A & B). After the linear precursor was synthesized, it was transferred to two separate filter plates (0.5 mg /well) and thiol protection was removed. Beads were washed with DMF, DCM, DMF-PBS (50%), and finally suspended in PBST.

Figure S8A: FACS analysis with 10 μm beads

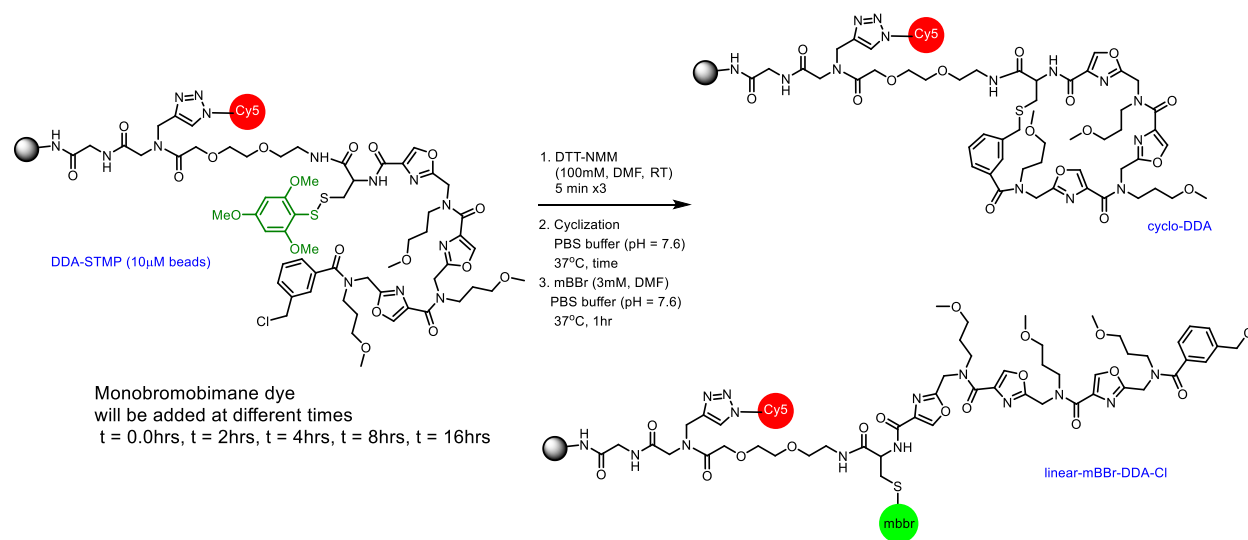
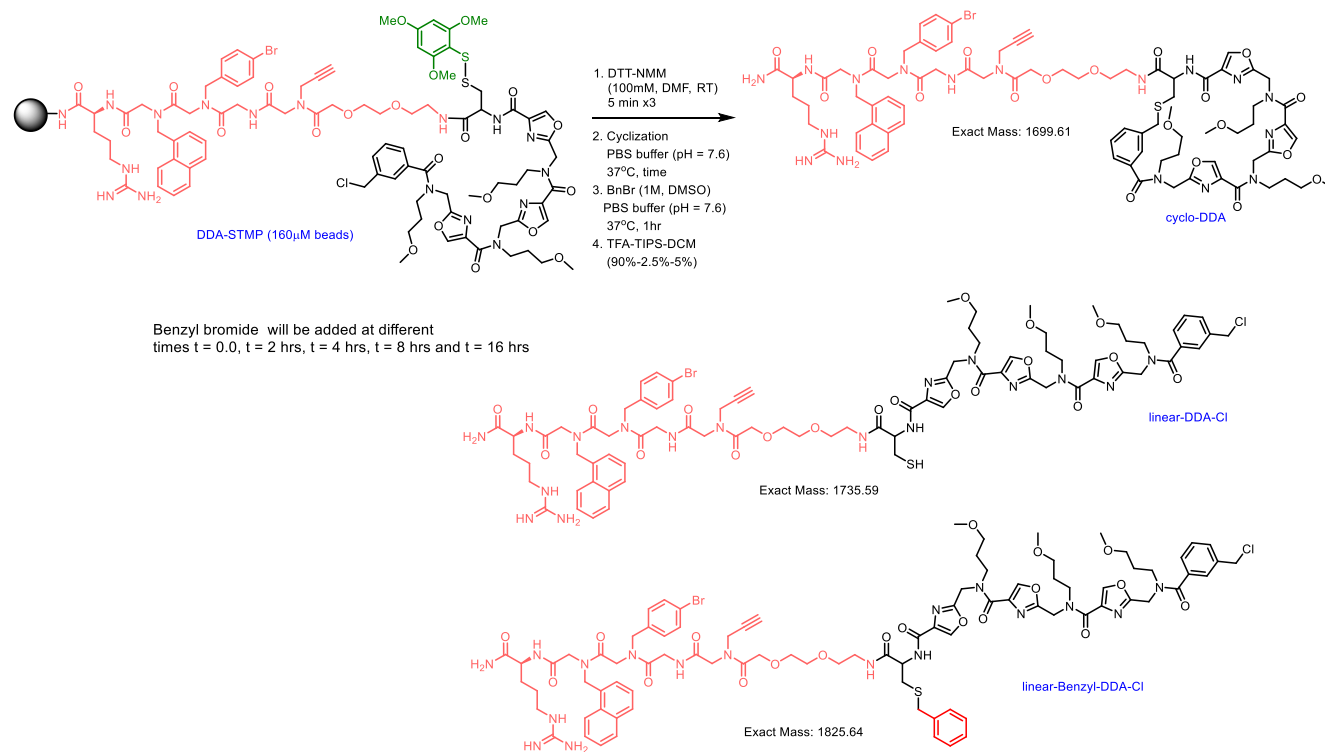
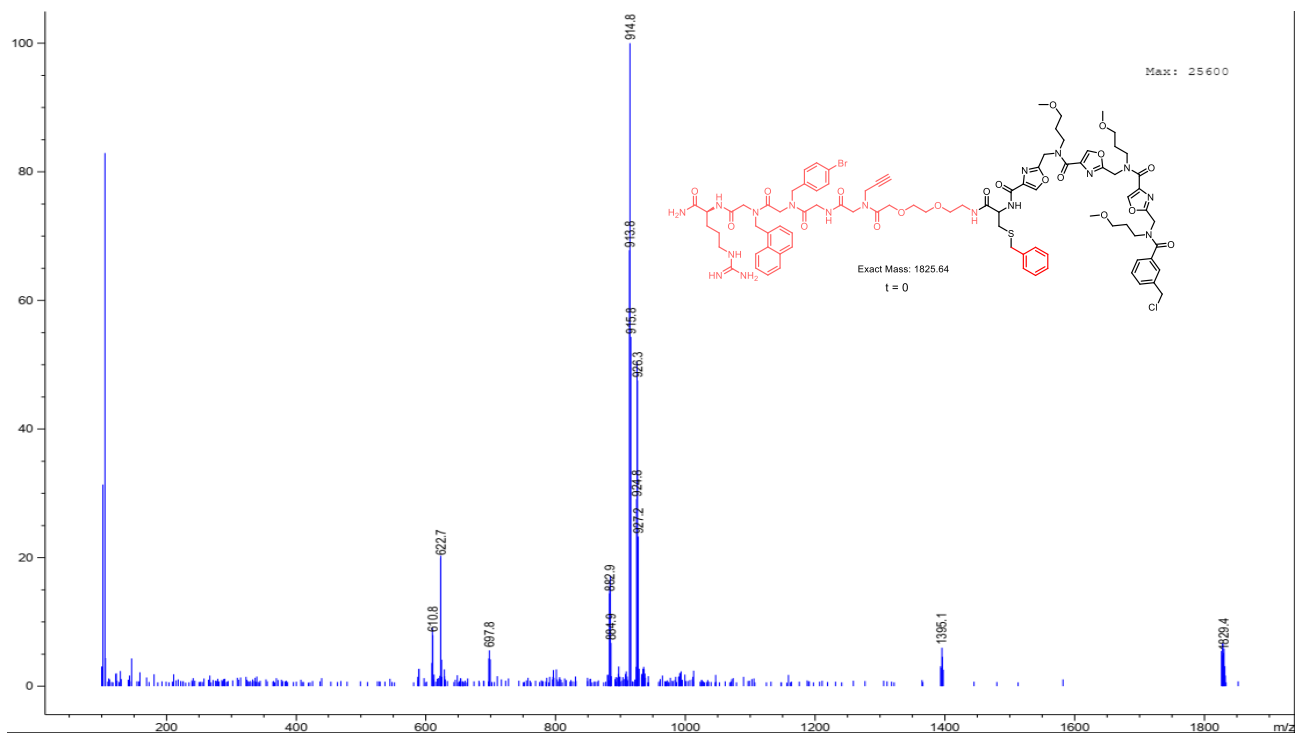


Figure S8B: LCMS analysis with 160 μm beads

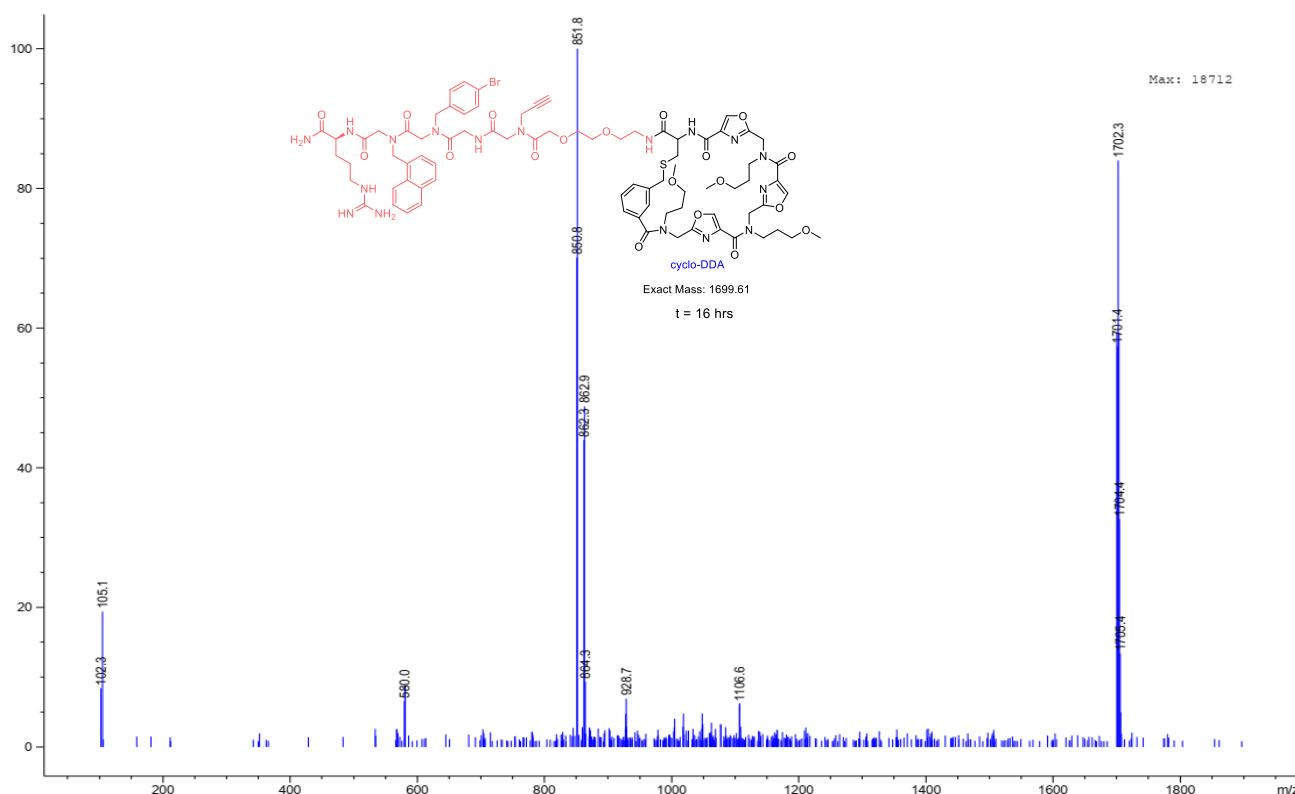


The ring closure process was monitored from point $t = 0$, onwards. After thiol exposure, mBBR (3.0 mM, 150 μL for 0.5mg /0.1 μmol of 10 μm TentaGel resin) and benzyl bromide (1.0 M, 150 μL for 0.5mg /0.2 μmol of 160 μm TentaGel resin) were added separately at $t = 0, 2, 4, 6, 8$ & 16 hrs. and incubated at 37°C for one hour. After 16 hrs., the 160 μm beads were TFA-cleaved (90% TFA, 2.5% TIPS, 2.5% thioanisole and 5% DCM, 2hrs, RT) and analyzed by LCMS, while 10 μm beads were passed through a 35 μm cells strainer and analyzed by FACS to measure fluorescence. As expected, at $t = 0$ hrs., mostly benzylated linear material (Figure **S8B**, Mw 1825) was obtained, while at $t = 16$ hrs., cyclo-**DDA** was obtained in major quantity. As cyclization progresses over time, absorbance for linear material (RT = 9.5 min) tend to diminish as expected.

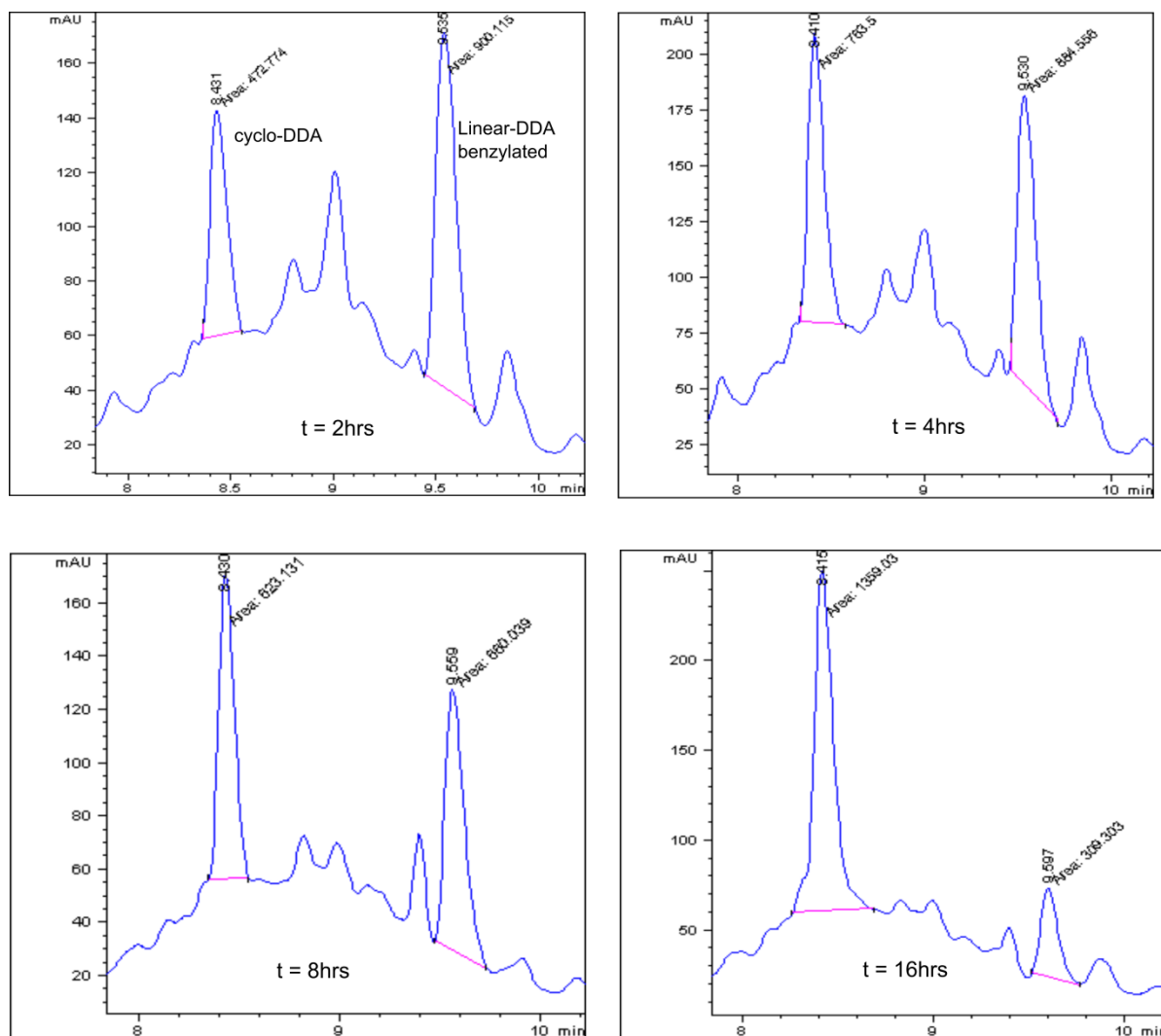
At t = 0, major ion corresponds to benzylated linear material.



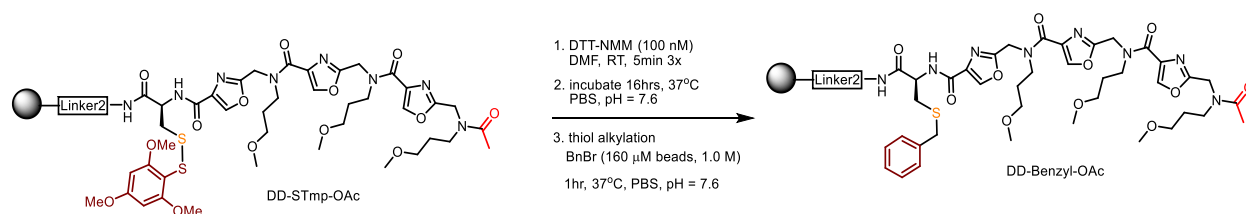
At t = 16 hrs., cyclo-DDA was obtained in major quantity.



Cyclization progress of DDA from t = 2 – 16 hrs.

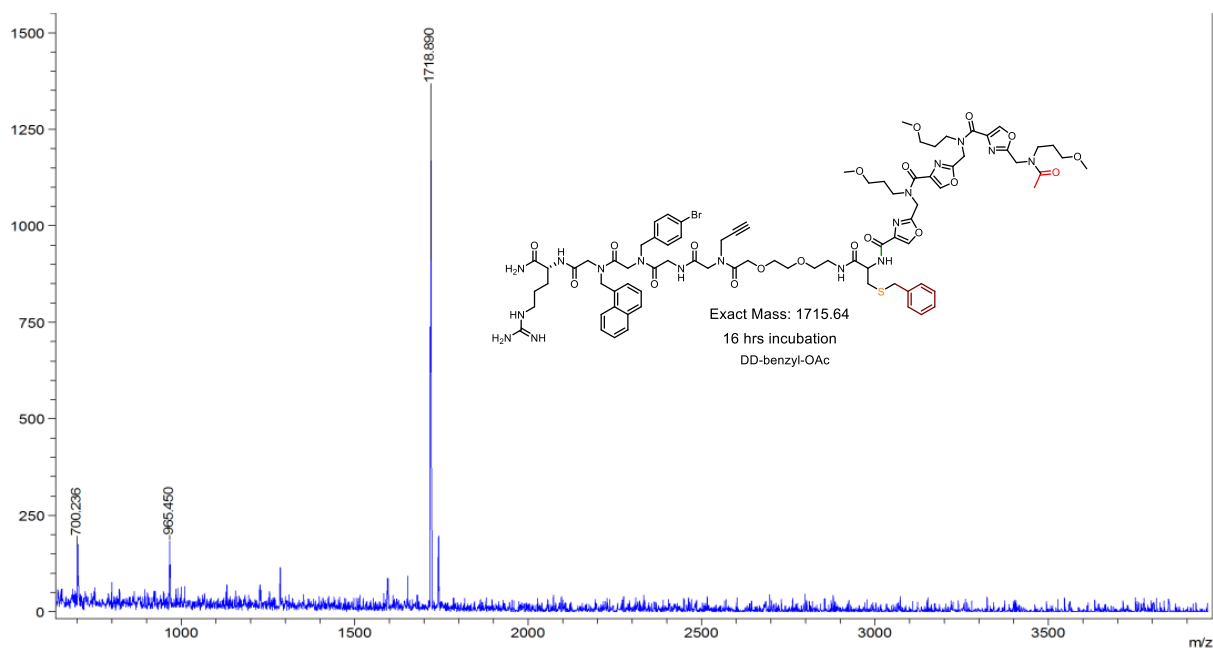


4C: Investigate stability of the sulfhydryl group after 16hrs. of incubation

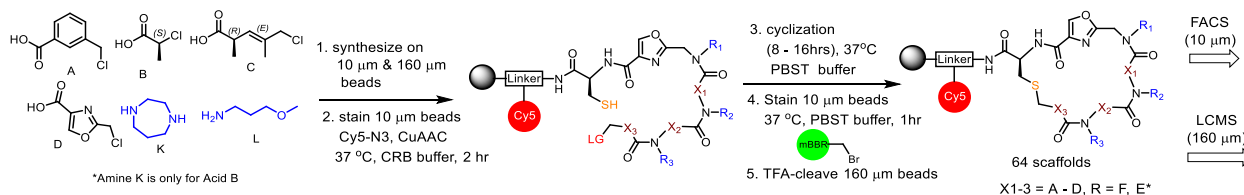


Due to concerns about general thiol oxidation occurring during 16 hours of cyclization, which would prevent mBBr addition and falsely indicate cyclization, an experiment was designed to test the stability of the sulfhydryl group. An acetylated version of the scaffold DD-STmp was synthesized on 160 μ m beads (linker

2) after adding Fmoc-Cys-(STmp)-OH. 2-(Chloromethyl)oxazole-4-carboxylic acid (3x) was the backbone unit, while 3-methoxypropyl amine was used in the amine positions. After the final amine addition, the compound was acetylated to prevent cyclization. The beads were then transferred to a filter plate (0.5mg/well), thiol protection was removed, and the resin was incubated at 37°C in PBST for 16 hrs. After 3 washes with PBST, the resin was treated with DMSO solution of benzyl bromide (final conc 1.0M, PBST) at 37°C for one hour, cleaved with TFA, and analyzed by MALDI. The data indicate that the sulfhydryl group remains intact and is able to react with the benzyl bromide, as observed below.



Section 5: Cyclization efficiency of 64 PICCO scaffolds



Synthesis & characterization of 64 scaffolds: 64 PICCO scaffolds (3.5-mer) were synthesized, in parallel, on 10 (linker-1) & 160 (linker-2) μm TentaGel resins in separate filter plates (MultiScreen Solvinert 0.45 μm Hydrophobic PTFE). Linkers 1 & 2 were functionalized with Fmoc-Cys-(STmp)-OH, then acid D, and distributed into the filter plate (0.5 mg / well). Scaffold synthesis was completed by iterative couplings of the various acids (A-D, preactivated for 5 minutes with oxyma/DEC/collidine, 1 hr., 37°C) and 3-methoxypropyl amine (1.0 M, 3 hrs., 37°C). Cy5-azide was then clicked onto the 10 μm resin only, followed by copper salt removal with BTP-BB, overnight. Thiol protection was then removed on both 10 μm and 160

μm resins with 100 mM DTT and 100 mM NMM, in DMF solution (3 x 5 min) at RT. The beads were then washed with DMF, DCM, and DMF-PBS, then suspended in PBST (pH = 7.6) buffer and incubated for 8 hrs. at 37°C, for cyclization. With synthesis complete, the 10 μm beads were then washed with and transitioned to PBST, labeled with mBBR (3.0 mM, 37°C, 1 hr), washed with DMF, DCM, and DMF-PBS buffer, then resuspended in PBST and filtered (35 μm) into 64 FACS tubes for FACS analysis. The 160 μm beads, meanwhile, were washed, suspended in DMF for one hour, and cleaved (90% TFA, 2.5% TIPS, 2.5% thioanisole and 5% DCM) for mass analysis.

Table T4: Ring closure summary (FACS & LCMS) of 64 Scaffolds

	1	2	3	4	7	8	9	10
K	AAA	ABA	ACA	ADA	AAB	ABB	ACB	ADB
L	BAA	BBA	BCA	BDA	BAB	BBB	BCB	BDB
M	CAA	CBA	CCA	CDA	CAB	CBB	CCB	CDB
N	DAA	DBA	DCA	DDA	DAB	DBB	DCB	DDB
O	AAD	ABD	ACD	ADD	AAC	ABC	ACC	ADC
P	BAD	BBD	BCD	BDD	BAC	BBC	BCC	BDC
Q	CAD	CBD	CCD	CDD	CAC	CBC	CCC	CDC
R	DAD	DBD	DCD	DDD	DAC	DBC	DCC	DDC

Note1: “3.5-mer” means the scaffold has four acids and three amines, but the first acid is always acid D. “2.5-mer means” scaffold has three acids and two amines.

Note2: Although 160 μm beads had 8 hrs. incubation time, cyclization may continue during and after TFA cleavage reaction. However, cyclization was frozen for the selected two-color population on 10 μm bead after mBBR addition, but continued during TFA cleavage. This indicates that few scaffolds have more conformational constraint than others and need more time to cyclize.

Note3: Some scaffolds cyclized as it is (3.5-mer to 3.5-mer) and some has incomplete acid addition residues, which in most cases also cyclized (2.5-mer).

5A: Ring closure analysis - summary of 64 scaffolds:

Each scaffold is analyzed by how much linear starting material (3.5-mer) is left after cyclization for 8 hrs. If a scaffold had 90% cyclization, it was considered complete. If it had 40% or more linear material left, it was considered incomplete. Due to incomplete synthesis reactions, some “2.5-mer” scaffolds were generated (ABA, ABB, BBA). Regardless, these compounds mostly cyclized as well. Ring closure is primarily reviewed for 3.5-mer compounds and examined that any 2.5-mer linear fragments contributed as false positive. In the LCMS analysis, combined area of all the cyclic compounds are compared against combined area of all the linear compounds.

Table T5: LCMS analysis of ring closure of 64 scaffolds

Entry	Position	Scaffold	cyclization status		linear SM	nature		comment
			FACS	mass-spec	left(%)	cyclic: linear	of scaffold	
1	K1	AAA	incomplete	complete	7.5	93.0:7.0		
2	K2	ABA	complete	complete				
3	K3	ACA	incomplete	complete				
4	K4	ADA	complete	complete	3.8	96.2:3.7		
5	K7	AAB	complete	incomplete	70.7	58.5: 41.4	difficult to cyclize	
6	K8	ABB	complete	incomplete	17.2	85.4: 14.7		
7	K9	ACB	incomplete	incomplete	28.8	69.6:20.1		
8	K10	ADB	incomplete	incomplete	20.9	82.6: 17.3		
9	L1	BAA	incomplete	complete				
10	L2	BBA	complete	complete				
11	L3	BCA	complete	complete				
12	L4	BDA	complete	complete				
13	L7	BAB	complete	complete	9.7	91.0: 8.9		
14	L8	BBB	complete	complete				
15	L9	BCB	complete	complete	4.7	95.5:4.5		Linear-2.5 mer
16	L10	BDB	complete	incomplete	30.8	76.4: 23.6		
17	M1	CAA	complete	complete				
18	M2	CBA	complete	complete				
19	M3	CCA	complete	complete				
20	M4	CDA	complete	complete				
21	M7	CAB	complete	incomplete	45	69.0: 31.0	difficult to cyclize	
22	M8	CBB	complete	incomplete	33.4	74.7: 25.2		linear- 3.0 mer
23	M9	CCB	incomplete	incomplete	66.7	60.0: 40.2	difficult to cyclize	
24	M10	CDB	complete	incomplete	27.2	78.5: 21.4		
25	N1	DAA	complete	complete				
26	N2	DBA	complete	complete				
27	N3	DCA	complete	complete				
28	N4	DDA	complete	complete				
29	N7	DAB	complete	incomplete	27.7	78.4: 21.6		
30	N8	DBB	complete	incomplete	34	74.6: 25.4		
31	N9	DCB	incomplete	incomplete	13.4	88.1: 11.8		
32	N10	DDB	complete	complete				
33	O1	AAD	incomplete	complete				

34	O2	ABD	complete	complete				
35	O3	ACD	incomplete	complete				
36	O4	ADD	complete	complete				
37	O7	AAC	complete	complete	2	98.1: 2.0		
38	O8	ABC	complete	complete				
39	O9	ACC	complete	complete				
40	O10	ADC	incomplete	complete	5	95.2: 4.8		
41	P1	BAD	complete	complete				
42	P2	BBD	complete	complete				
43	P3	BCD	complete	complete				
44	P4	BDD	complete	complete				
45	P7	BAC	complete	complete				
46	P8	BBC	complete	complete				
47	P9	BCC	complete	complete				
48	P10	BDC	incomplete	complete				
49	Q1	CAD	complete	complete				
50	Q2	CBD	complete	complete				
51	Q3	CCD	complete	complete				
52	Q4	CDD	complete	complete				
53	Q7	CAC	incomplete	complete				
54	Q8	CBC	complete	complete				
55	Q9	CCC	incomplete	complete				
56	Q10	CDC	incomplete	complete				
57	R1	DAD	complete	complete				
58	R2	DBD	complete	complete				
59	R3	DCD	complete	complete				
60	R4	DDD	complete	complete				
61	R7	DAC	complete	complete				
62	R8	DBC	complete	complete				
63	R9	DCC	complete	complete				
64	R10	DDC	complete	complete				

For fluorescence and LCMS data, please see section 9.

Section 6: Monitor on-resin cyclization progress in presence of DNA

To test for inhibition of macrocyclization by the encoding DNAs, cyclization progress was measured on resins that displayed full-length barcodes. Compounds **DDD**, **DDA**, **DDE** and **EBB** were synthesized on 10 & 160 μm beads (~ 5.0 mg). Headpiece DNA (0.008 equiv.) & 1,3-azidopropane (1.5 equiv., added two hours after azido-HDNA addition) were clicked together via a CuAAC reaction, and a full length, test-DNA tag was ligated onto the 10 μm beads. After linear precursor synthesis was complete, Cy5-DBCO was attached (final conc. 0.11 mM, 150 μL CRB buffer, for 0.5 mg, 10 μm beads, ON, 37°C) via SPAAC reaction in a filter plate. The thiol-protecting STMP group was then removed and the compounds were cyclized for 16 hrs. at 37°C. The 10 μm beads were then treated with mBBR (final conc. 9.0 mM, 150 μL PBST, 2 hrs., 37°C) while the 160 μm beads were treated with benzyl bromide (1.0 M, 150 μL PBST, 2 hrs., 37°C) to freeze cyclization during or after TFA cleavage. DNA tags from the 10 μm beads were then PCR-amplified and Sanger sequenced. Ring closure status was then analyzed by FACS and MALDI.

Figure S10: Cyclization and staining in the presence of a DNA tag

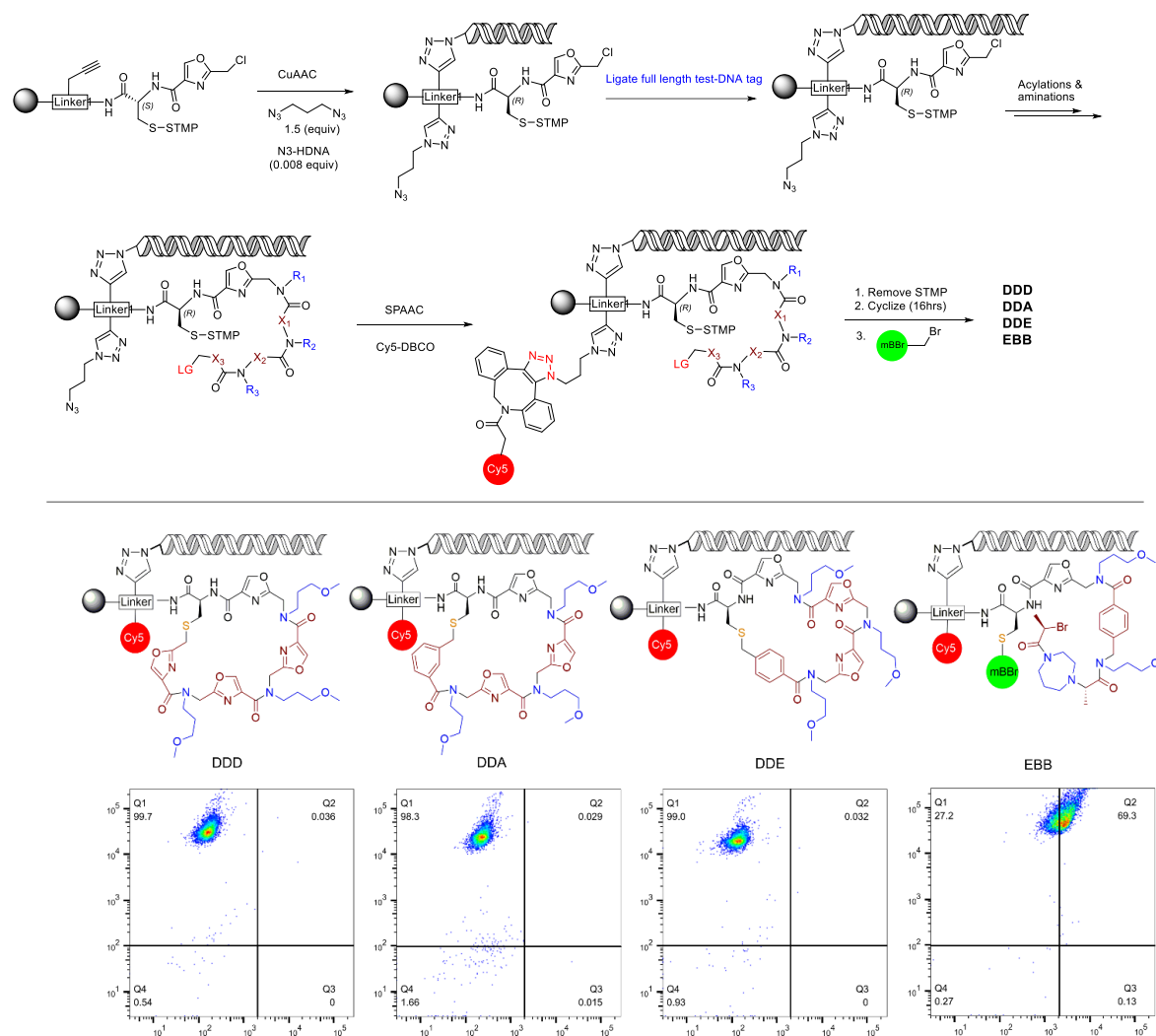
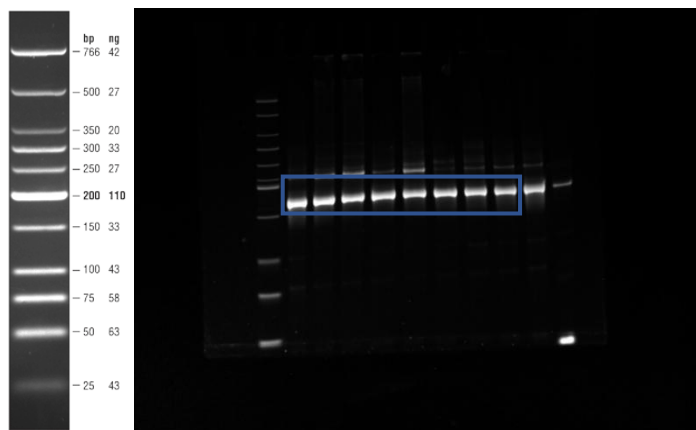


Figure S11: DNA tag amplification of compounds DDD, DDA, DDE and EBB from 10 µm beads (1500 beads) in two replicates followed by controls (+ve, -ve) and Sanger sequencing results.



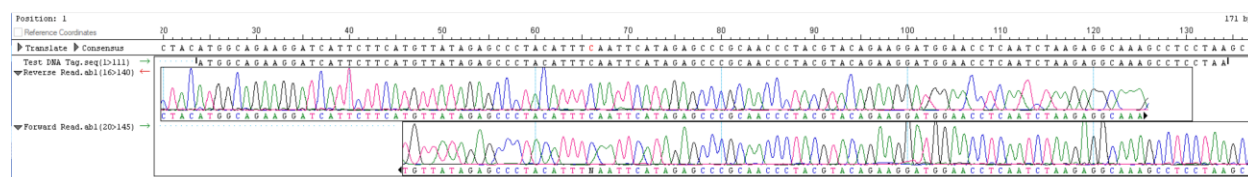
Test-DNA tags of these beads were amplified (Table T7, 1st PCR), purified (5.0 µL) by native PAGE gel extraction (6%, 1 x TBE, 4 W, 60 min), with 1X SYBR Gold staining. Gel slices containing 167bp DNA products were excised and suspended in DI water (50.0 µL) in a clean tube overnight. The samples were then centrifuged (5 min, 10,000 RCF), and the supernatants were transferred to clean tubes, diluted 1:10000 in BTPWB, and used as template for Sanger-primer-addition PCRs. The samples were again gel purified by native PAGE gel extraction (233bp DNA), suspended in DI water, centrifuged, and sent for Sanger sequencing (GENEWIZ).

All four samples had same test-DNA tag. They are shown below.

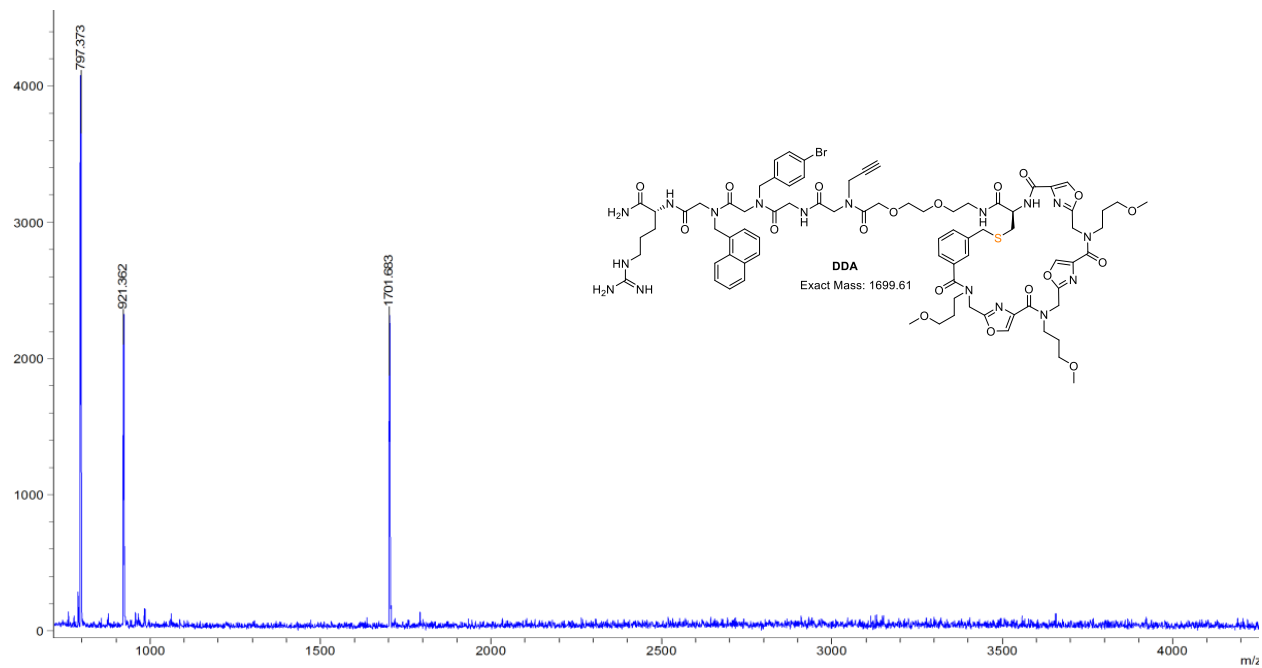
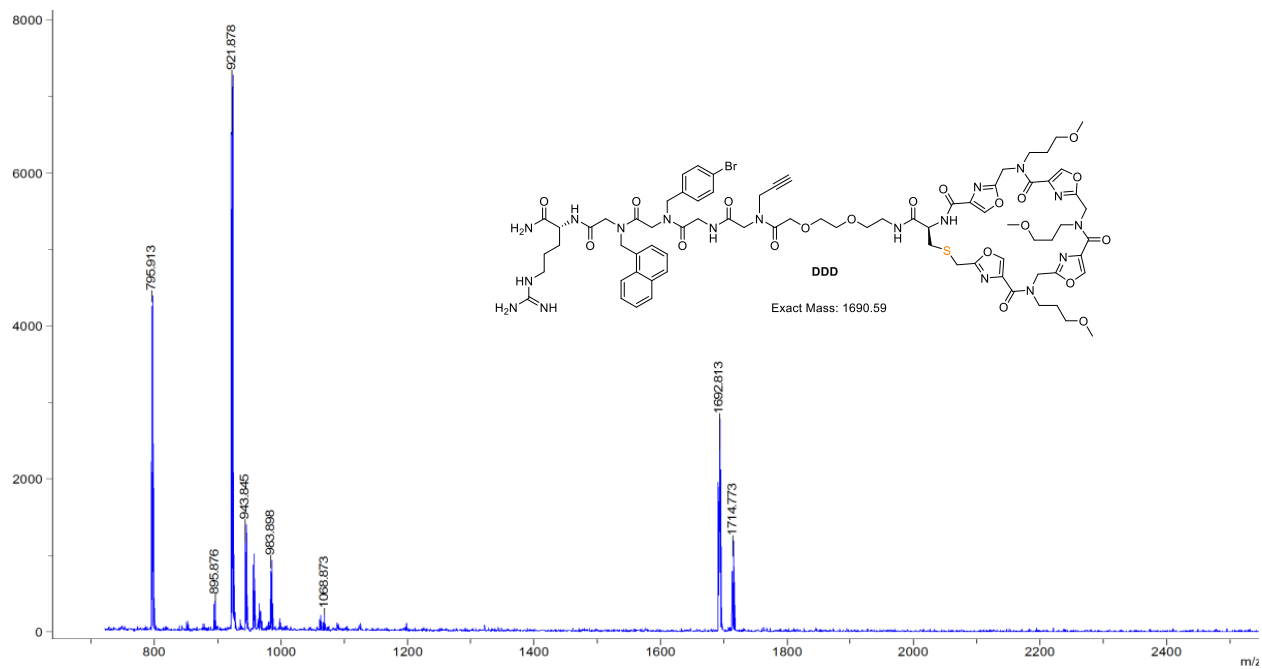
Expected DNA sequence :

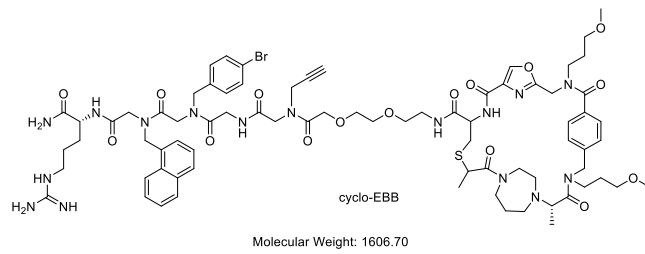
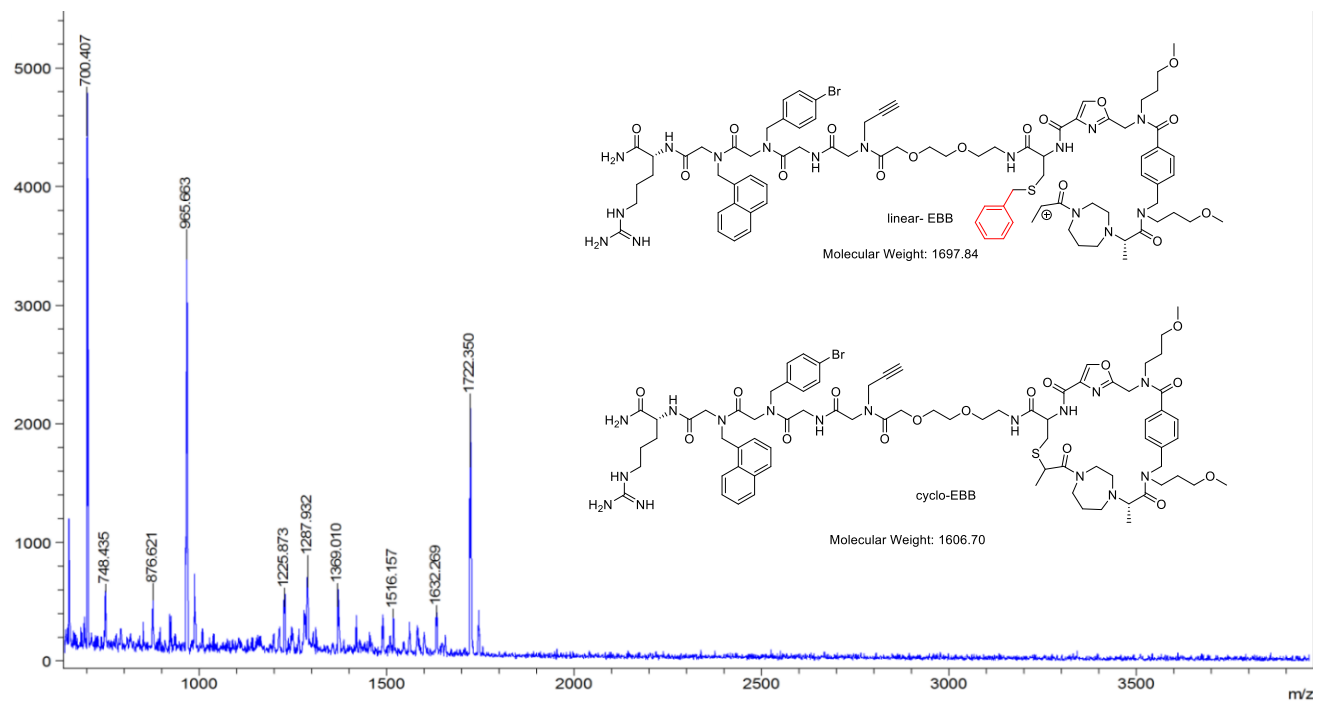
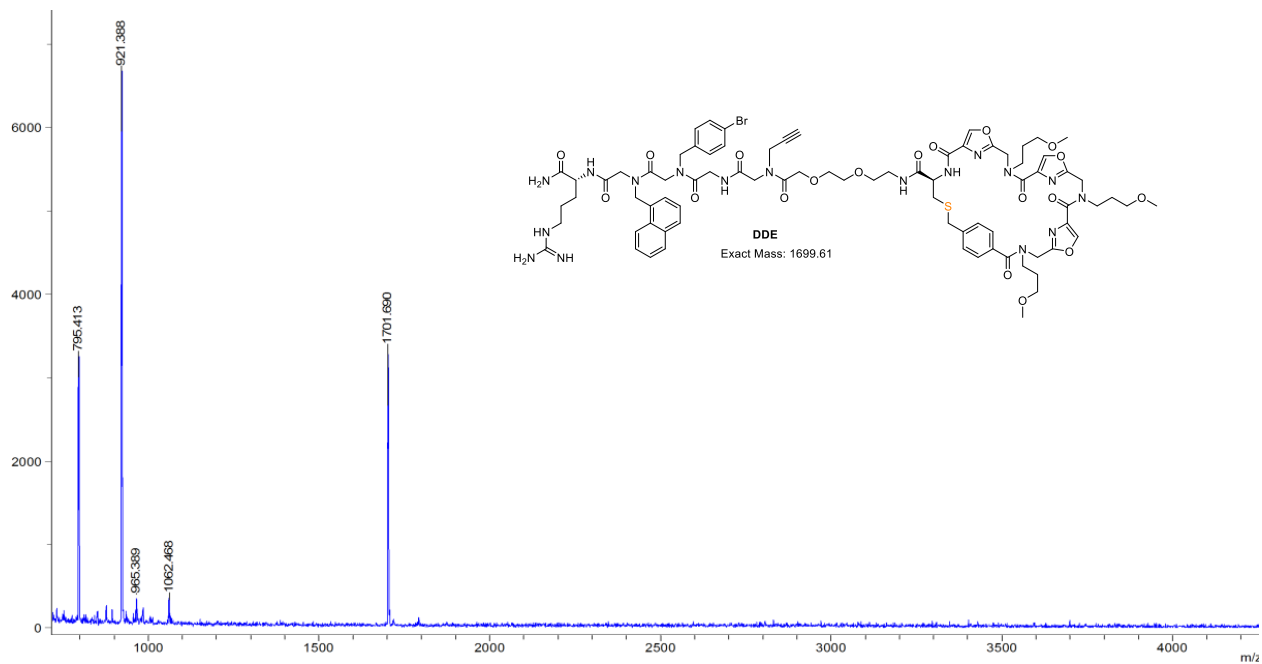
1107[+],2209[+],1306[+],2406[+],1506[+],2604[+],1707[+],2802[+],1901[+],2A01[+]

Found sequence as expected. All 4 samples had same test DNA tag below.

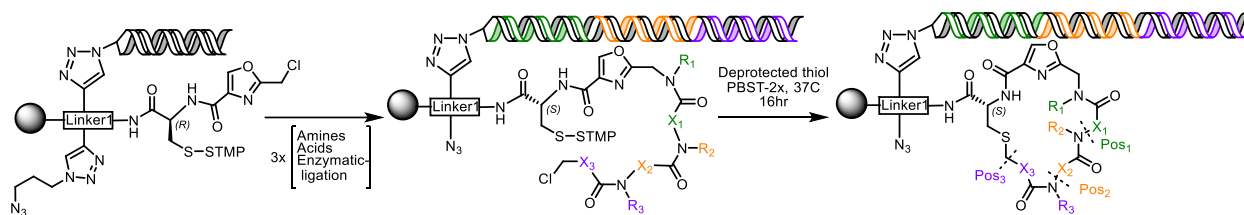


6A: Mass analysis of compounds DDD, DDA, DDE and EBB





Section 7: Synthesis & quality control of OBOC thioether macrocyclic DEL for ring closure.



Position 1

1st amine-acid													
	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410		1309	1310
1301												2401	
1302												2402	
1303												2403	
1304												2404	

Position 2

2nd amine-acid													
	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610		1509	1510
1501												2601	
1502												2602	
1503												2603	
1504												2604	

Position 3

3rd amine-acid													
	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810		1709	1710
1701												2801	
1702												2802	
1703												2803	
1704												2804	

Synthesis & analysis: Linker-1 was synthesized on 25.0 mg of 10 μ m TentaGel amine beads, Fmoc-Cys(STmp)-OH and acid **D** were then added, in succession. Azido headpiece-DNA and 1, 3-diazidopropane

were attached via CuAAC reaction following general method **2C**. The beads were then distributed into a filter plate (0.5 mg/ well, 48 wells, Millipore MultiScreen Solvinert 0.45 μ m Hydrophobic PTFE). Subsequently, FWD primer along with 11xx-22xx primers were ligated, beads were pooled and redistributed. Amines (1.0 M, 150.0 μ L, 3 hrs., 37°C) were reacted first, followed by acid additions for each position **X1-3** (Acid/DIC/Oxyrna/Collidine: 80/126/80/80mM, pre-activated, 150.0 μ L, 3hrs., 37°C) following the general scheme **7A**. Beads were then washed (150.0 μ L, DMF, DCM, DMF, BTP-WB) and suspended in BTP-WB overnight before encoding.

X1-3 positions were encoded with primers 13xx-24xx, 15xx-26xx and 17xx-28xx, respectively. In general, an encoding oligonucleotide ligation mixture containing T4 DNA ligase (15000 U) in BTP-LB (1.35X) was prepared and aliquoted into all plate wells (110 μ L). Stocks of \approx 13XX[\pm] (Table **T5**) and \approx 24XX[\pm] were annealed and then added to the appropriate wells (final conc for each codes \sim 10mM, total vol 150uL) the plate was sealed with adhesive foil, and incubated with agitation (4h, RT, 800 rpm).

After each ligation, beads were transitioned to and equilibrated in DMF overnight before the chemistry steps. The library- id (1901-2A07) and reverse primer were then ligated to complete the DNA barcodes. The beads were then washed with and equilibrated with BTP-WB buffer, overnight. An aliquot of the library (\sim 5.0 mg) was transferred to a fritted spin-column (Bio-Rad, large filter, 10- μ m pore size) and re-suspended in CRB, DMSO solution of Cy5-DBCO (final conc 0.11 mM, 150uL) was added and incubated at 37°C for overnight (2hr also works). The beads were then washed with BTPWB, DMF, and DCM before re-suspending in DMF for overnight. The thiol-protecting STmp group was then removed (100.0 mM DTT-NMM in DMF, 500 μ L, 3x, RT). The beads were then suspended in PBST (1.00 ml) and incubated at 37°C to monitor cyclization. After 8, 12 & 16 hrs., aliquots of beads were transferred to a filter pate, stained with mBBri (9.0 mM, DMF, 37°C, 2hrs) , and analyzed by flow cytometry. Beads that have higher fluorescence intensities than control-**3** (due to incomplete cyclization) were separated and collected.

Sorted beads were transferred from the FACS collection tubes to clean centrifuge tubes (0.2 mL) and concentrated (to \sim 5.0 μ L). Encoding DNA tags were amplified (Table **T7**, 1st PCR) and purified (5.0 μ L) by native PAGE gel extraction (6%, 1 x TBE, 4 W, 60 min). Gel slices containing 167bp DNA products were excised and suspended in DI water (50.0 μ L) in a clean tube overnight. The samples were then centrifuged (5 min, 10,000 RCF), transferred to a clean tube, diluted to (1:10000 in BTPWB), and used as template for Illumina primer addition PCRs. Illumina index primers, along with the P5-univ-FWD primer, SuperFi buffer, SuperFI DNAP, and dNTP mix were premixed, 1.0 μ L of the template from the 1st PCR was added, and the mixture was thermally cycled (Table **T7**). The samples were again gel purified (289bp DNA), eluted with DI water, and deep sequenced.

Table T6. Oligonucleotide sequence lookup table.

Overhangs		Coding Sequences			
Overhang #	Sequence	Identifier #	Sequence	Identifier #	Sequence
≈X1XX[+]	/5Phos/ATGG	≈1X01[+]	AAGAGAGG	≈2X01[+]	AGTTTCAG
≈X1XX[-]	/5Phos/TGA	≈1X01[-]	CCTCTCTT	≈2X01[-]	CTGAAACT
≈X2XX[+]	/5Phos/TCA	≈1X02[+]	ACGGAGCA	≈2X02[+]	AACCTCAA
≈X2XX[-]	/5Phos/AAC	≈1X02[-]	TGCTCCGT	≈2X02[-]	TTGAGGTT
≈X3XX[+]	/5Phos/GTT	≈1X03[+]	ACAAAGAG	≈2X03[+]	AATCCCAT
≈X3XX[-]	/5Phos/TAG	≈1X03[-]	CTCTTTGT	≈2X03[-]	ATGGGATT
≈X4XX[+]	/5Phos/CTA	≈1X04[+]	AAGGAGGT	≈2X04[+]	AACCCTAC
≈X4XX[-]	/5Phos/GAA	≈1X04[-]	ACCTCCTT	≈2X04[-]	GTAGGGTT
≈X5XX[+]	/5Phos/TTC	≈1X05[+]	AGAAAGCA	≈2X05[+]	ATCCTCTC
≈X5XX[-]	/5Phos/GCG	≈1X05[-]	TGCTTTCT	≈2X05[-]	GAGAGGAT
≈X6XX[+]	/5Phos/CGC	≈1X06[+]	ATAAAGGT	≈2X06[+]	ATTCTCCG
≈X6XX[-]	/5Phos/AAC	≈1X06[-]	ACCTTTAT	≈2X06[-]	CGGAGAAT
≈X7XX[+]	/5Phos/GTT	≈1X07[+]	ATAGAAGG	≈2X07[+]	CGCCTTCA
≈X7XX[-]	/5Phos/TAG	≈1X07[-]	CCTTCTAT	≈2X07[-]	TGAAGGCG
≈X8XX[+]	/5Phos/CTA	≈1X08[+]	ATGGGAGT	≈2X08[+]	CGTTCCTG
≈X8XX[-]	/5Phos/AGGC	≈1X08[-]	ACTCCCAT	≈2X08[-]	CAGGAACG
		≈1X09[+]	GCAAAGGA	≈2X09[+]	CTCTCCAC
		≈1X09[-]	TCCTTTGC	≈2X09[-]	GTGGAGAG
		≈1X10[+]	TTGAGGAT	≈2X10[+]	TCCTCTTA
		≈1X10[-]	ATCCTCAA	≈2X10[-]	TAAGAGGA

Primers

PCR Primer #	Sequence
≈0001[+]	/5Phos/GCCGCCAGTCCTGCTCGCTTCGCTAC
≈0001[-]	/5Phos/CCATGTAGCGAAGCGAGCAGGACTGGGCGGCGG
≈0901[+]	/5Phos/GCCTGTTTGCCCGCCAGTTGTTGTGCCAC
≈0901[-]	/5AmMC6/GTGGCACAACAAC TGCGGGCAAC

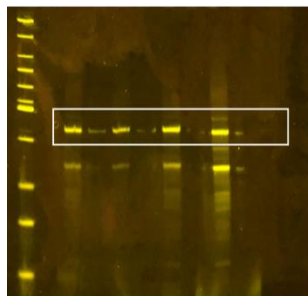
Table T7: PCR amplification of encoding DNA tags from beads.

1st PCR: Amplification of encoding DNA tags from beads					
rxn volume:	50	total rxns:	6		
reagent	vol	stock	MM volume	Cycle:	
initial vol	10		60		
5X SuperFi Buffer	10.0	5X	60.0	1	98°C, 30 sec
0.2 mM dNTP Mix	1.0	10 mM	6.0	2	98°C, 10 sec.
0.3 µM ABM99-2A-07*	1.5	10 uM	9.0	3	46°C, 10 sec.
0.3 µM ABM063	1.5	10 uM	9.0	4	72°C, 15 s
SuperFi DNAP	0.5	2U/ul	3.0	5	Goto 2, 25 times
ddH2O	25.5	ddH2O	153.0	6	4" hold
total	50.0	total	300.0		
*library specific rev primer					

Table T8: NGS sample preparation- addition of Illumina index primer

2nd PCR- add illumina rev-index and fwd primers					
rxn volume:	50	total rxns:	9		
reagent	vol	stock	MM volume	Cycle 2:	
5X SuperFi Buffer	10.0	5X	90.0	1	98°C, 2 min
0.2 mM dNTP Mix	1.0	10 mM	9.0	2	98°C, 10 sec.
0.3 µM P5 Univ Fwd2	1.5	10 uM	13.5	3	36°C, 10 sec.
0.3 µM Index Rev (1-4)*	1.5	10 uM		4	72°C, 15 s
SuperFi DNAP	0.5	2U/ul	4.5	5	Goto 2, 25 times
DNA Template (1k & 10k)fold diluted	1.0			6	4" hold
ddH2O	34.5	ddH2O	310.5		
total	50.0	total	427.5		
*Illumina index					

1st PCR: 25 Cycles



2nd PCR: Illumina primer addition, 10Kx dilution

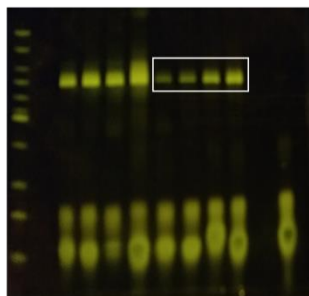


Figure S12: Fluorescence readout of DNA-linked control-3. Methionine-DNA-CY5 beads were treated with mBBR and analyzed by FACS. This is a negative control for analyzing OBOC macrocyclic DEL through a flow cytometer.

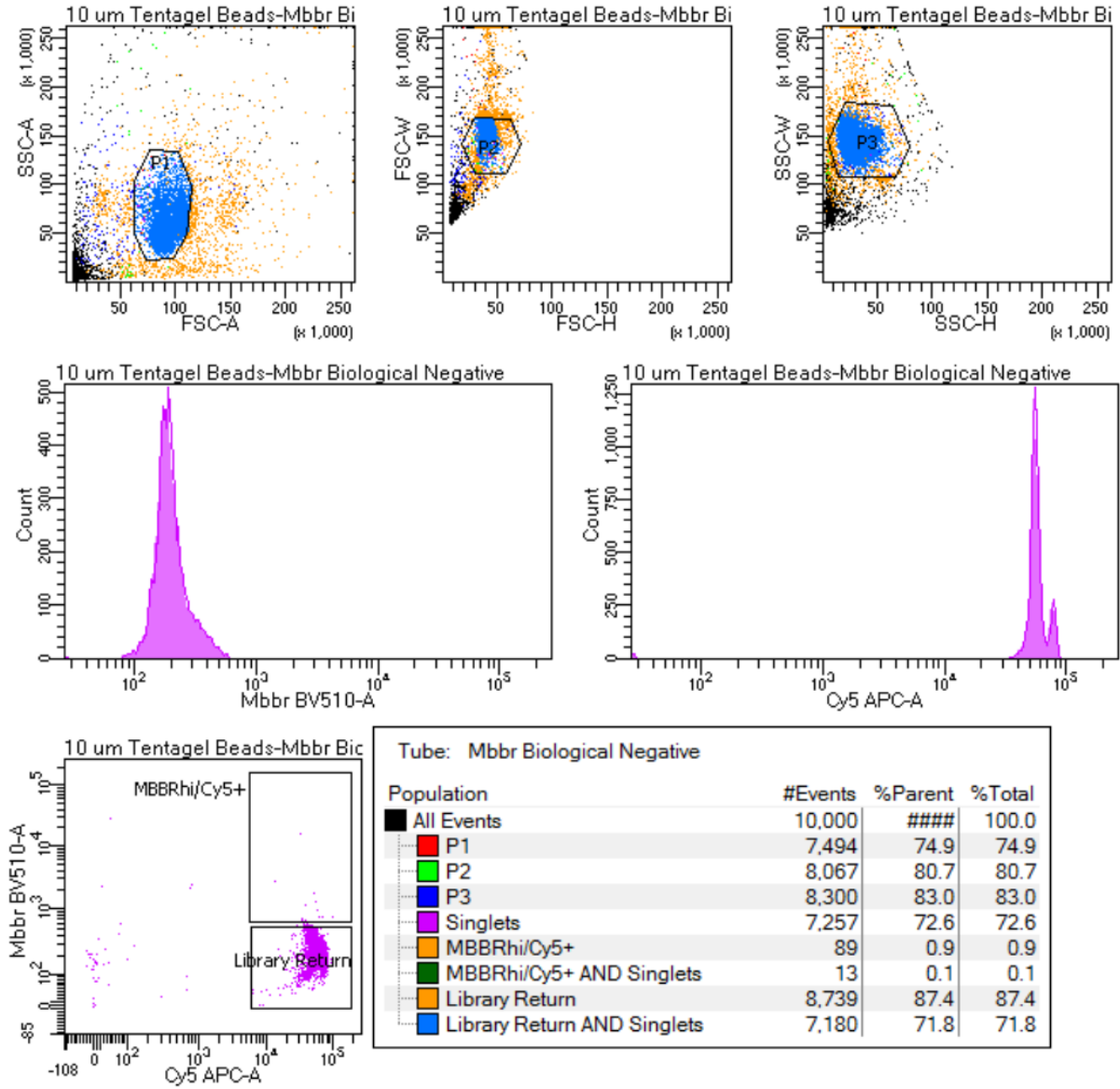
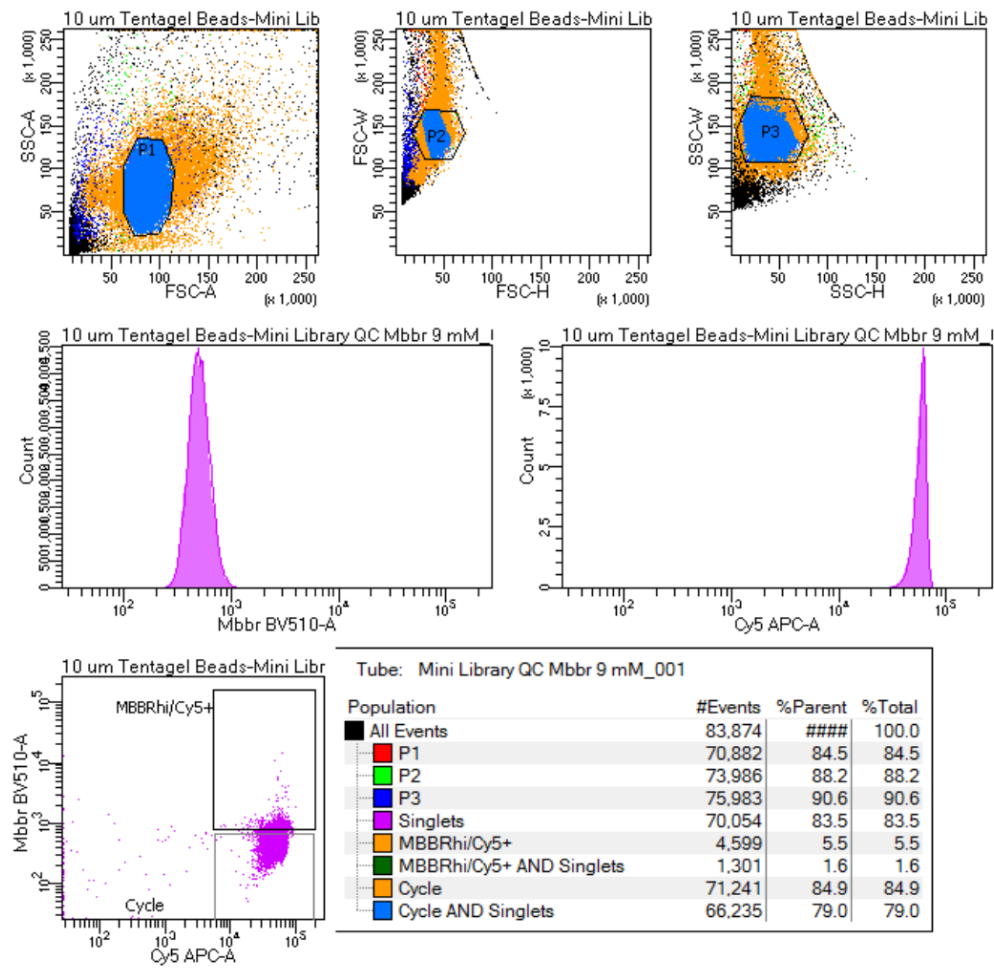
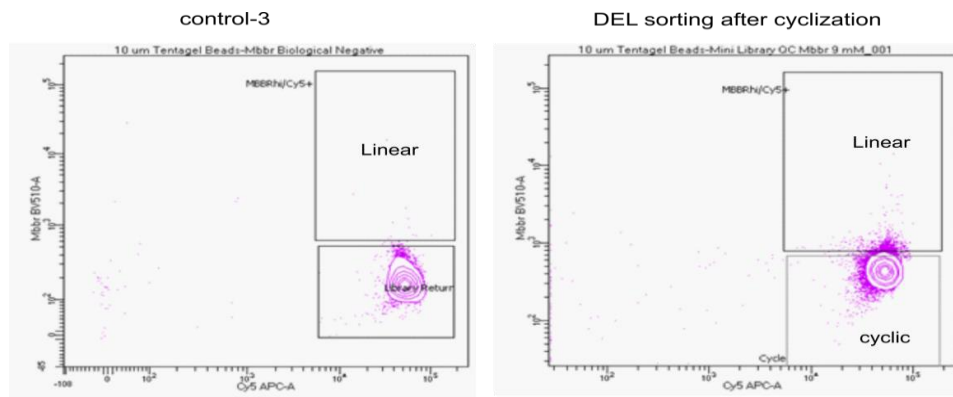


Figure S13: Fluorescence readout of beads from the macrocyclic DEL. After cyclization, beads were stained with Cy5-DBCO and MBBR (9.0 mM) and analyzed by FACS.

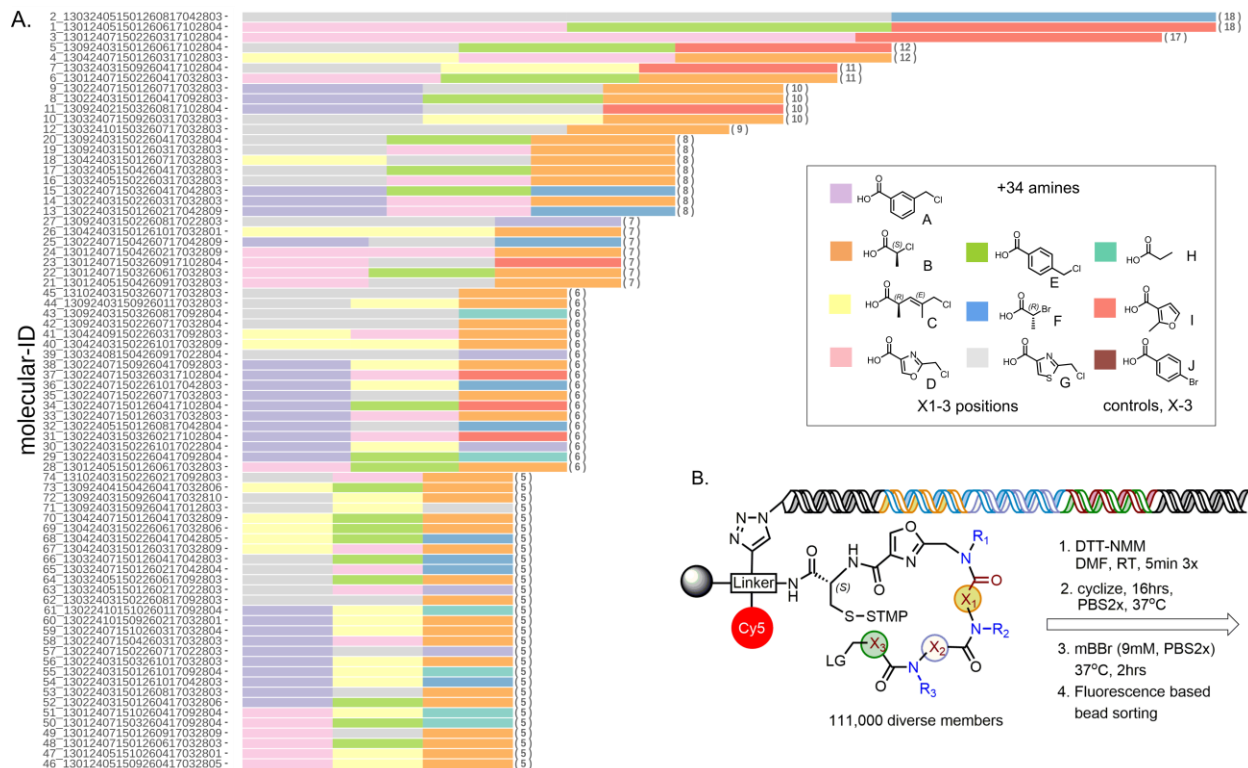


Sorting result: Beads that appeared in the cyclic region (MBBR/Cy5+) were collected and their encoding tags were deep sequenced.



For sequencing analysis of naïve and FACS-sorted beads, please see **Sections 10 & 11**, respectively.

Figure S14: (A) After deep sequencing, difficult to cyclize scaffolds were arranged by count (up to 5 copies, 74 scaffolds). Each line indicates a combination of three acids at position X1-3 for a scaffold along with its molecular ID (left) and the number of times it was present in the collected pool (right). (B) Acids A – G and amines were used in position X1-X3 to construct DEL scaffolds. 4% of DEL members were capped with acid H & I to keep them as linear controls for FACS analysis.



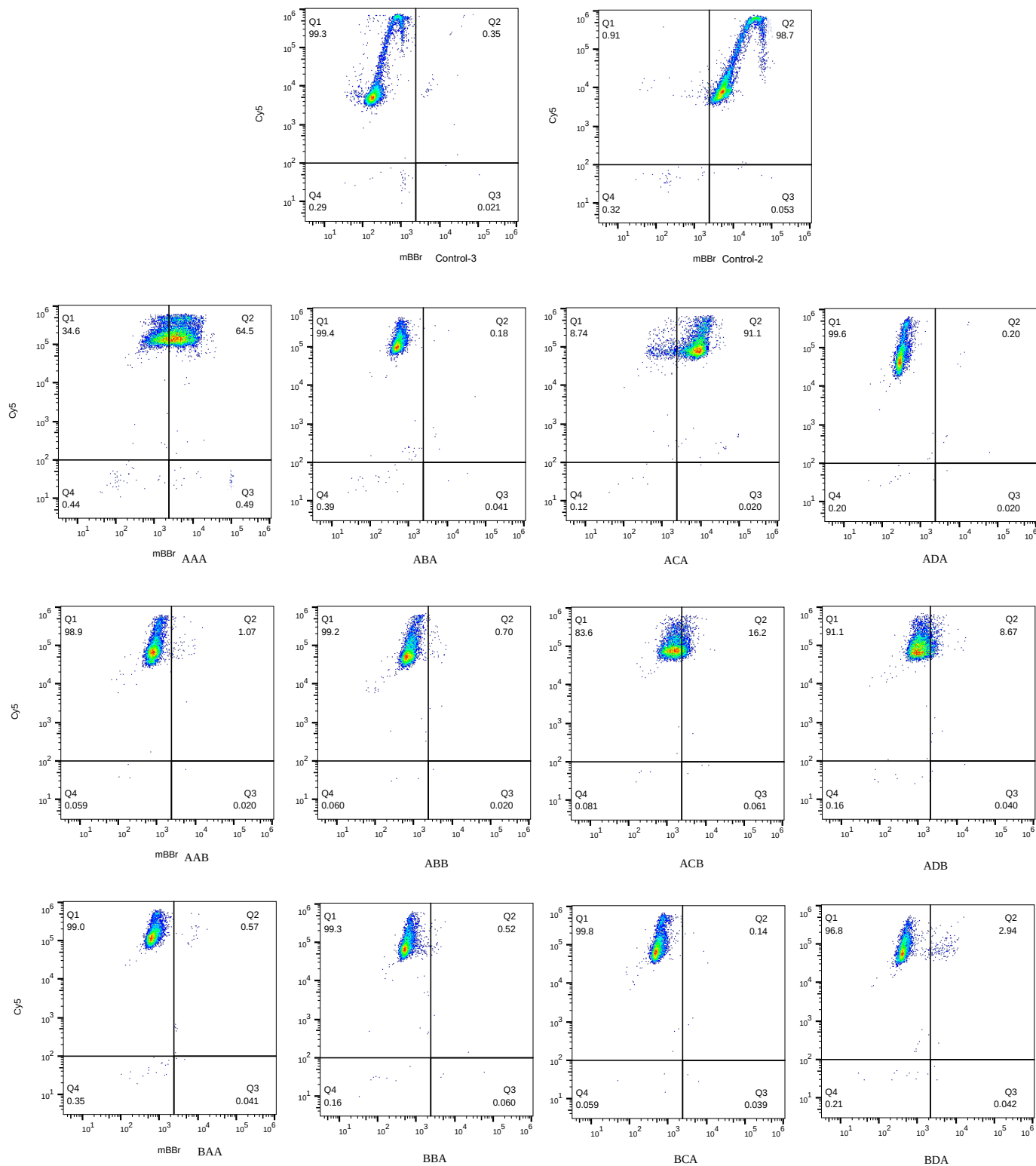
Section 8: FACS & LCMS analysis of 64-scaffolds

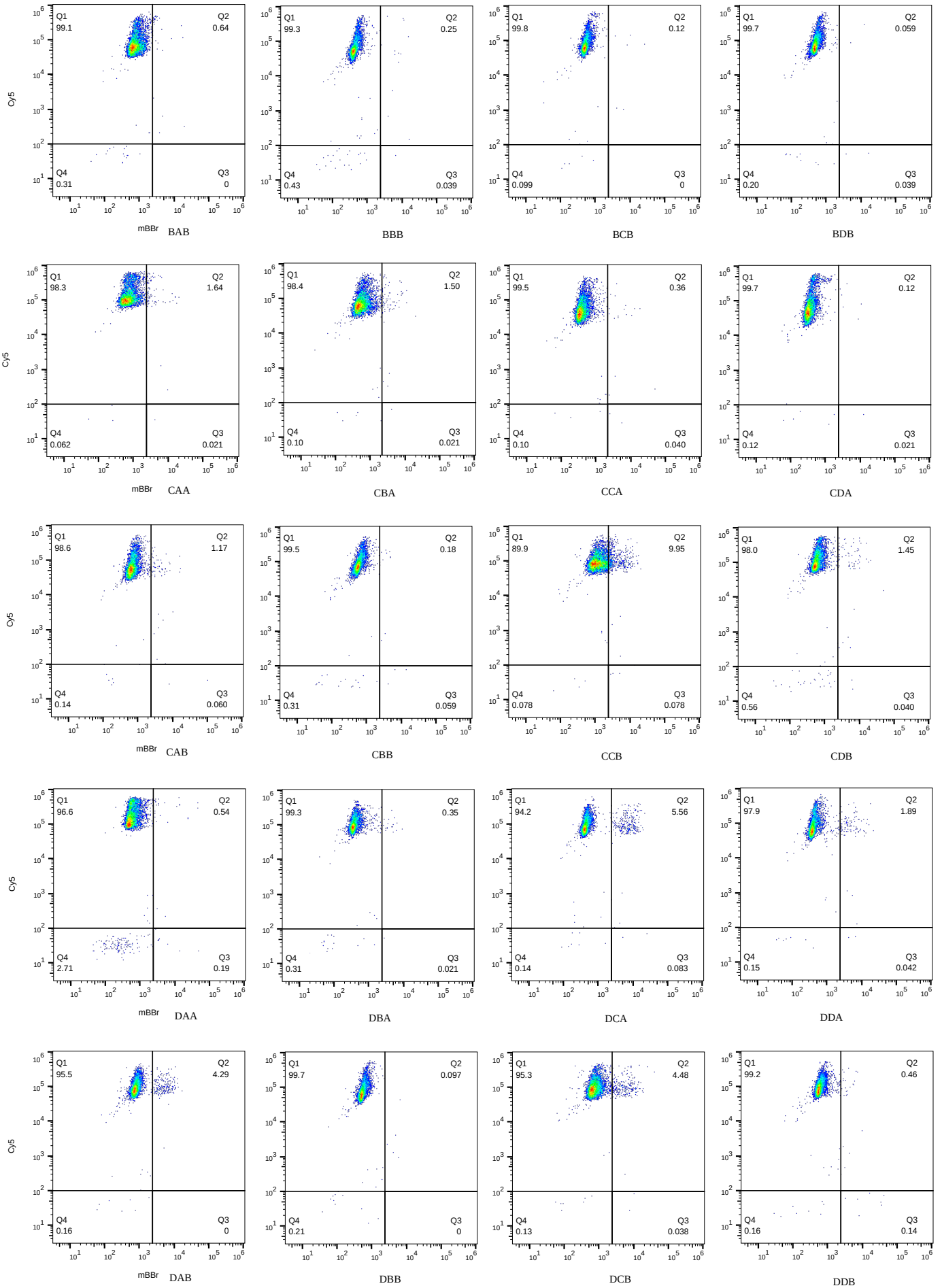
Fluorescence data analysis of 64 PICCO scaffolds after cyclization

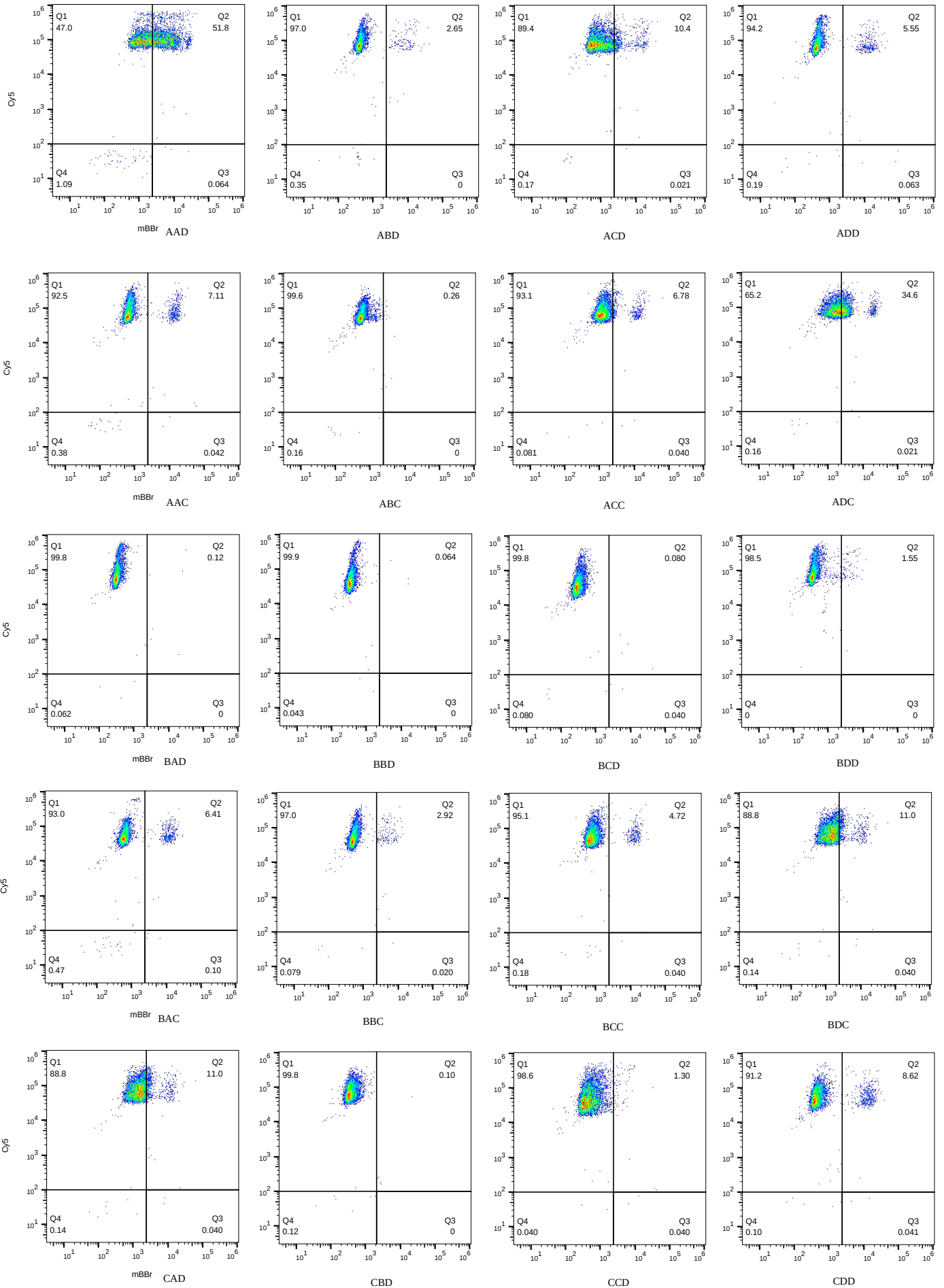
Fluorescence readouts were recorded for each of the 64 scaffolds. Status of ring closures were determined by FACS and cross-referenced with mass spectra to see if there is any linear starting material remaining. The goal was to ultimately gauge the state of cyclization from FACS data by locating the majority of the bead population, without cleaving compounds from beads.

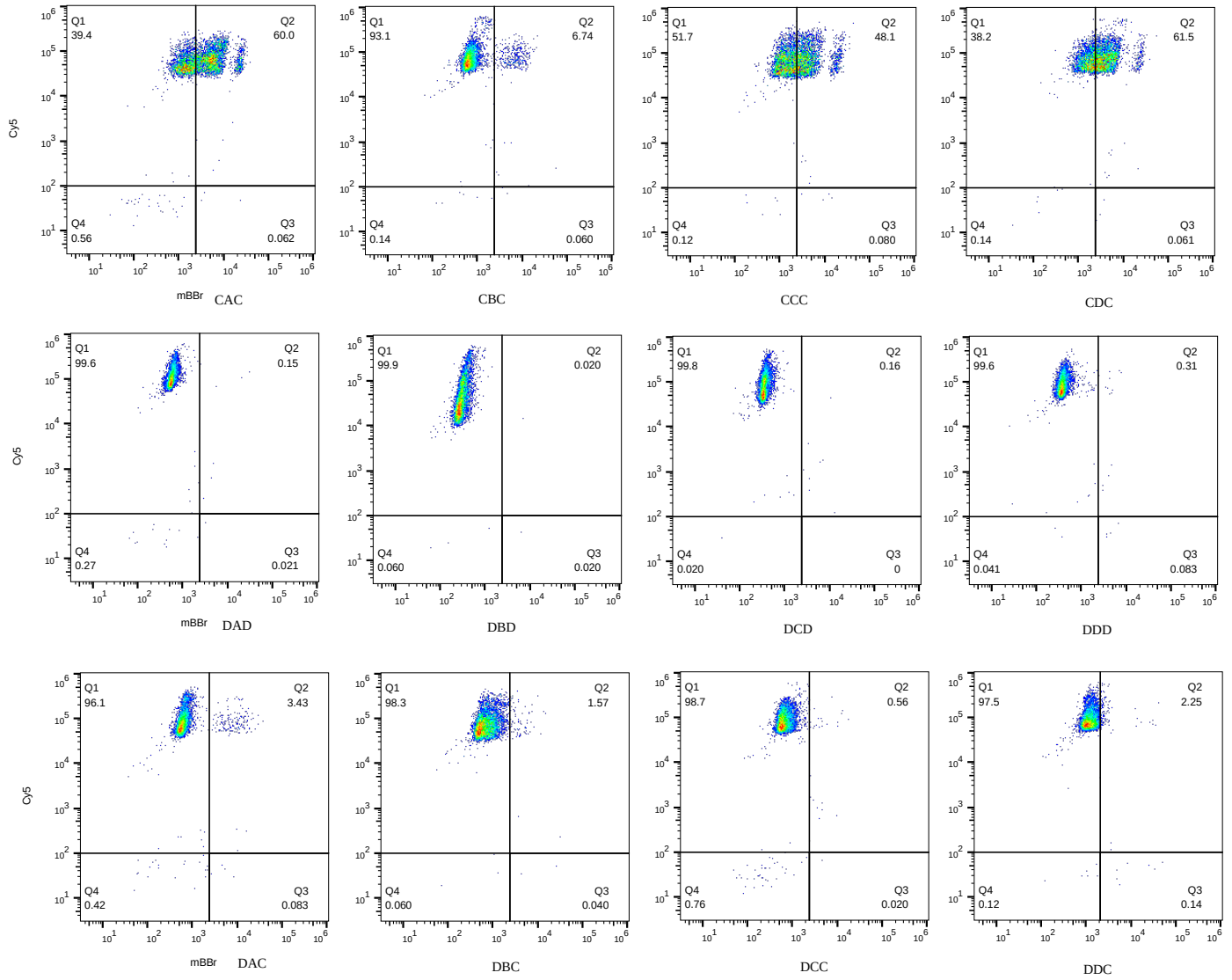
Each FACS plot is divided into 4 quadrants; Q1-Q4. After cyclization and two dye additions, if the majority of the bead population for a particular scaffold stays in Q1 (Cy5 +, MBBR -), cyclization will be considered as complete. If the scaffold does not cyclize efficiently, it will have unreacted thiol groups and will be present in Q2 (Cy5 +, MBBR +), as it will pick up both dyes. Negative control beads that were not treated with any dye will stay in Q4 (Cy5 -, MBBR -). These populations are gated based on the fluorescence intensity of control compound 3.

Section-9A: Fluorescence readout of 64 scaffolds after cyclization.



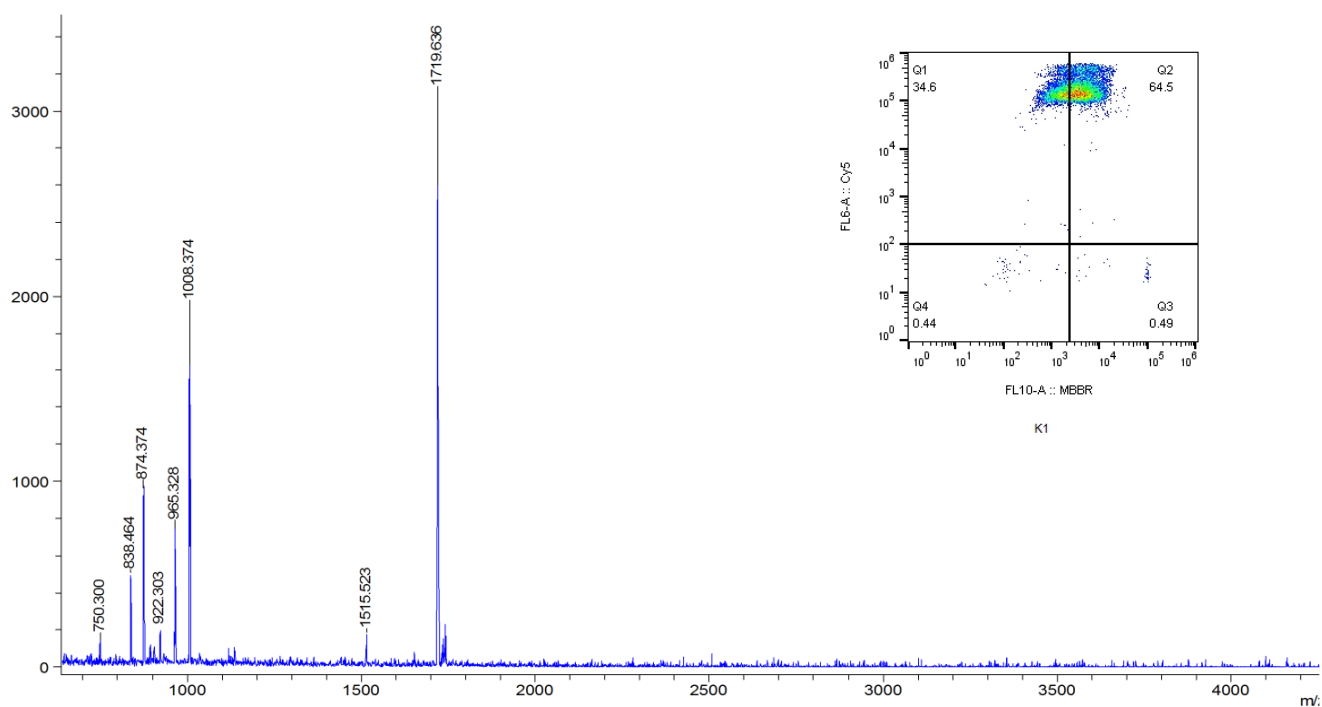
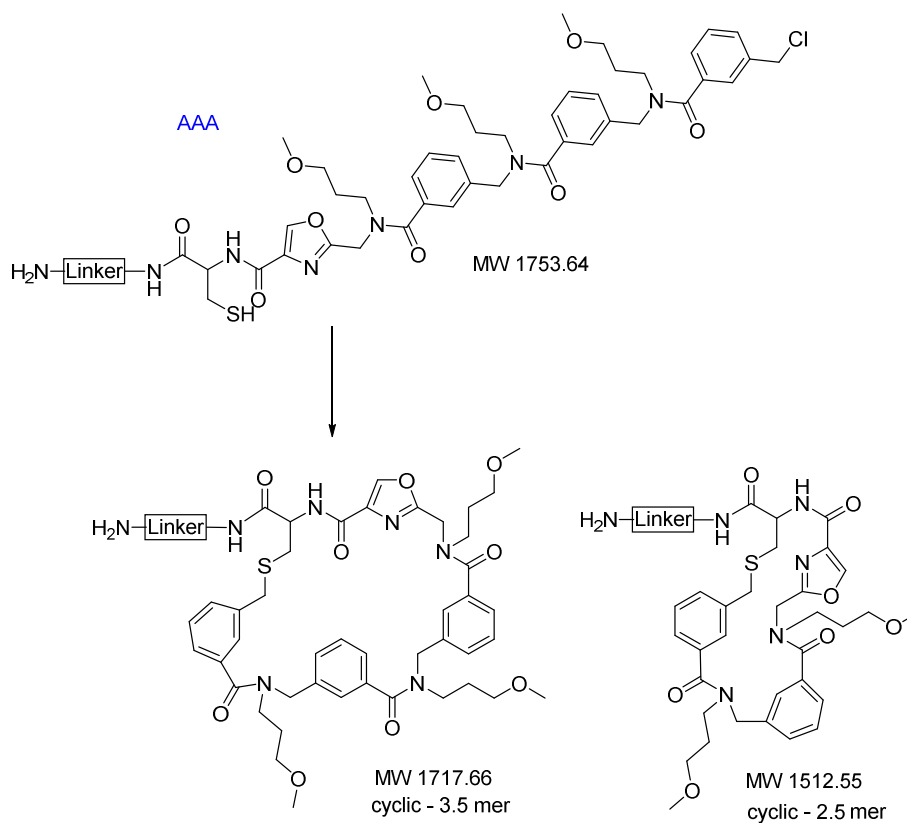


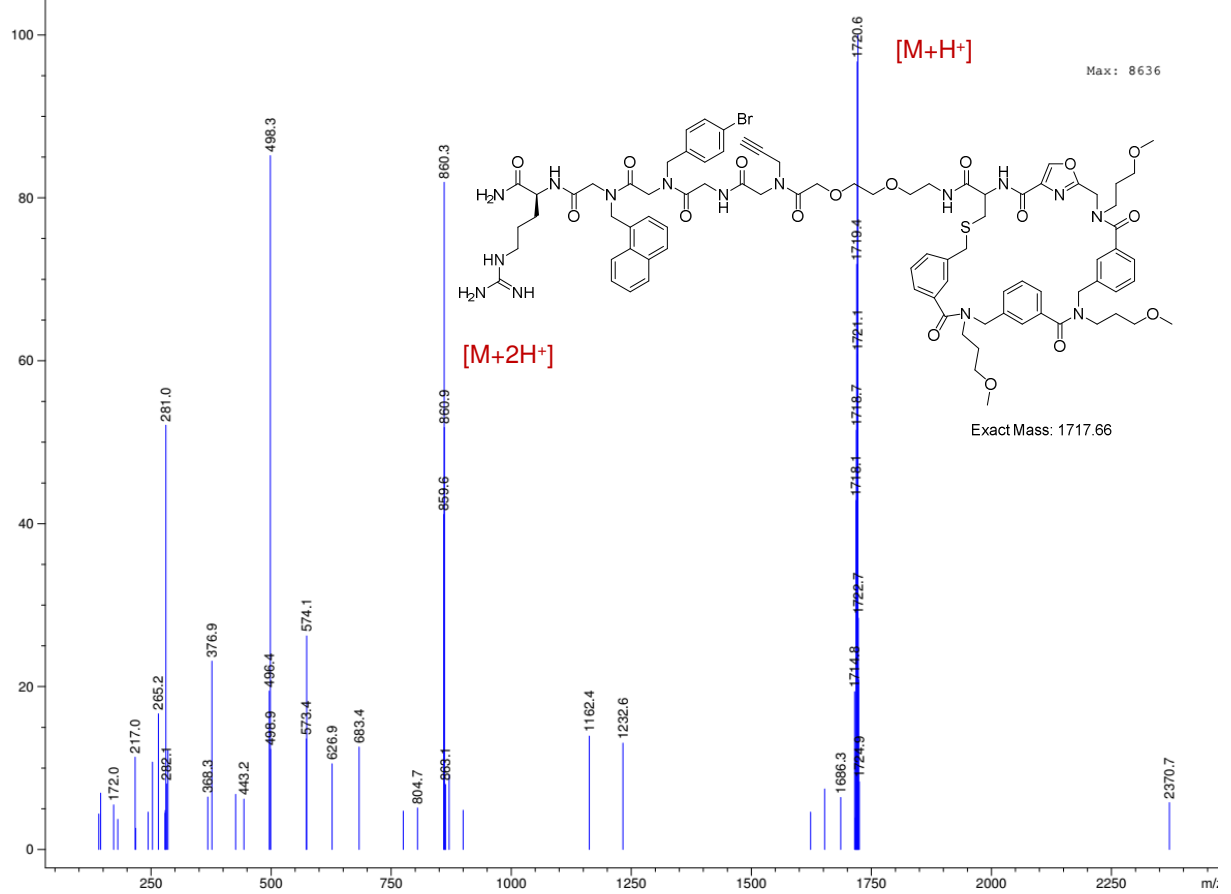
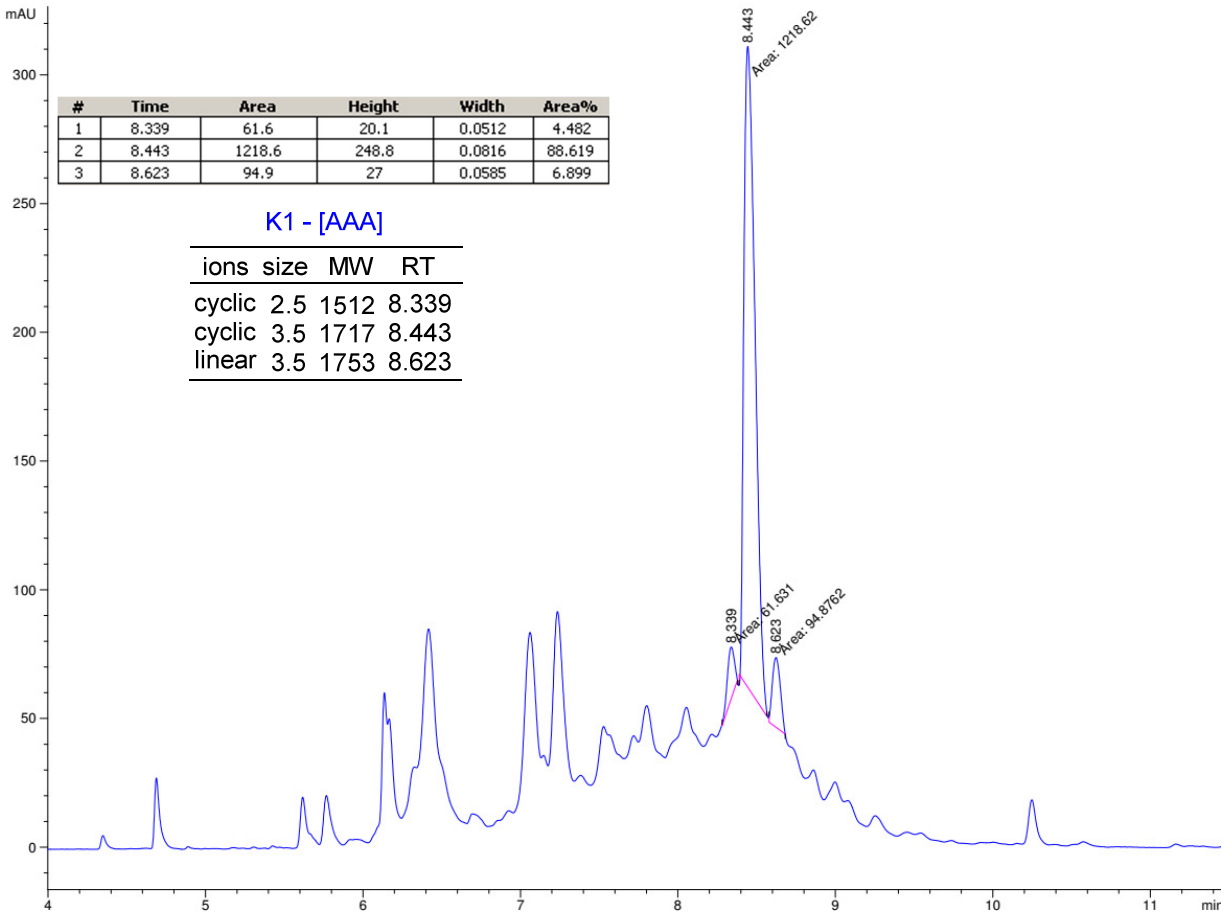


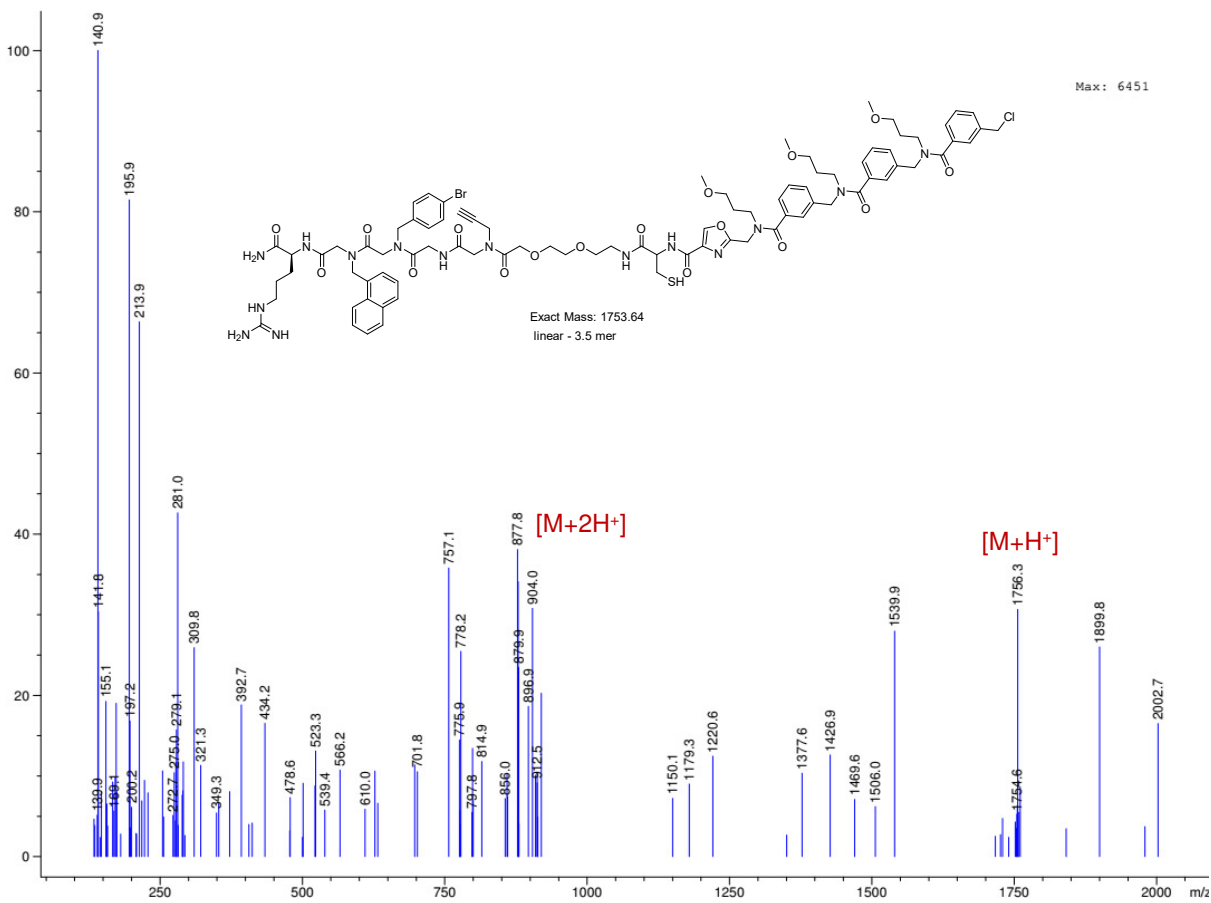
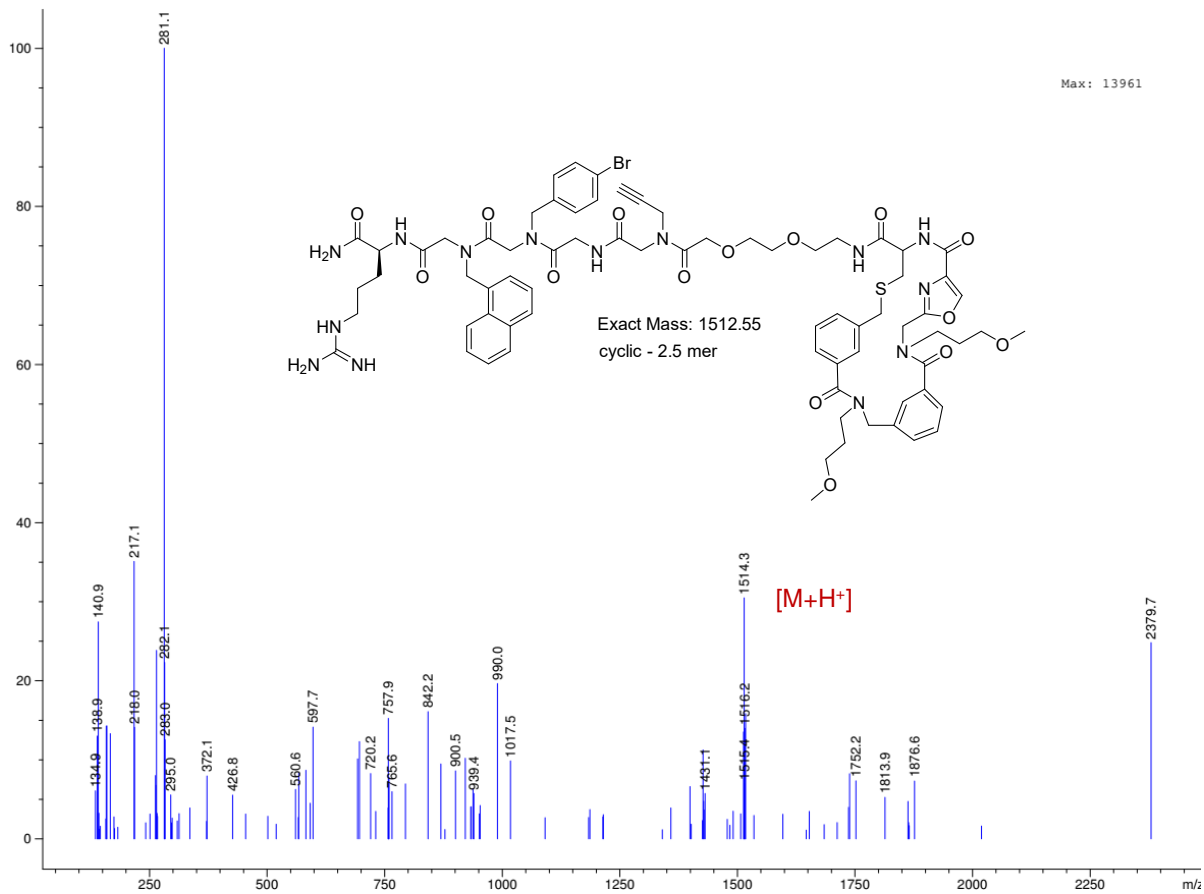


Section-9B: Mass analysis of 64-scaffolds

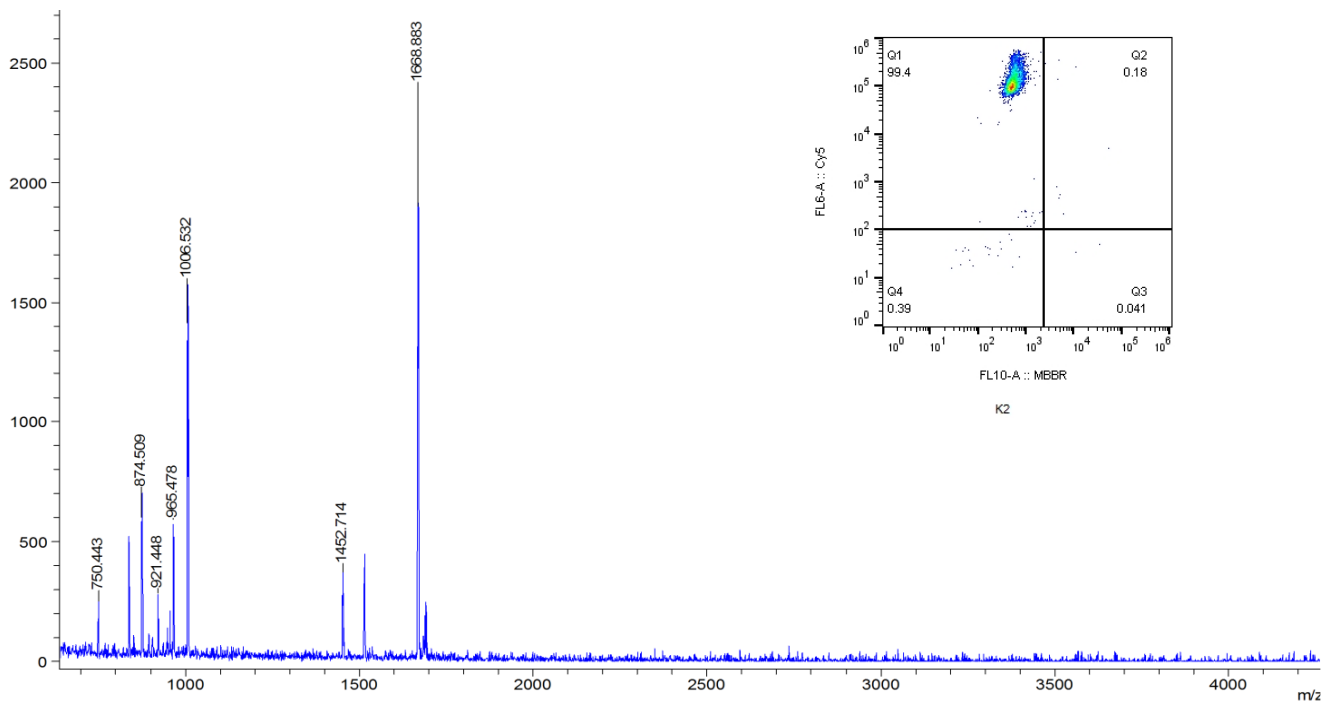
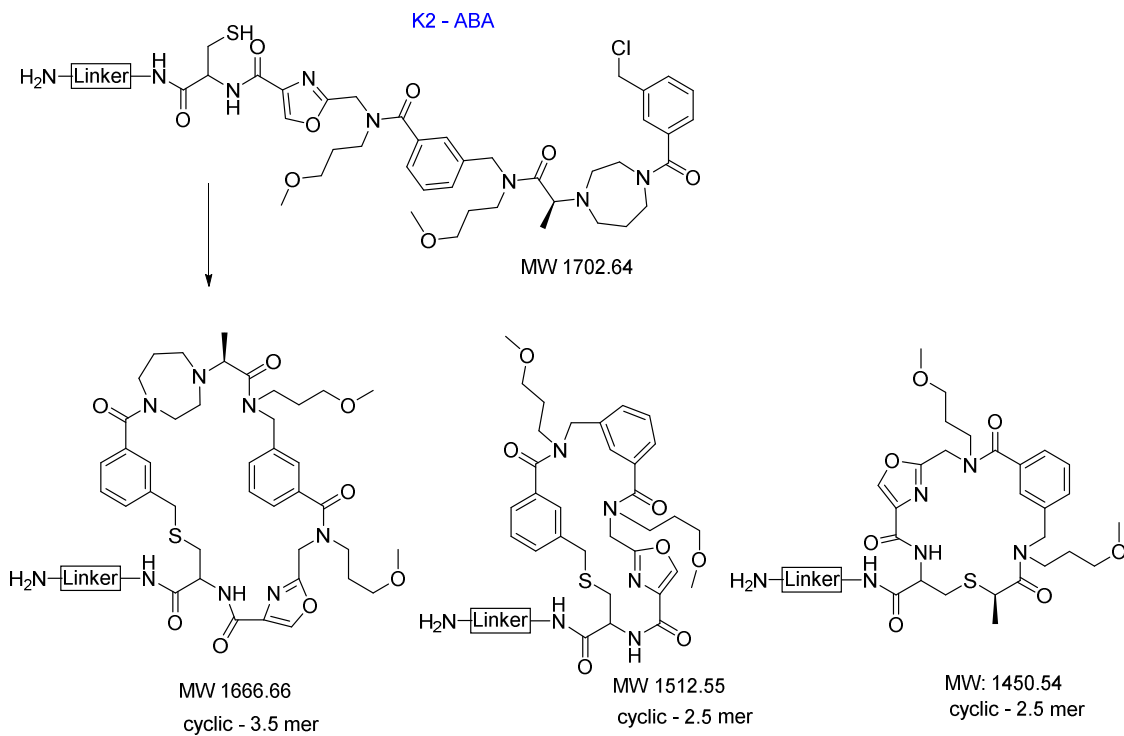
K1-[AAA]: Incomplete cyclization was detected on 10 μm but was >90% complete on 160 μm beads.

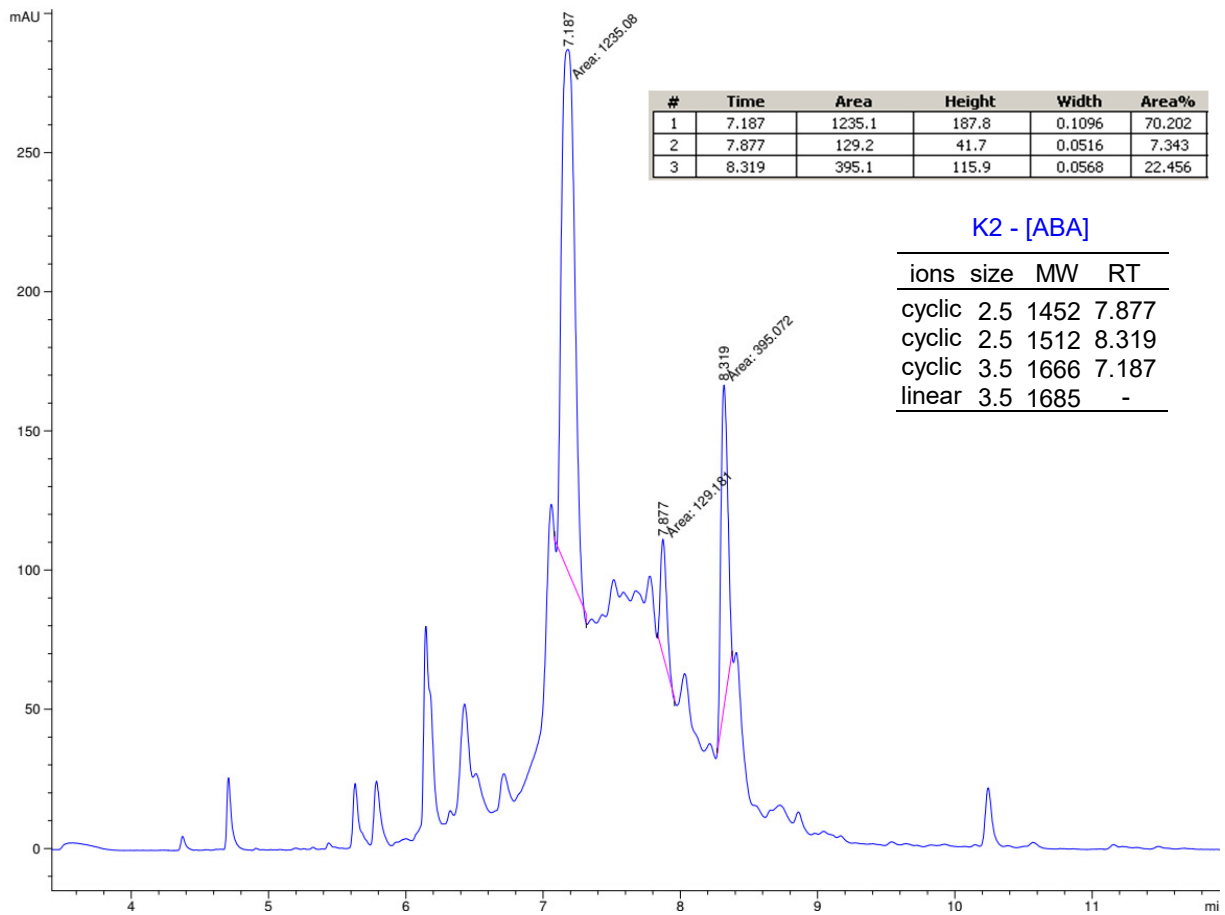






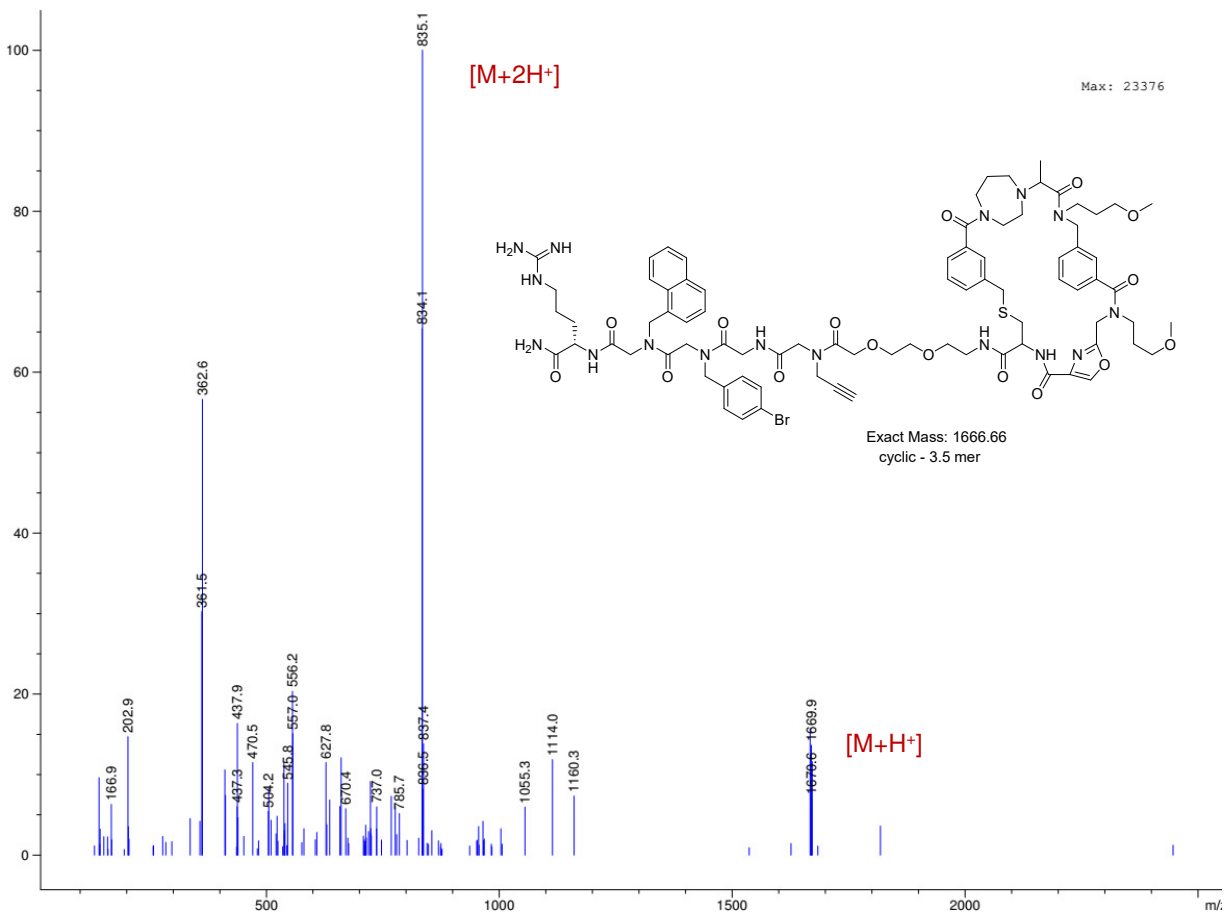
K2-[ABA]: Complete cyclization was observed on 10 μm & 160 μm beads.

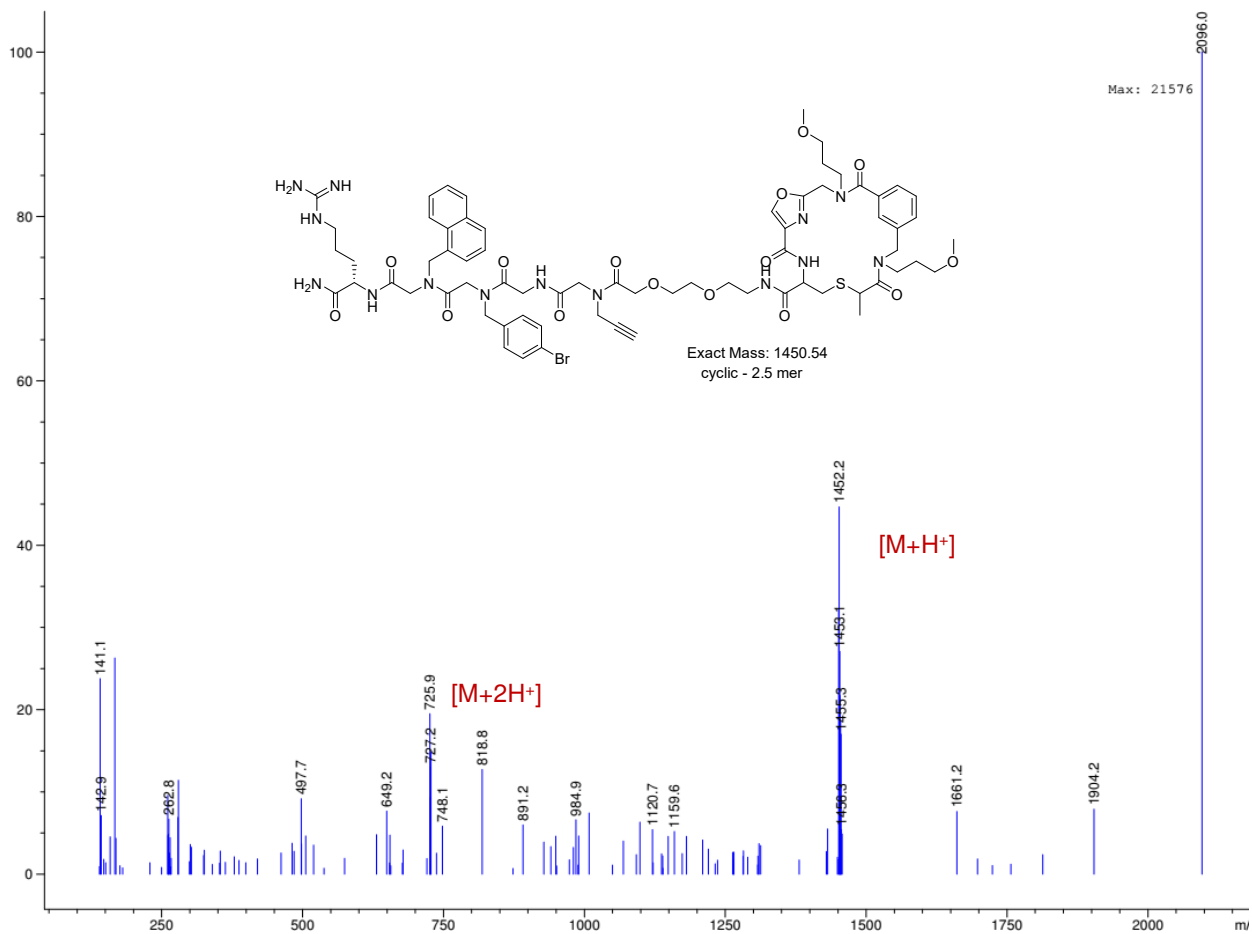
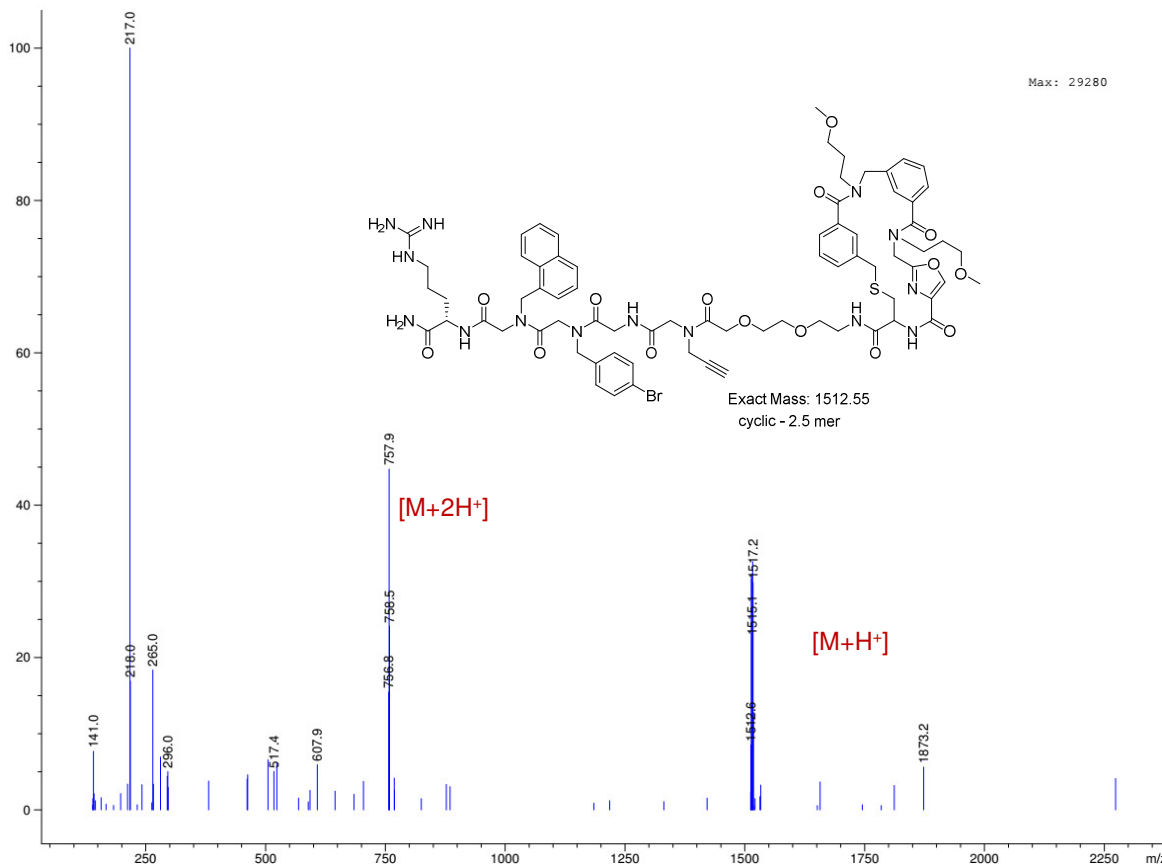




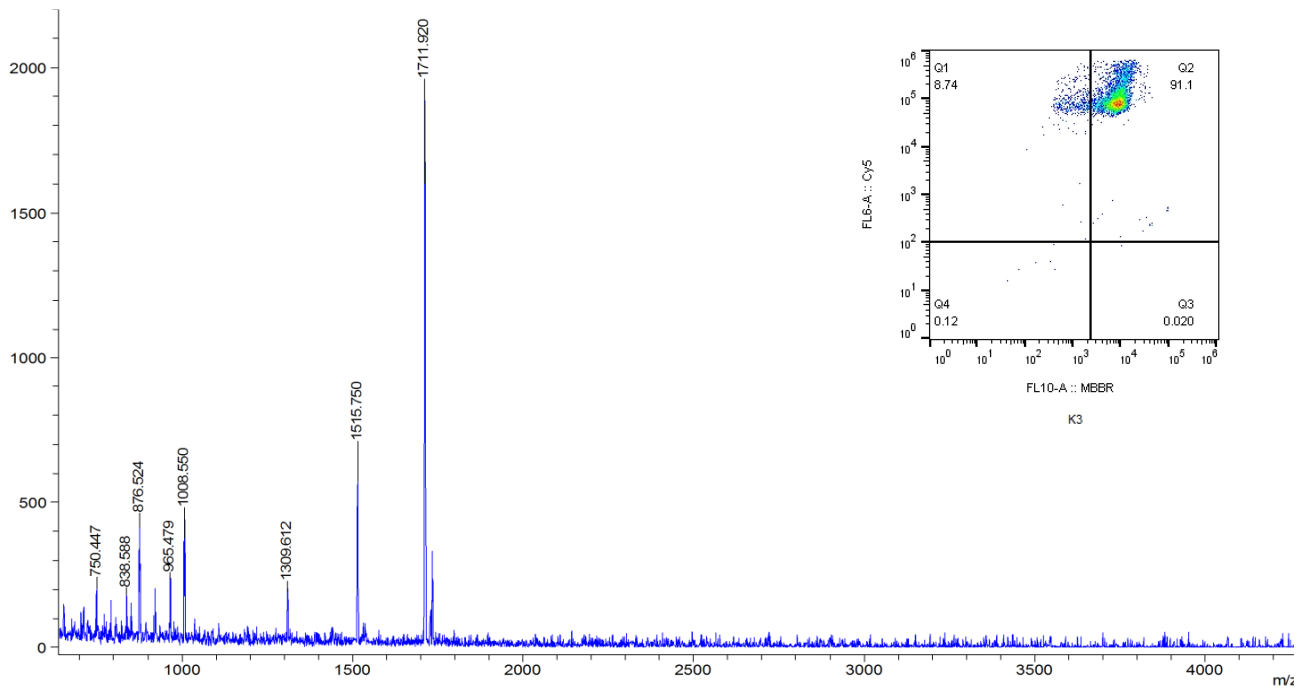
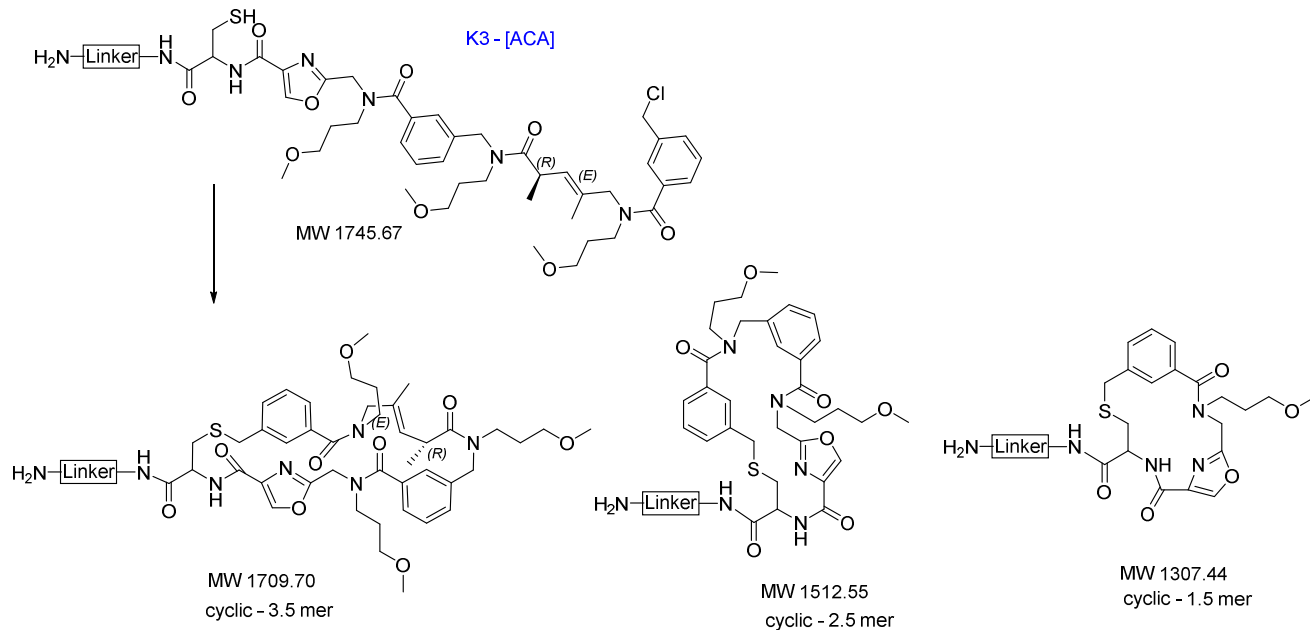
K2 - [ABA]

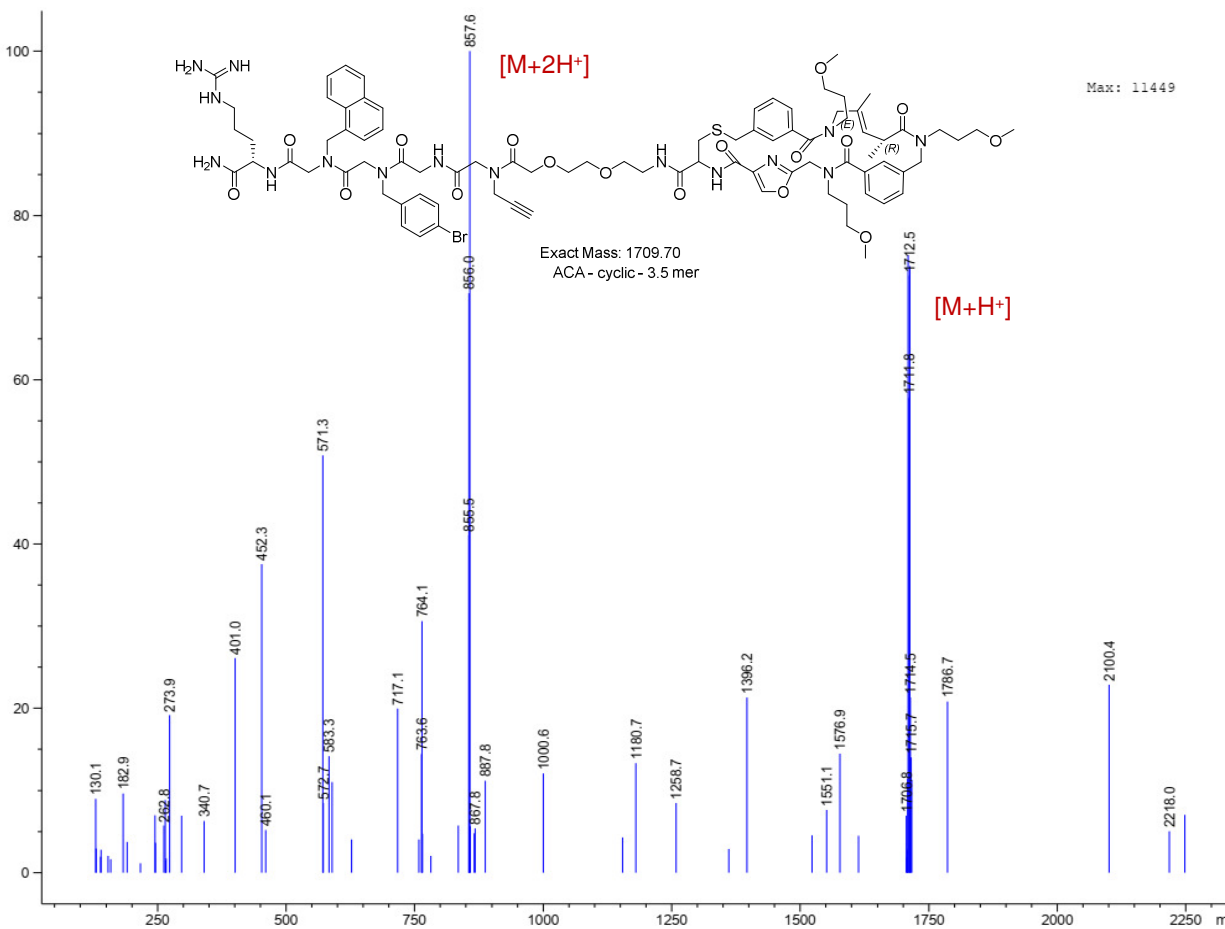
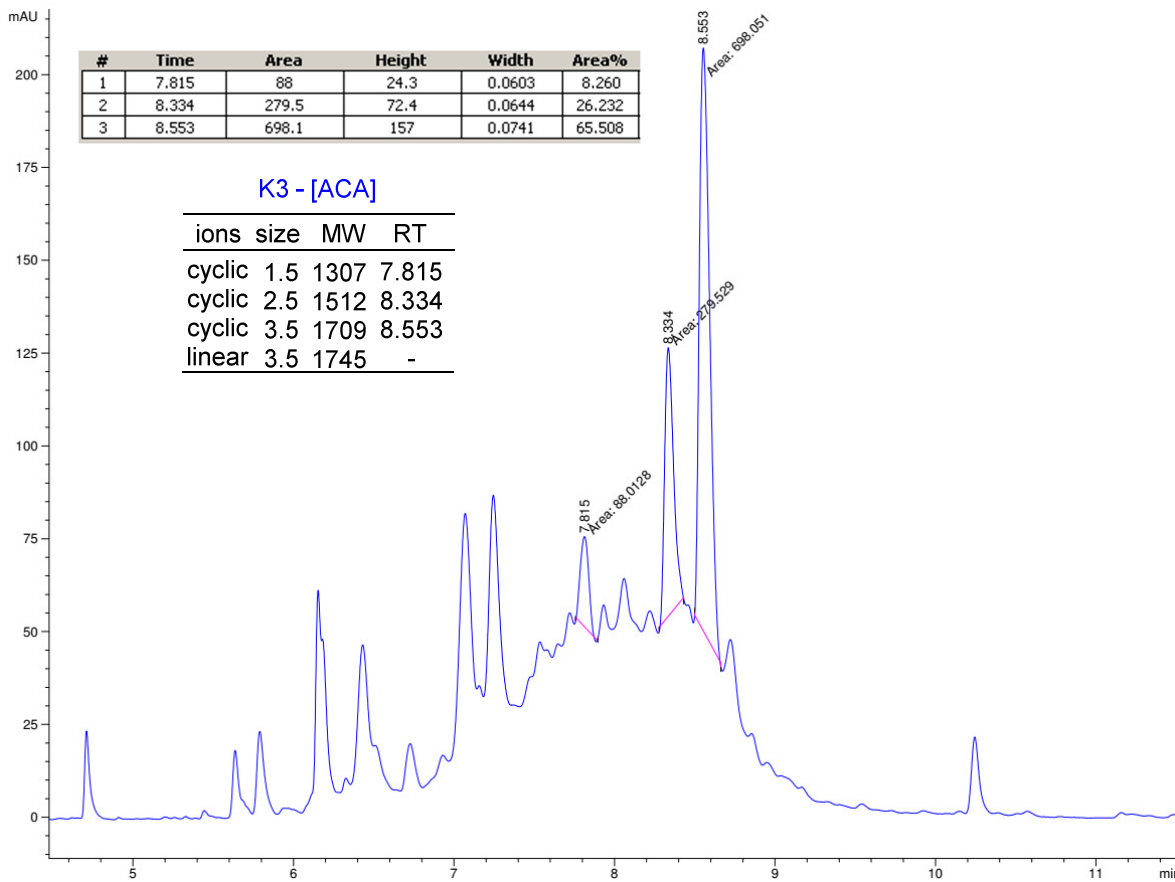
	ions	size	MW	RT
cyclic	2.5	1452	7.877	
cyclic	2.5	1512	8.319	
cyclic	3.5	1666	7.187	
linear	3.5	1685	-	

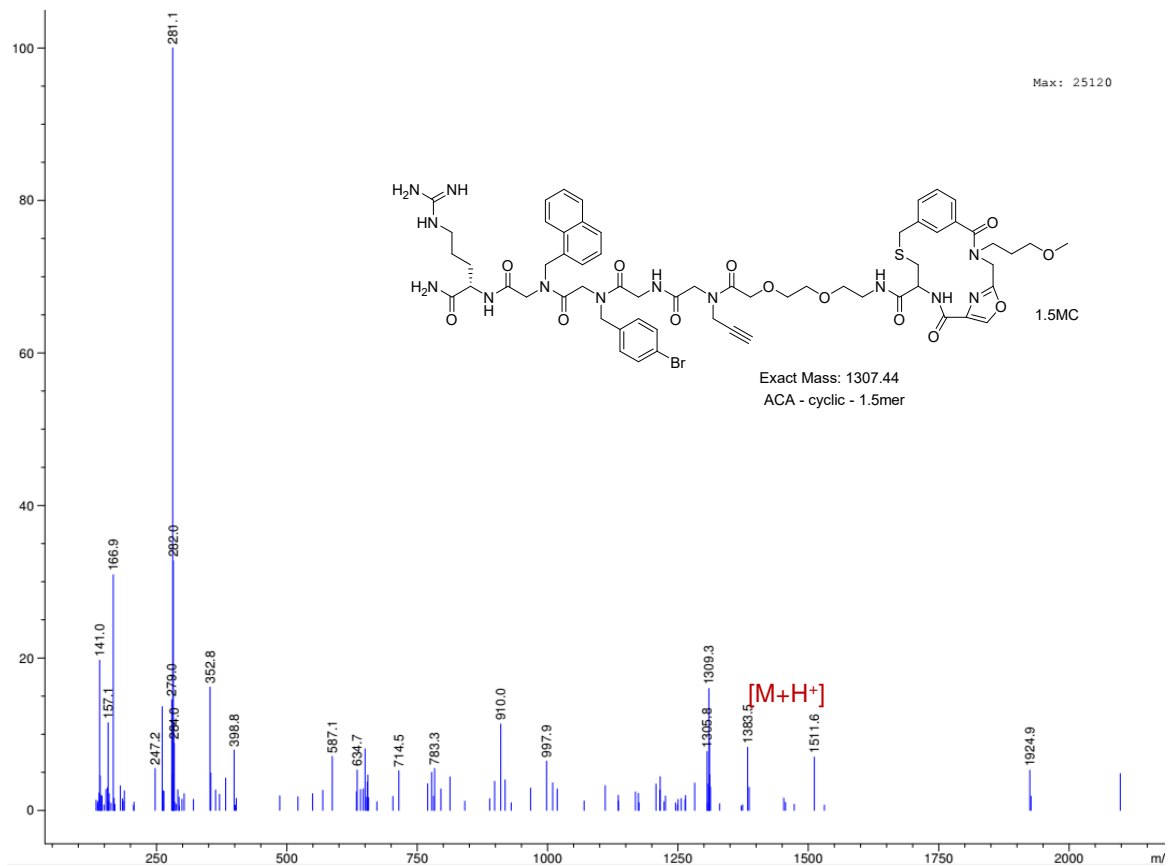
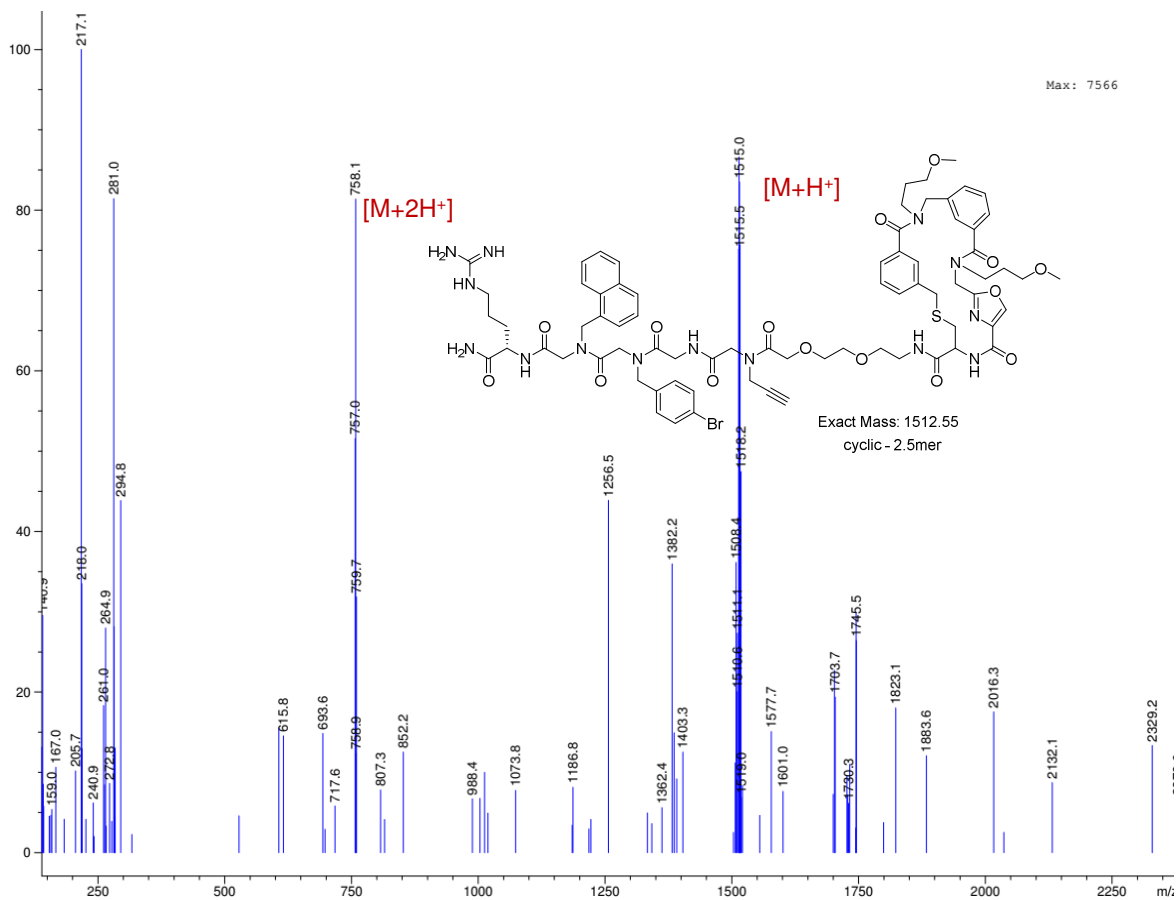




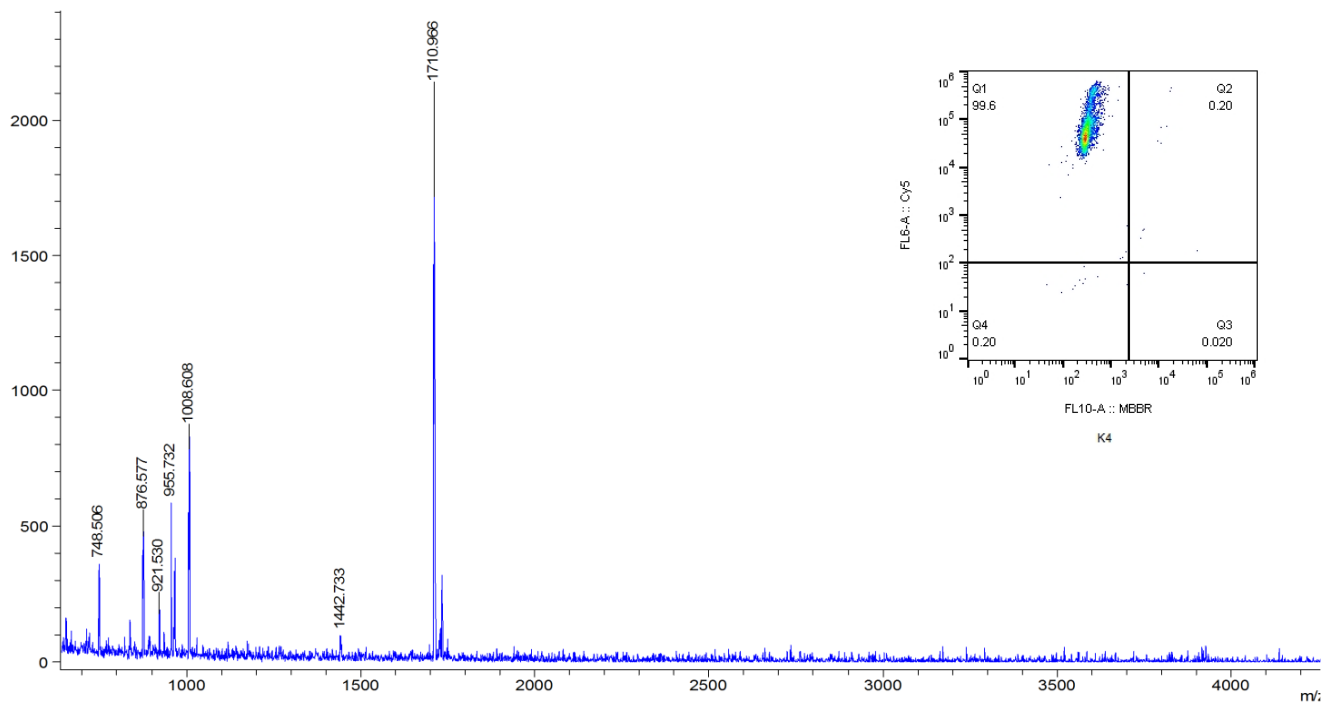
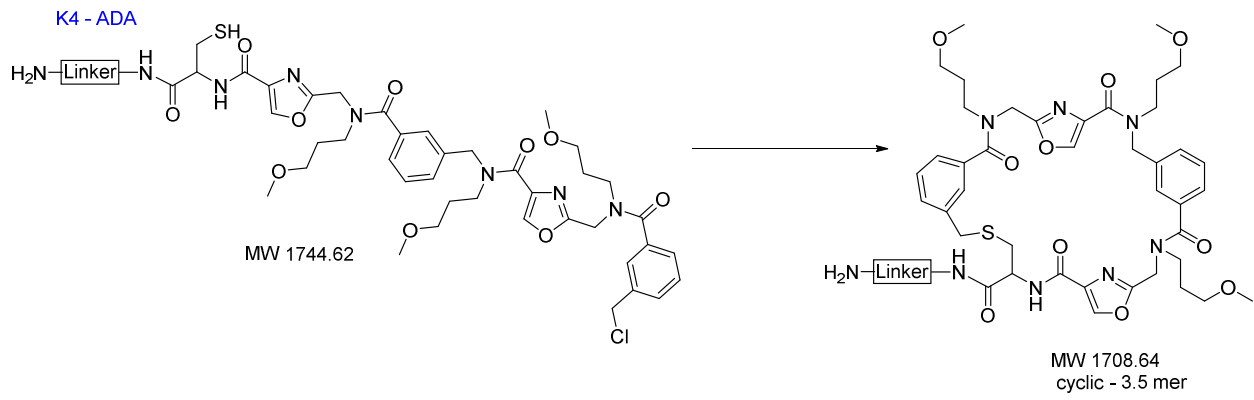
K3-[ACA]: Incomplete cyclization was observed on both 10 μ m and 160 μ m beads.

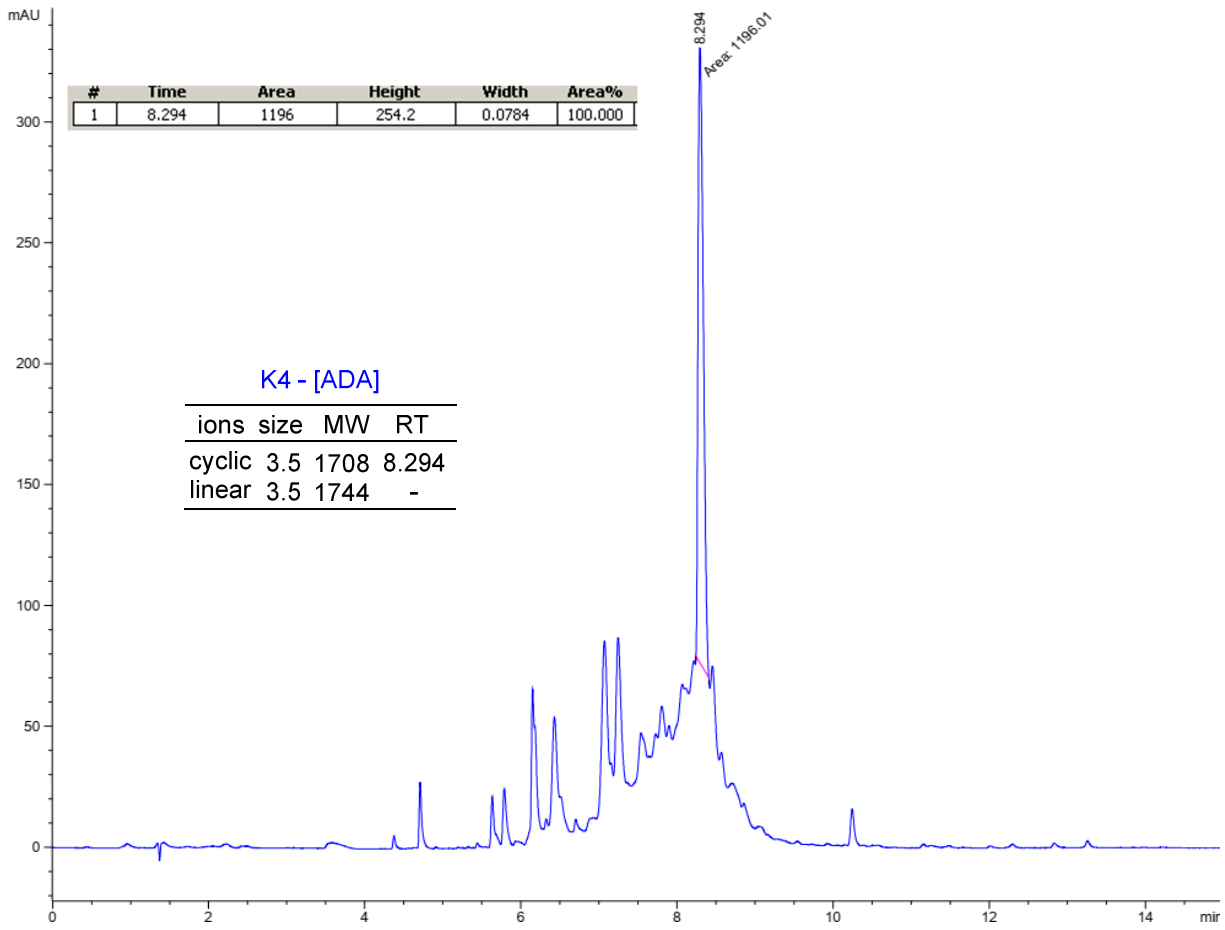






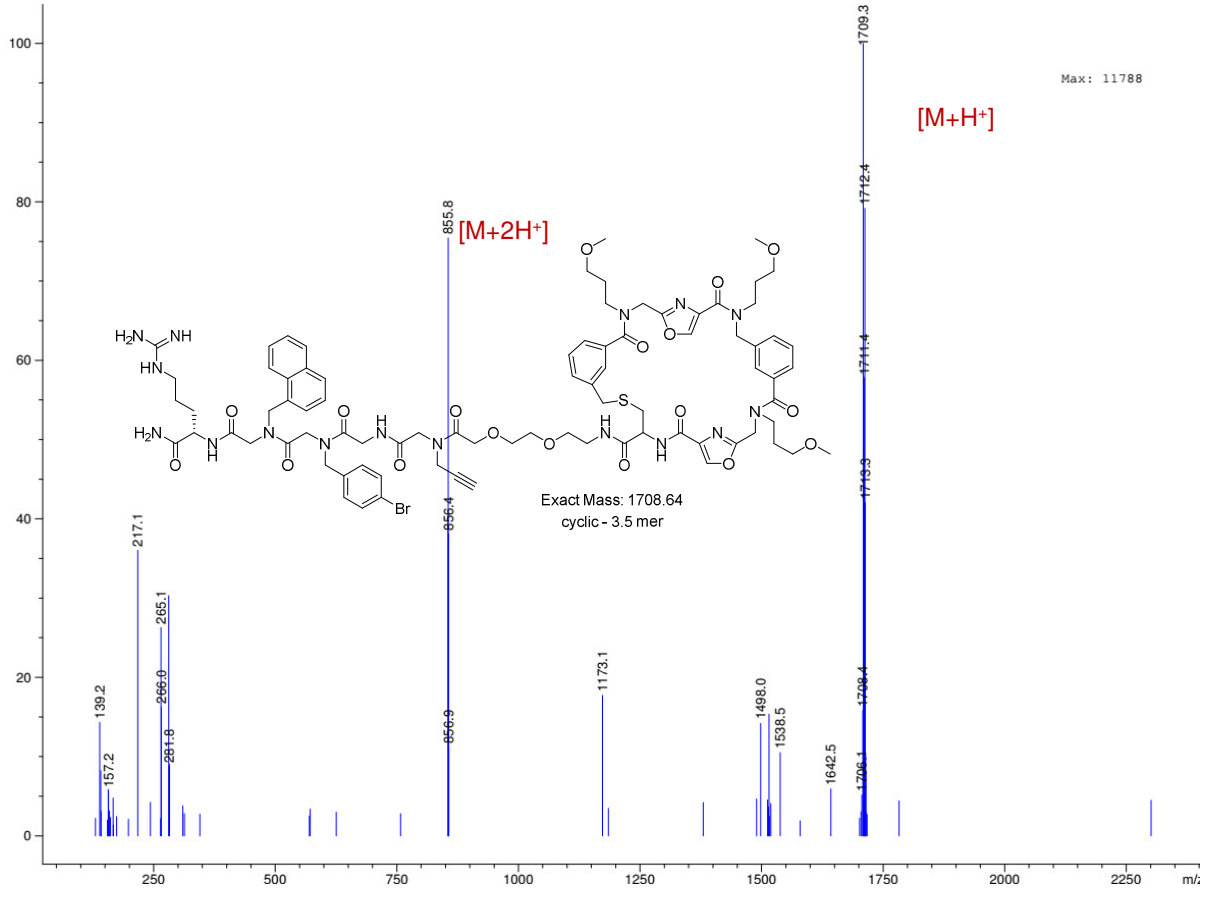
K4-[ADA]: Complete cyclization was observed 10 μm & 160 μm beads.

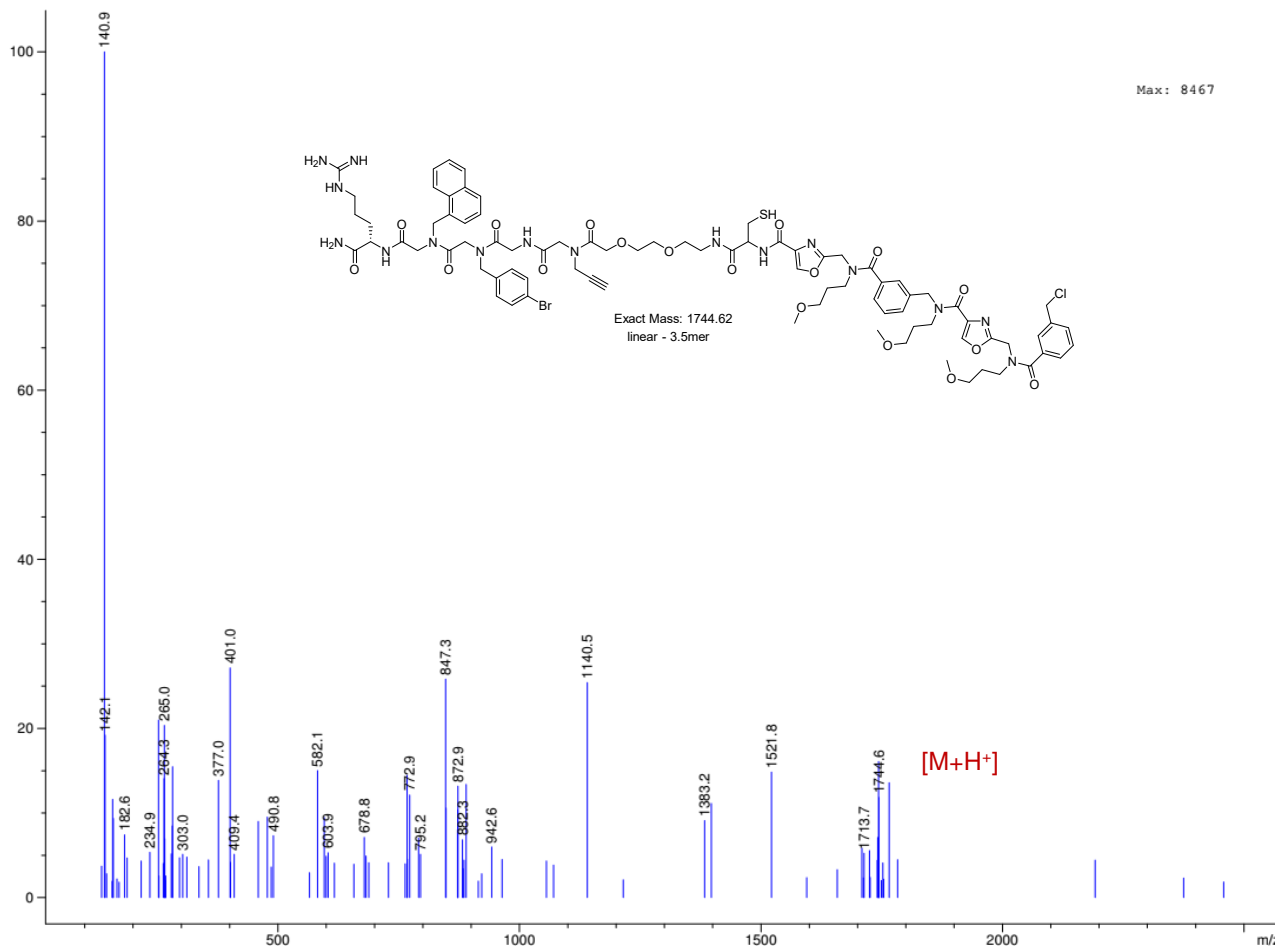




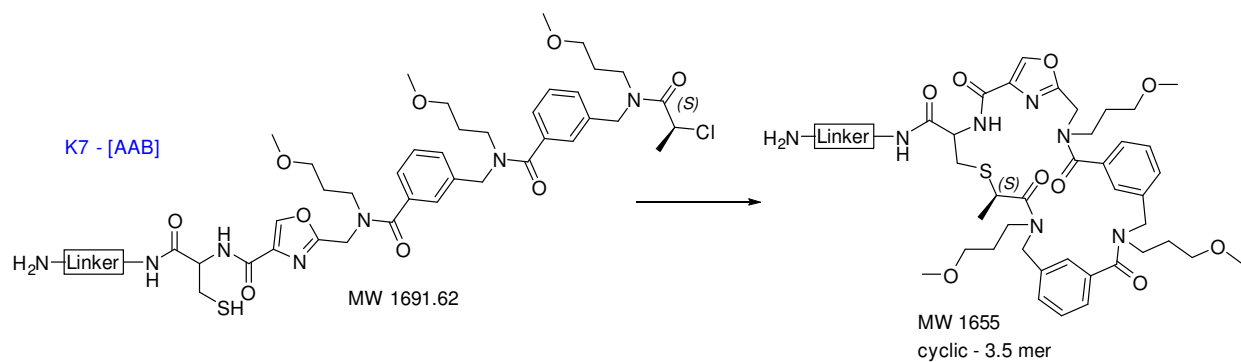
K4 - [ADA]

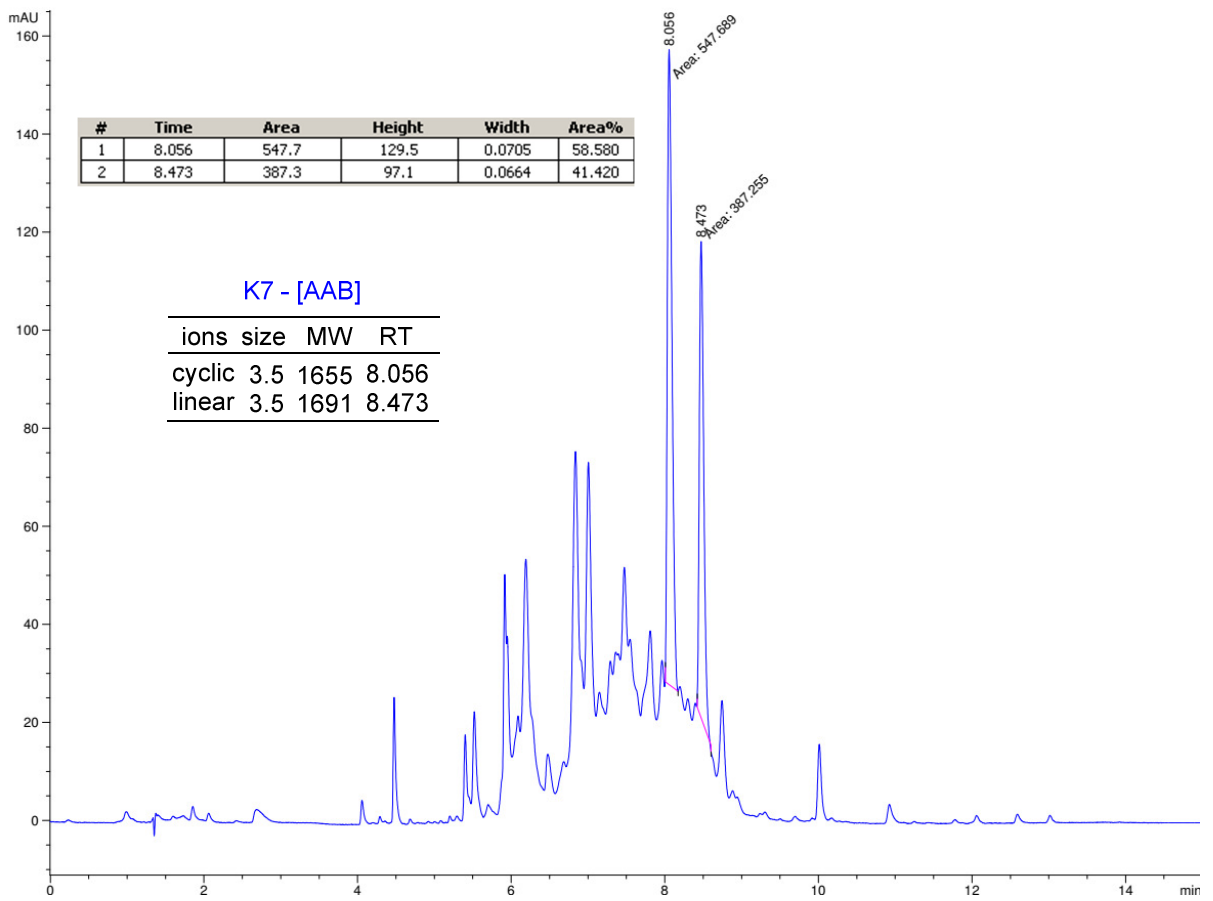
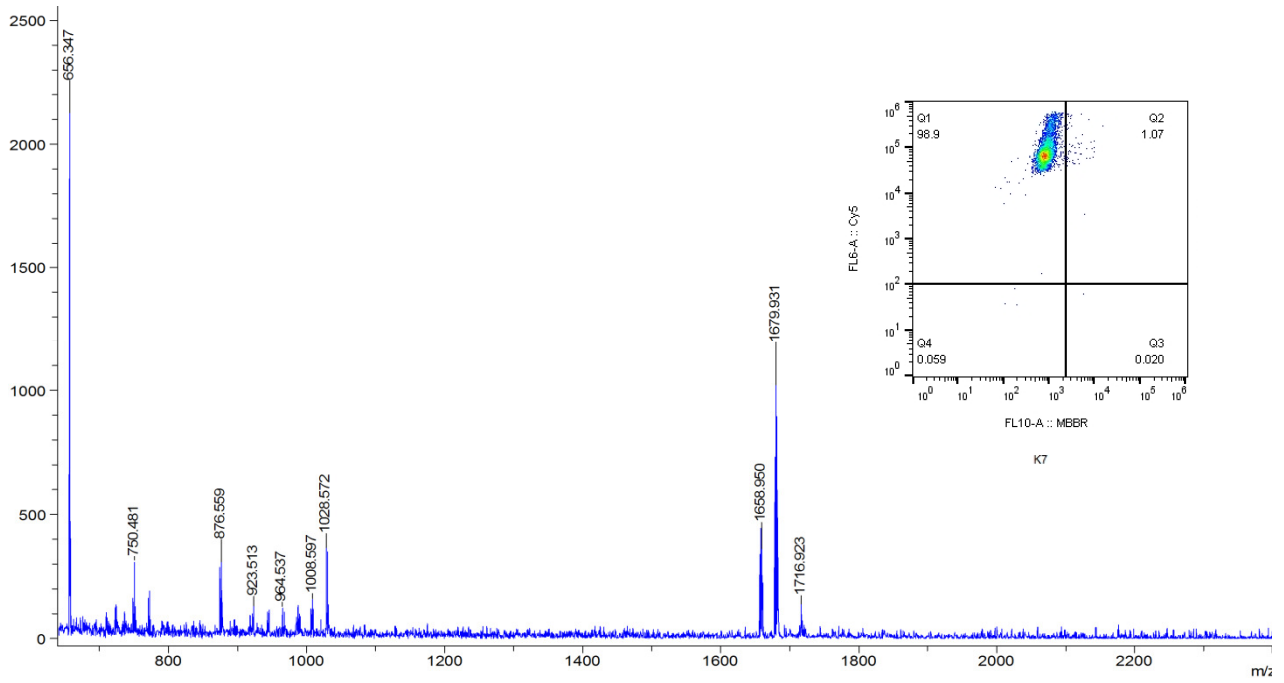
ions size	MW	RT
cyclic	3.5 1708	8.294
linear	3.5 1744	-



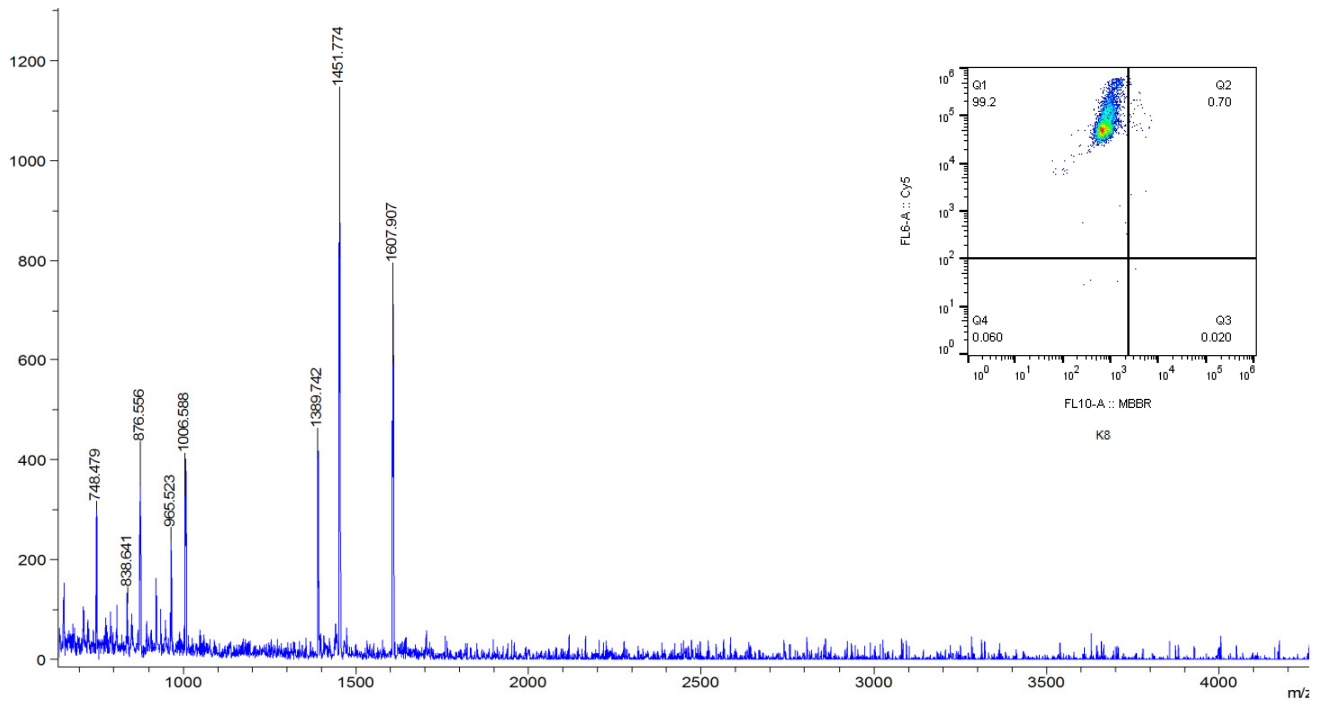
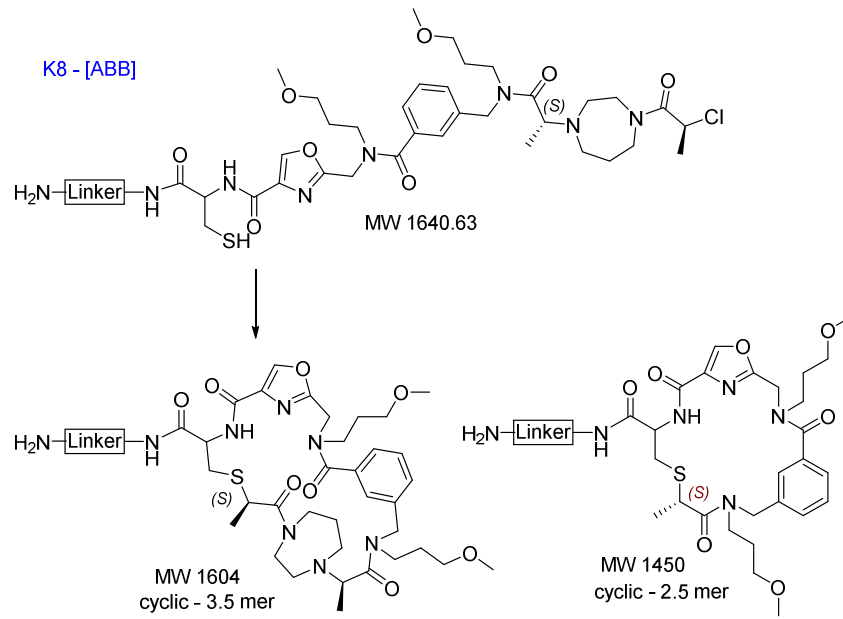


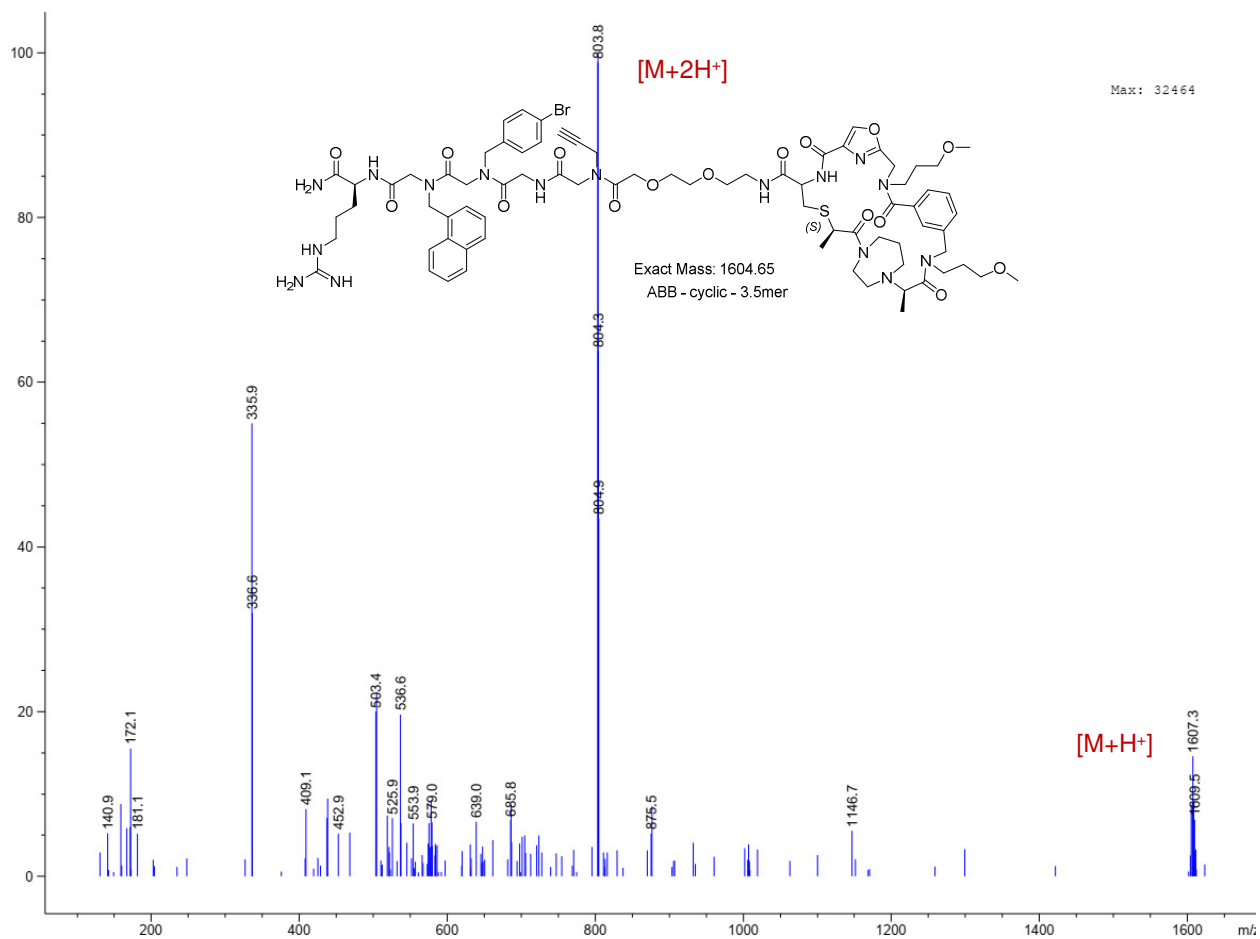
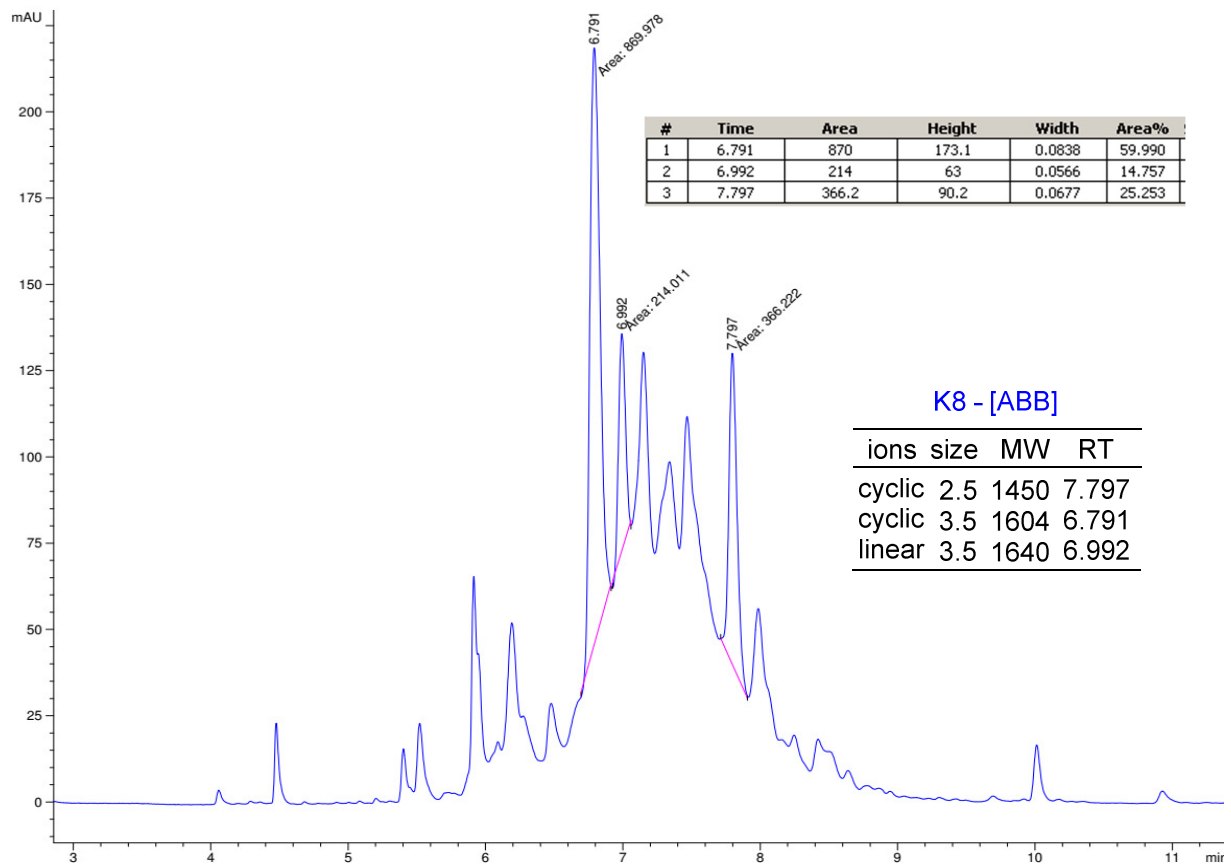
K7-[AAB]: Incomplete cyclization was observed on 10 μm but was complete on 160 μm beads.

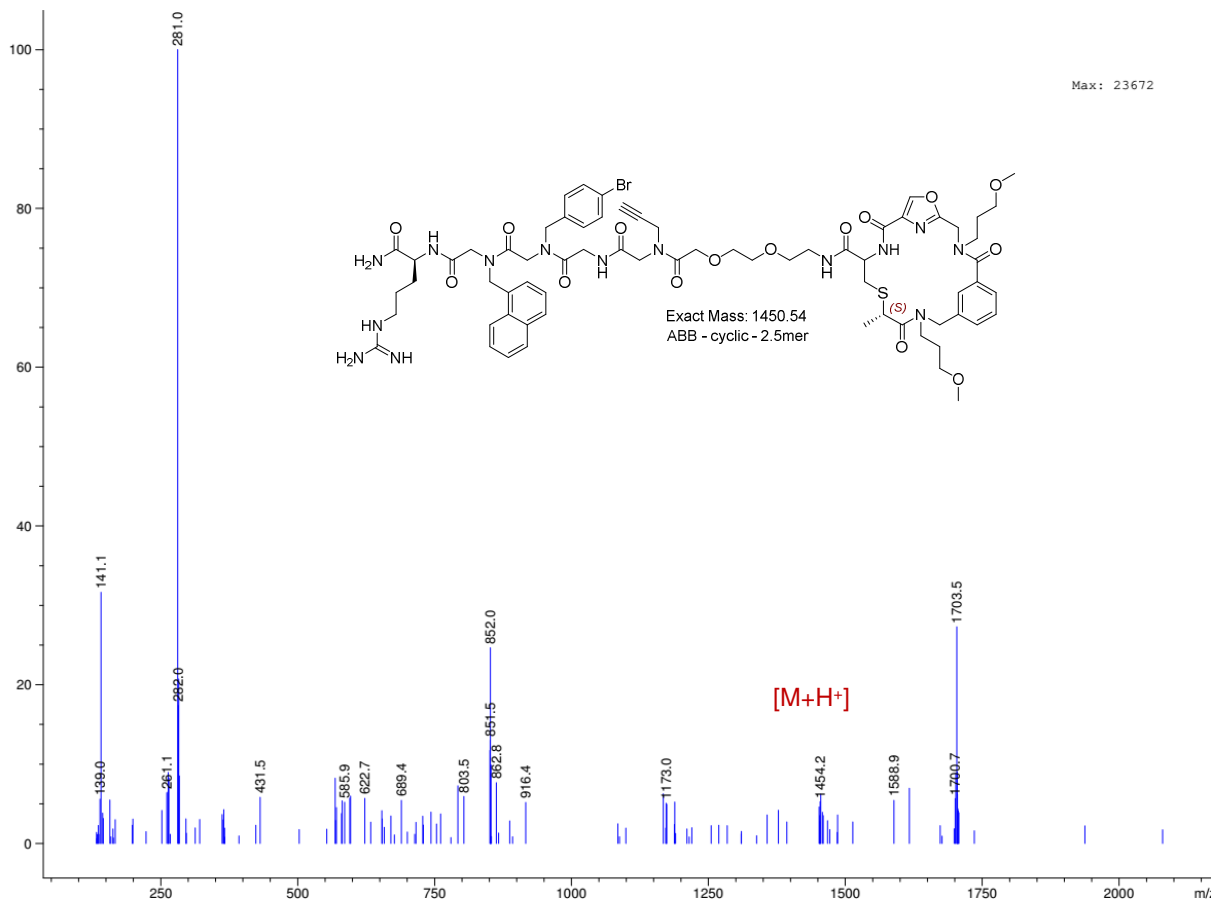
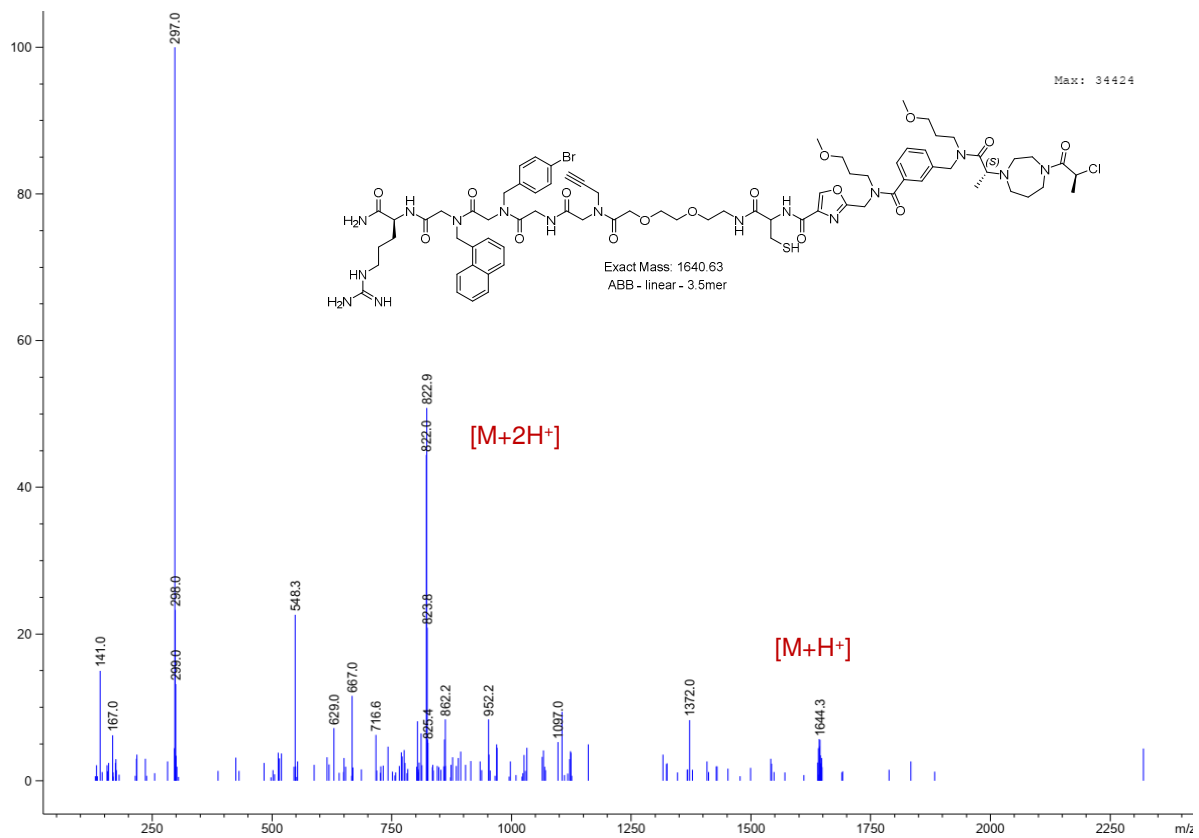




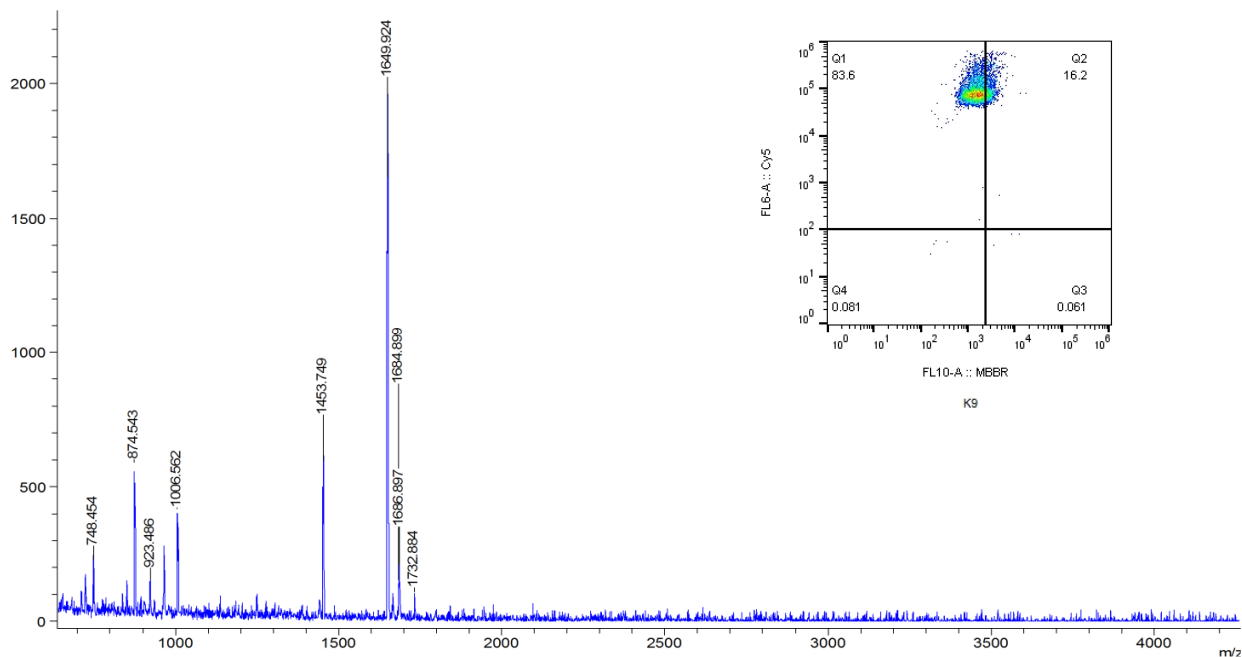
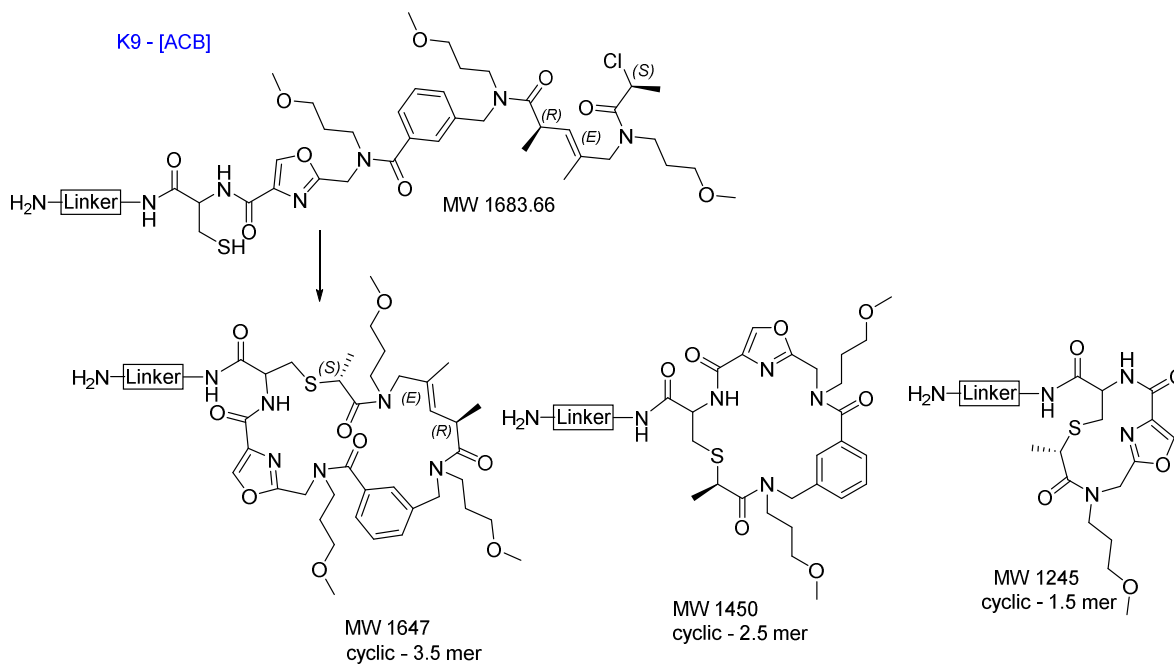
K8-[ABB]: Complete cyclization was detected on 10 μm but was incomplete on 160 μm beads.

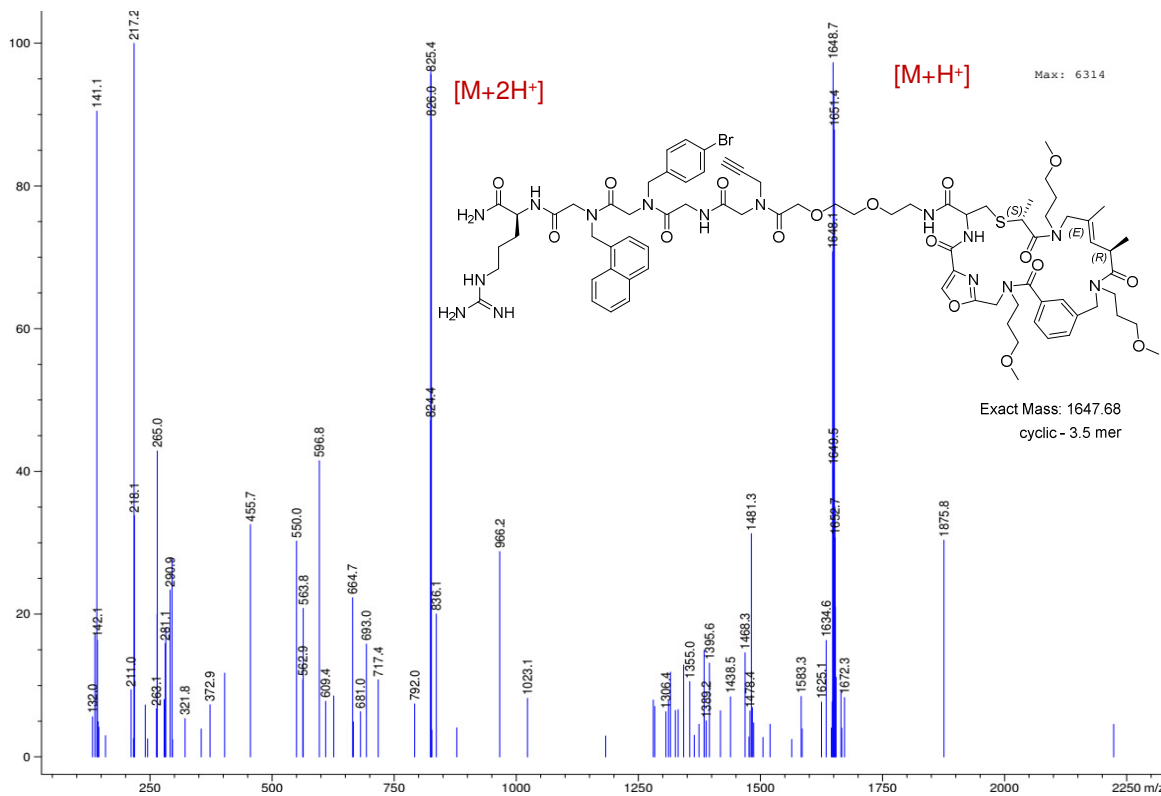
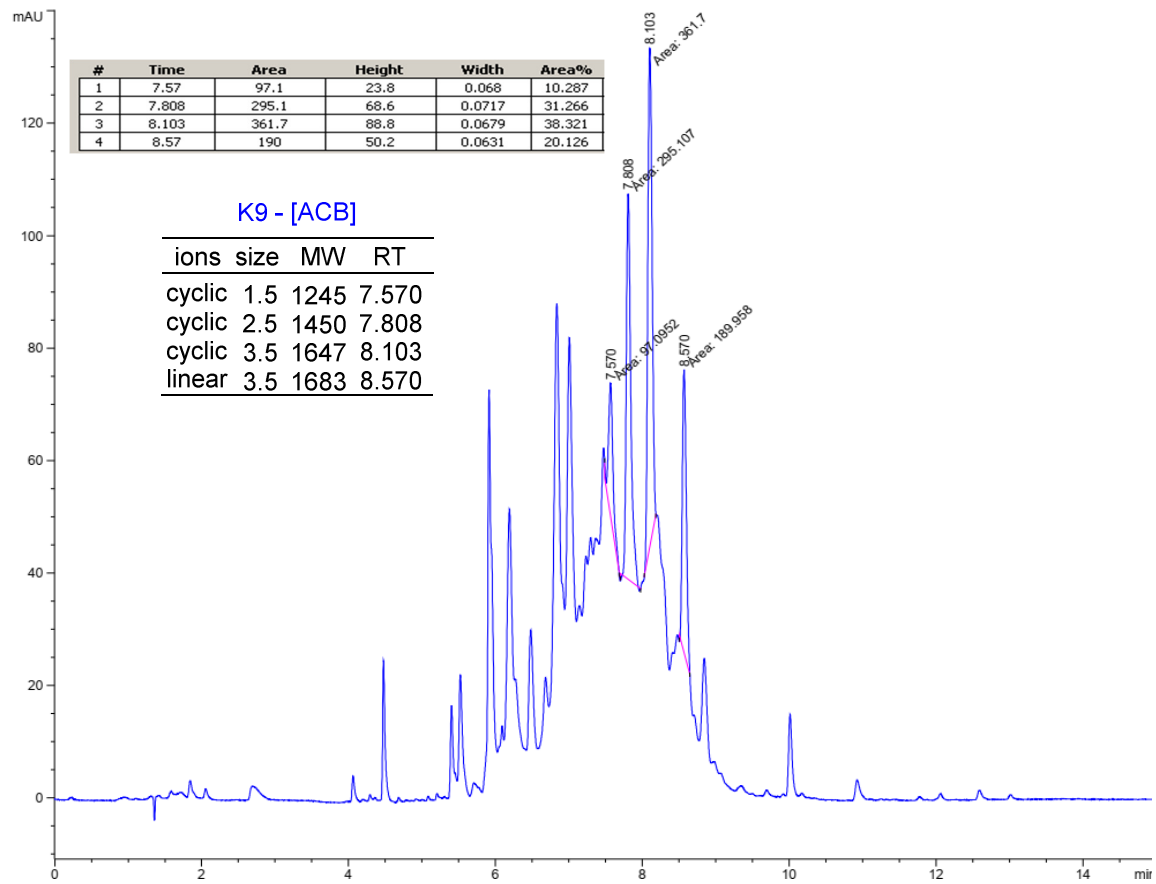


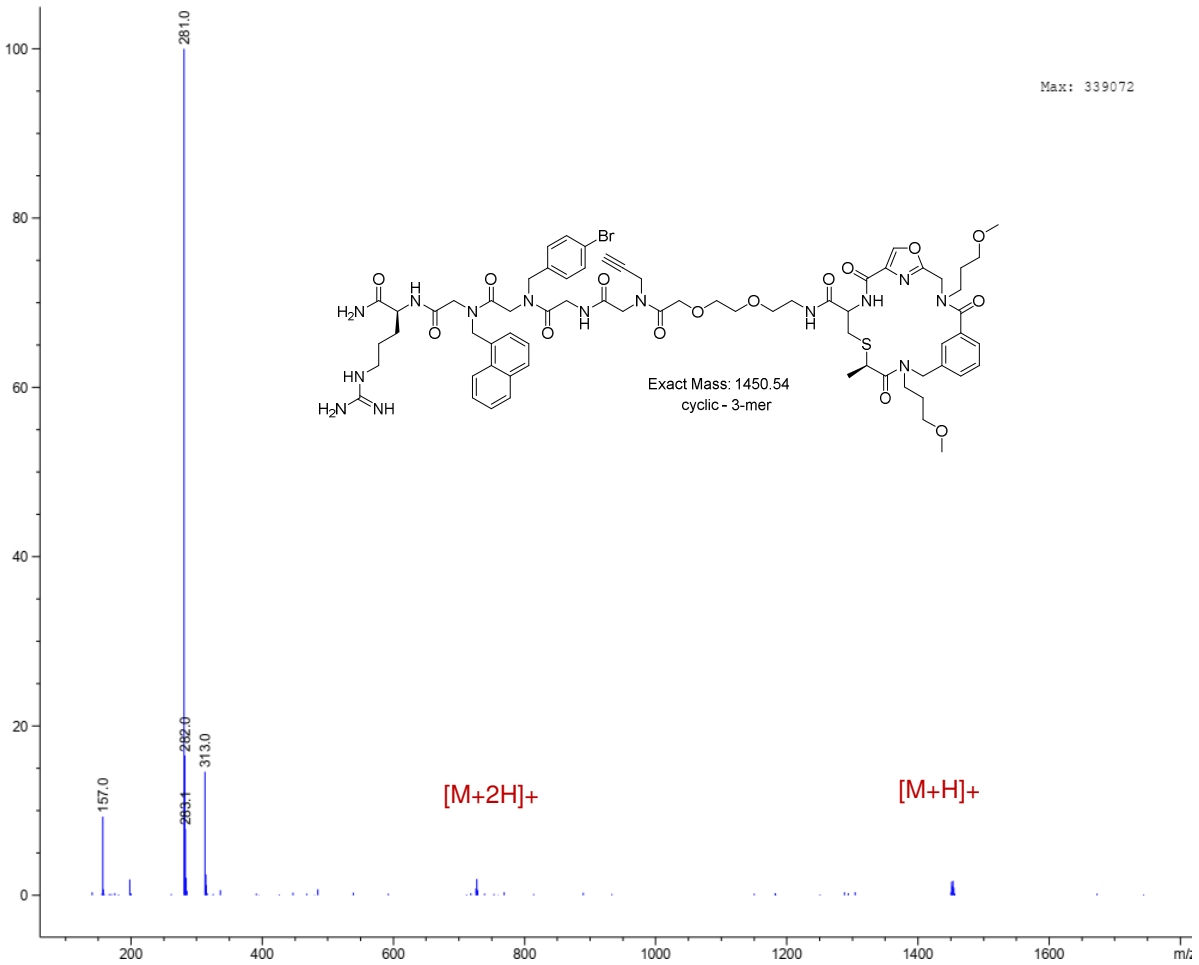
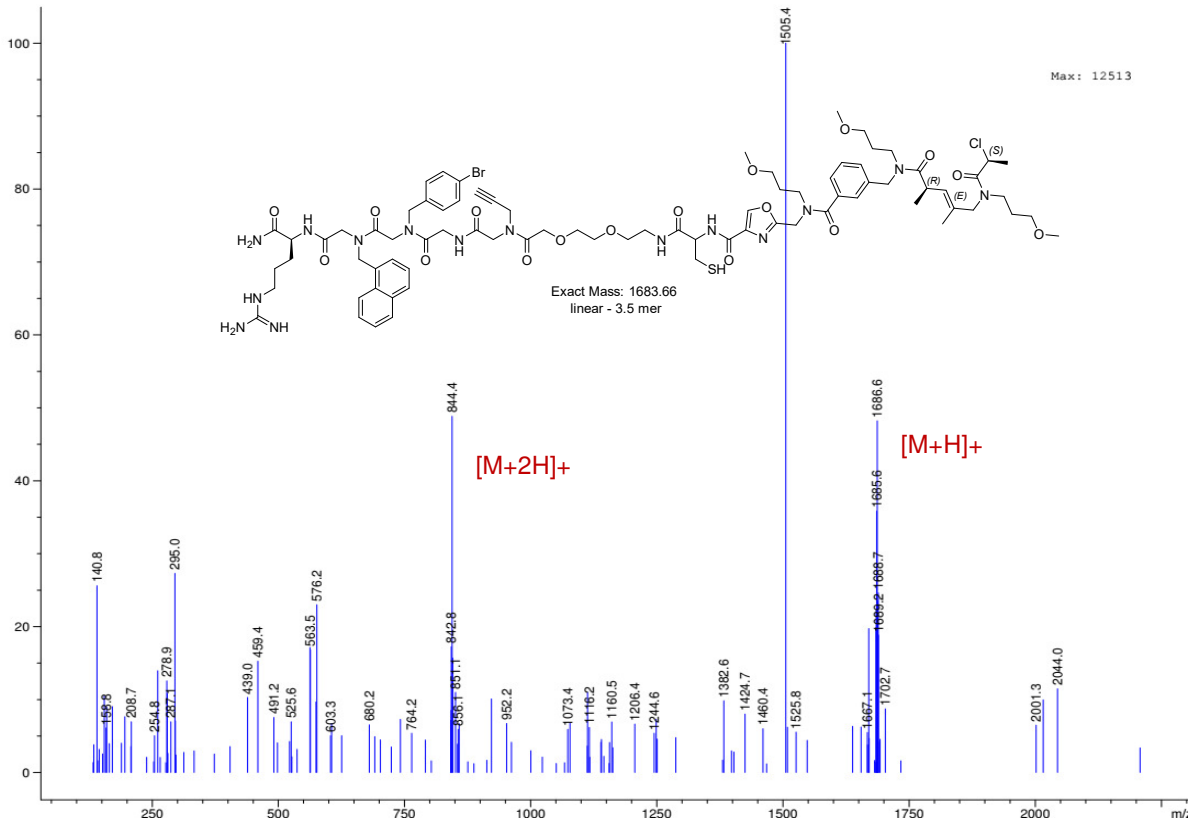


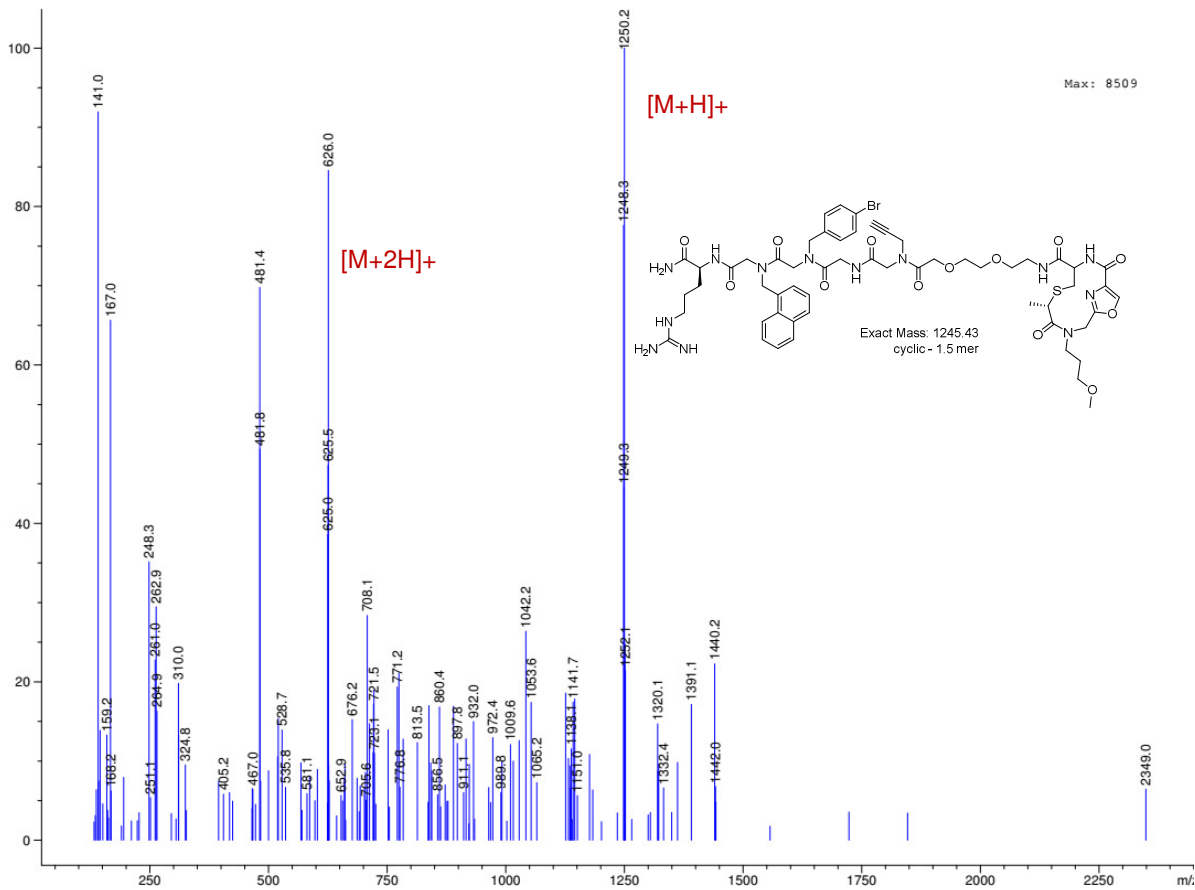


K9-[ACB]: Incomplete cyclization was observed on both 10 μm & 160 μm .

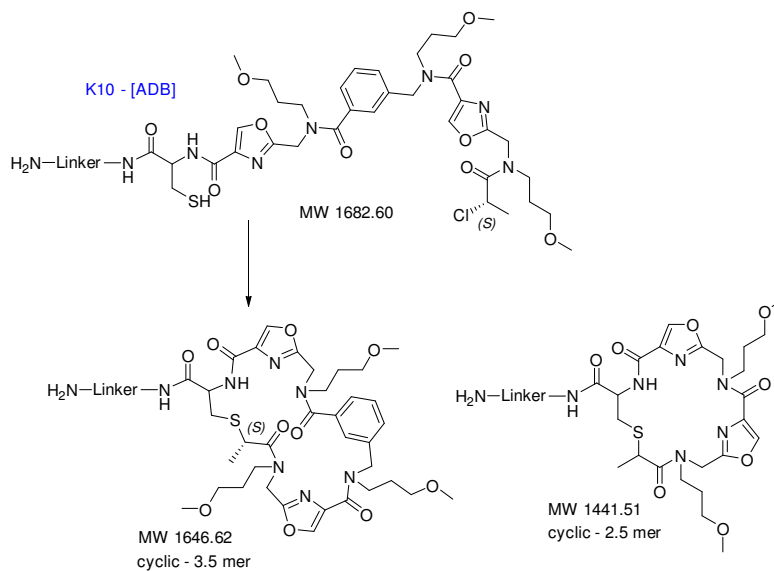


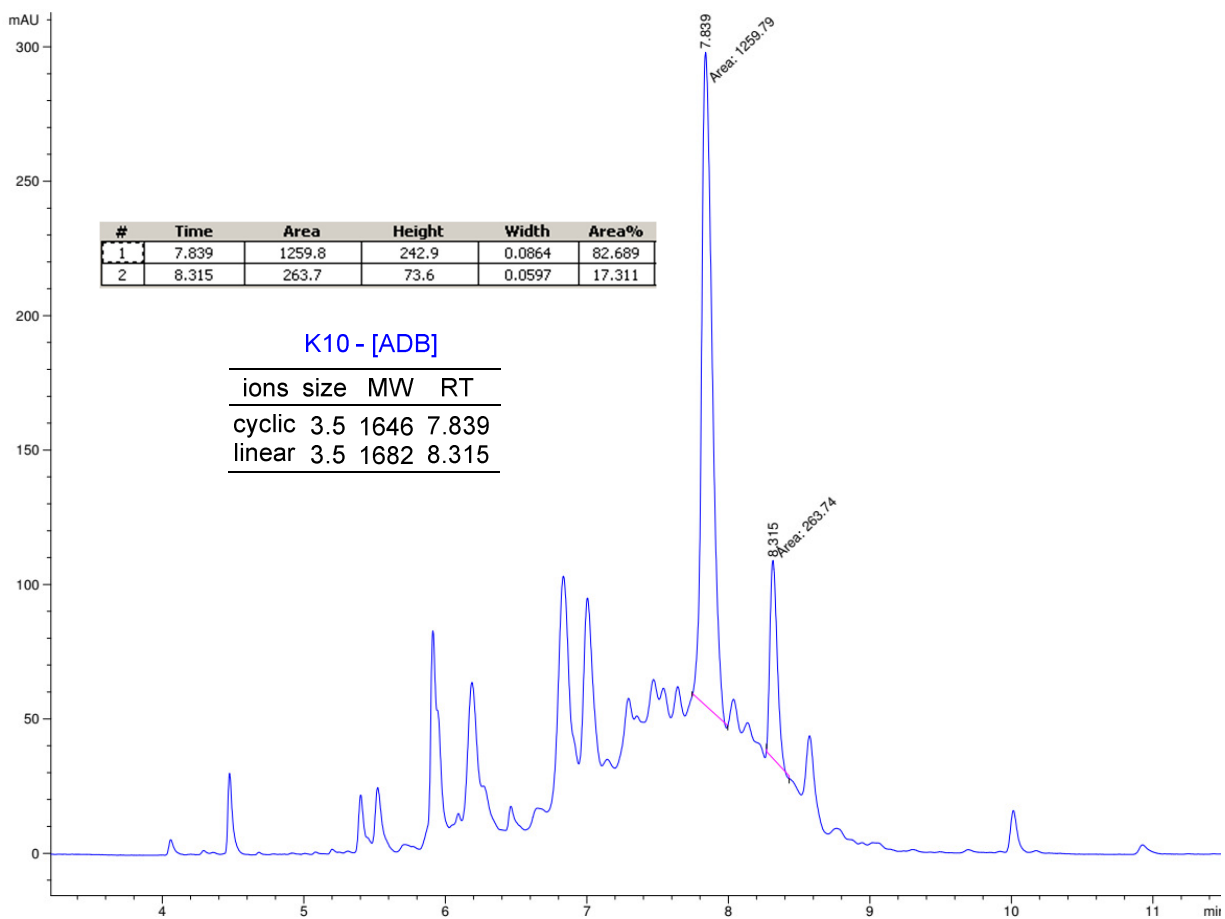
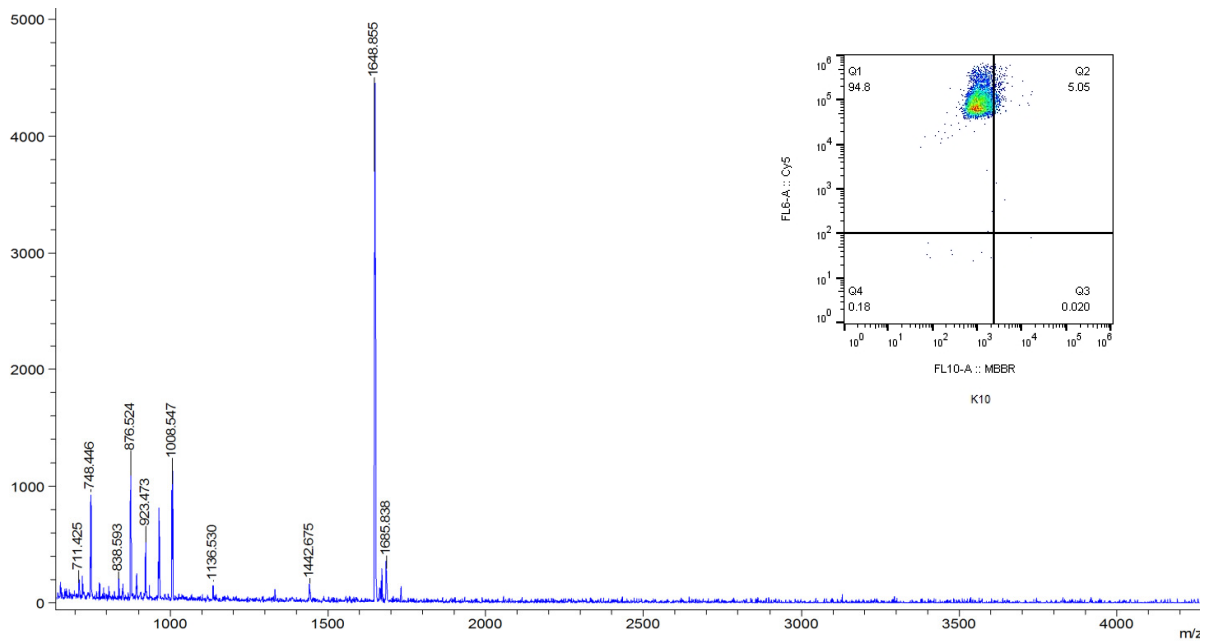


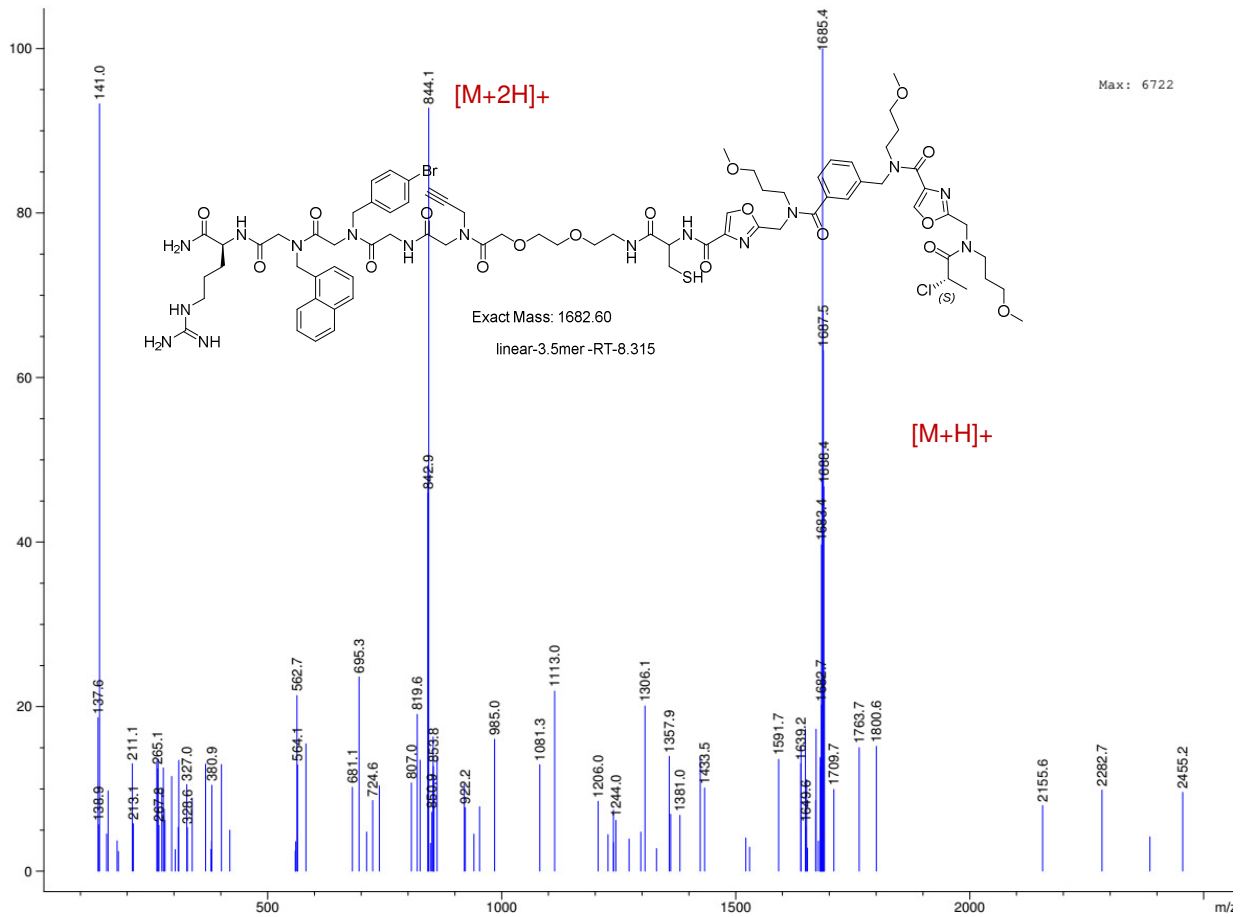
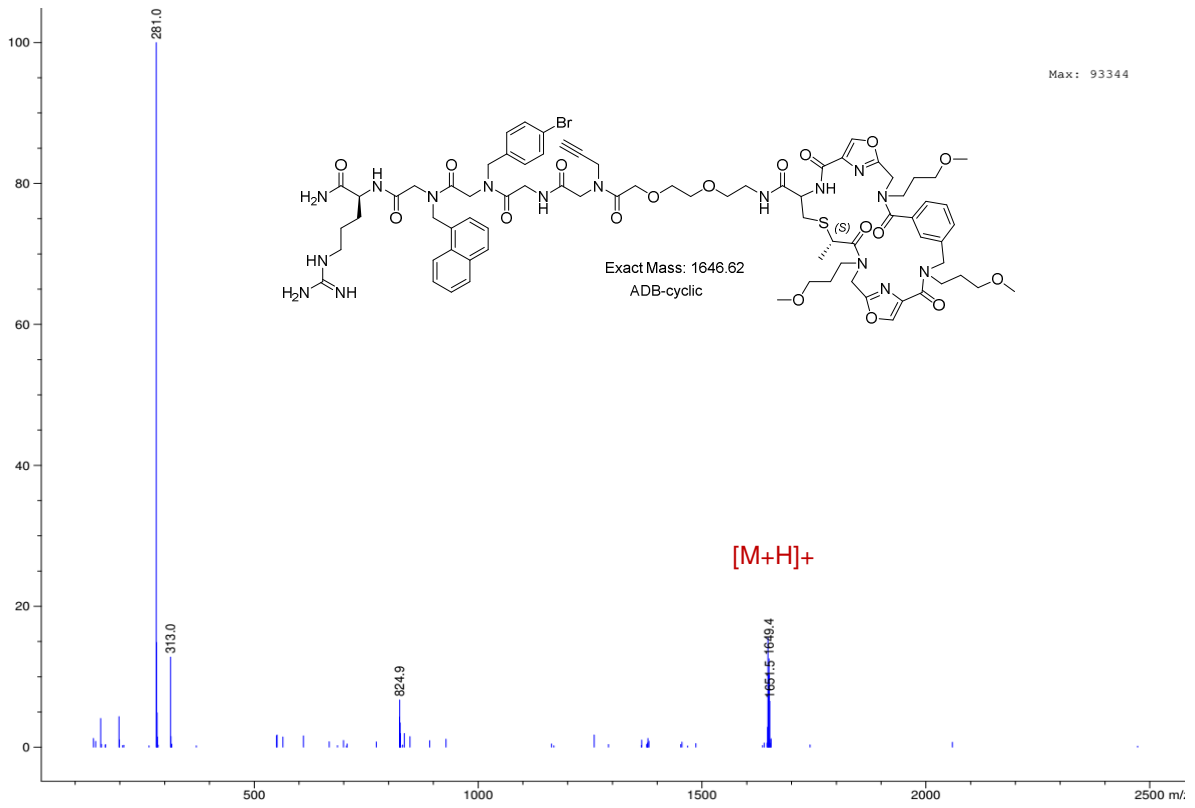




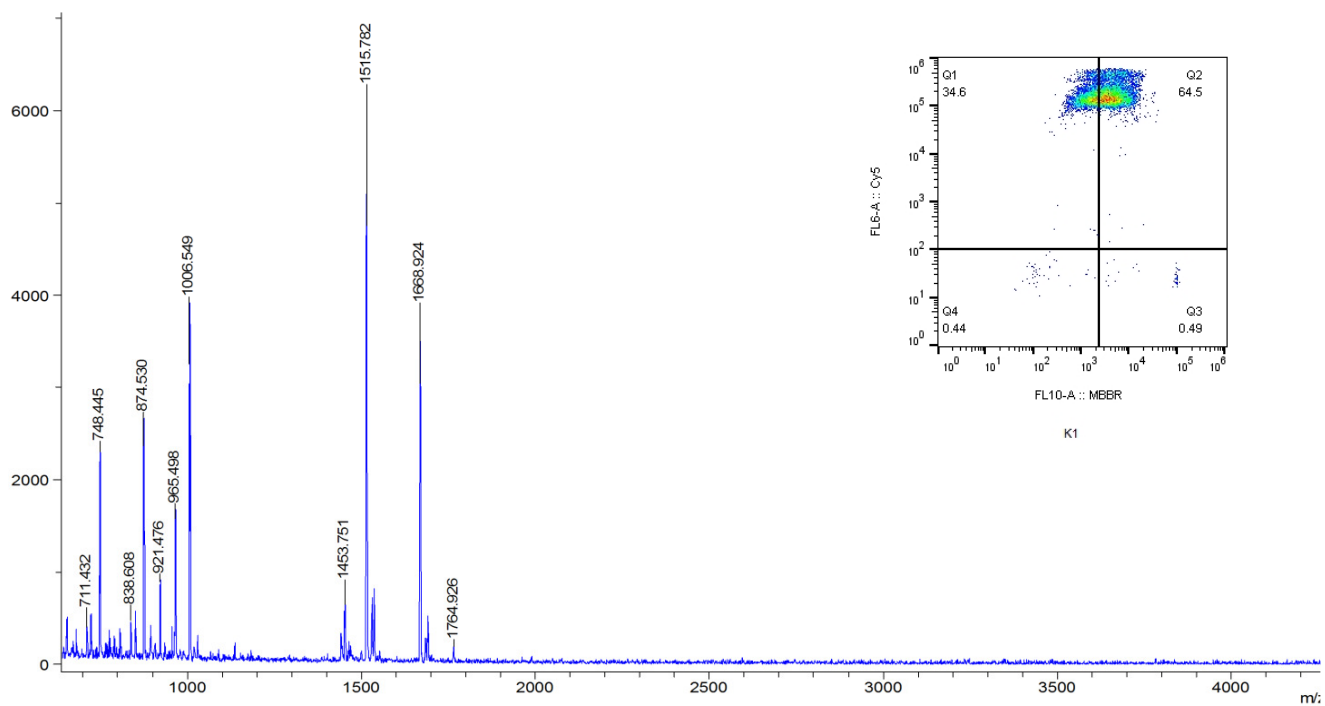
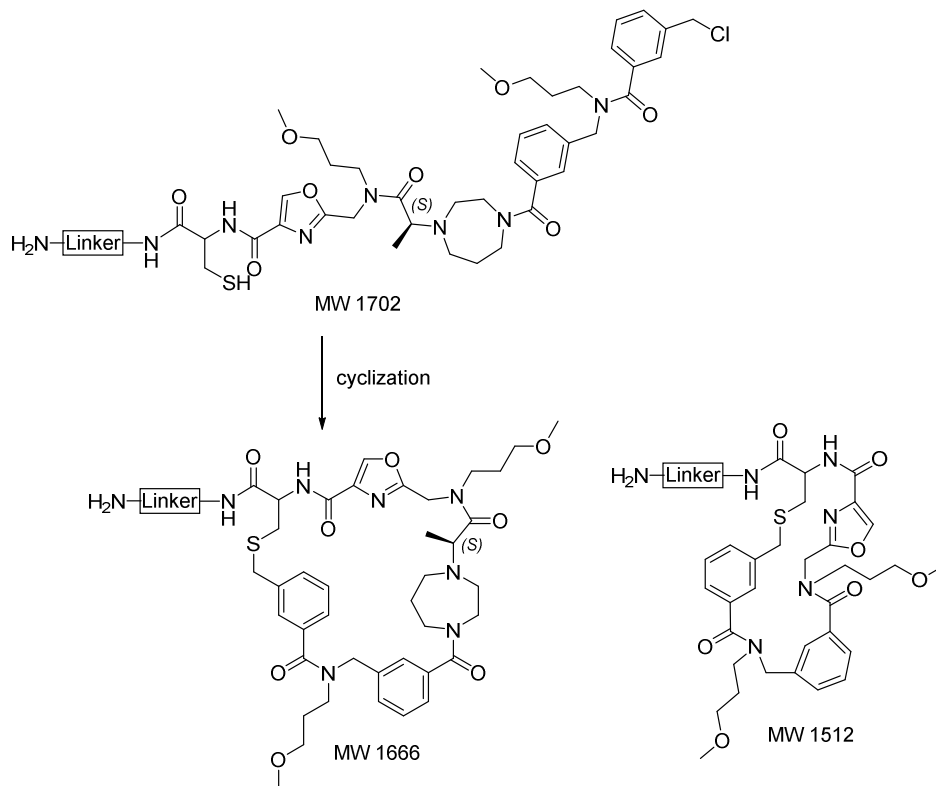
K10-[ADB]: Incomplete cyclization was observed on both 10 μm & 160 μm beads.

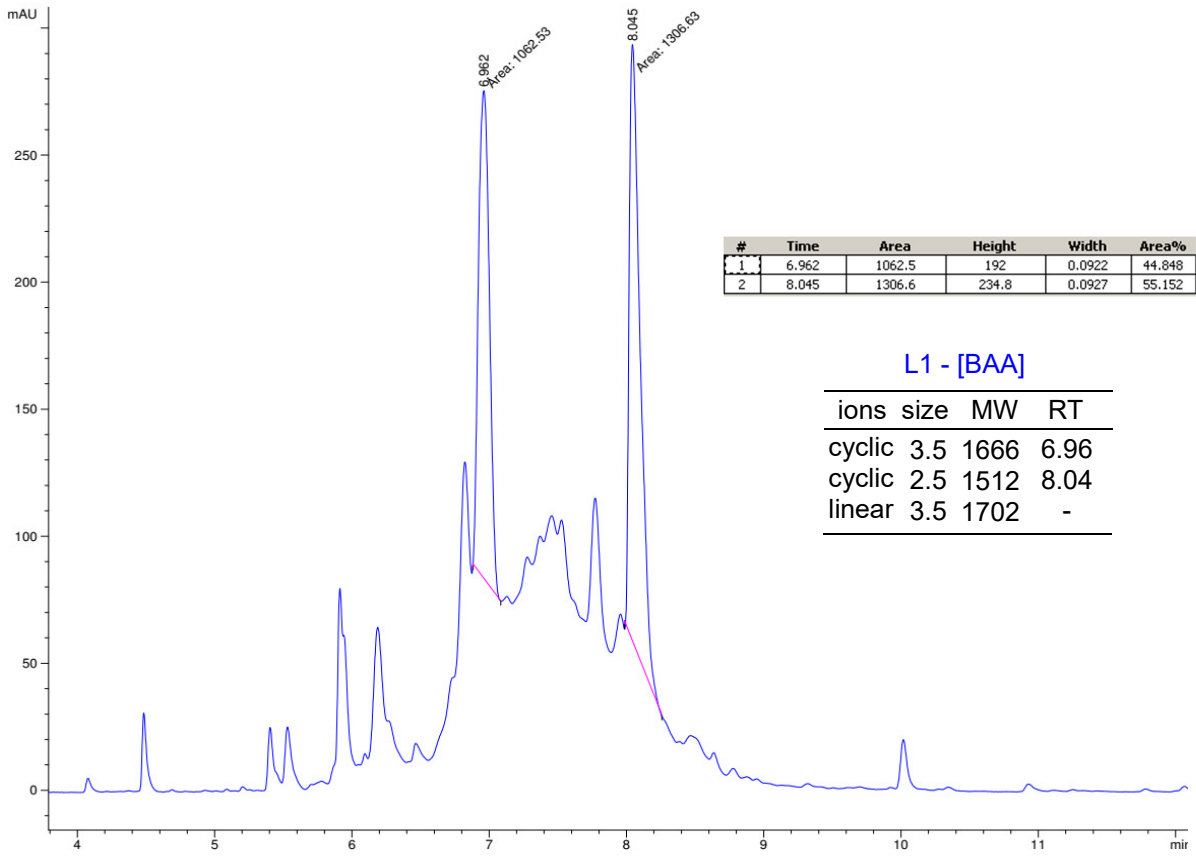






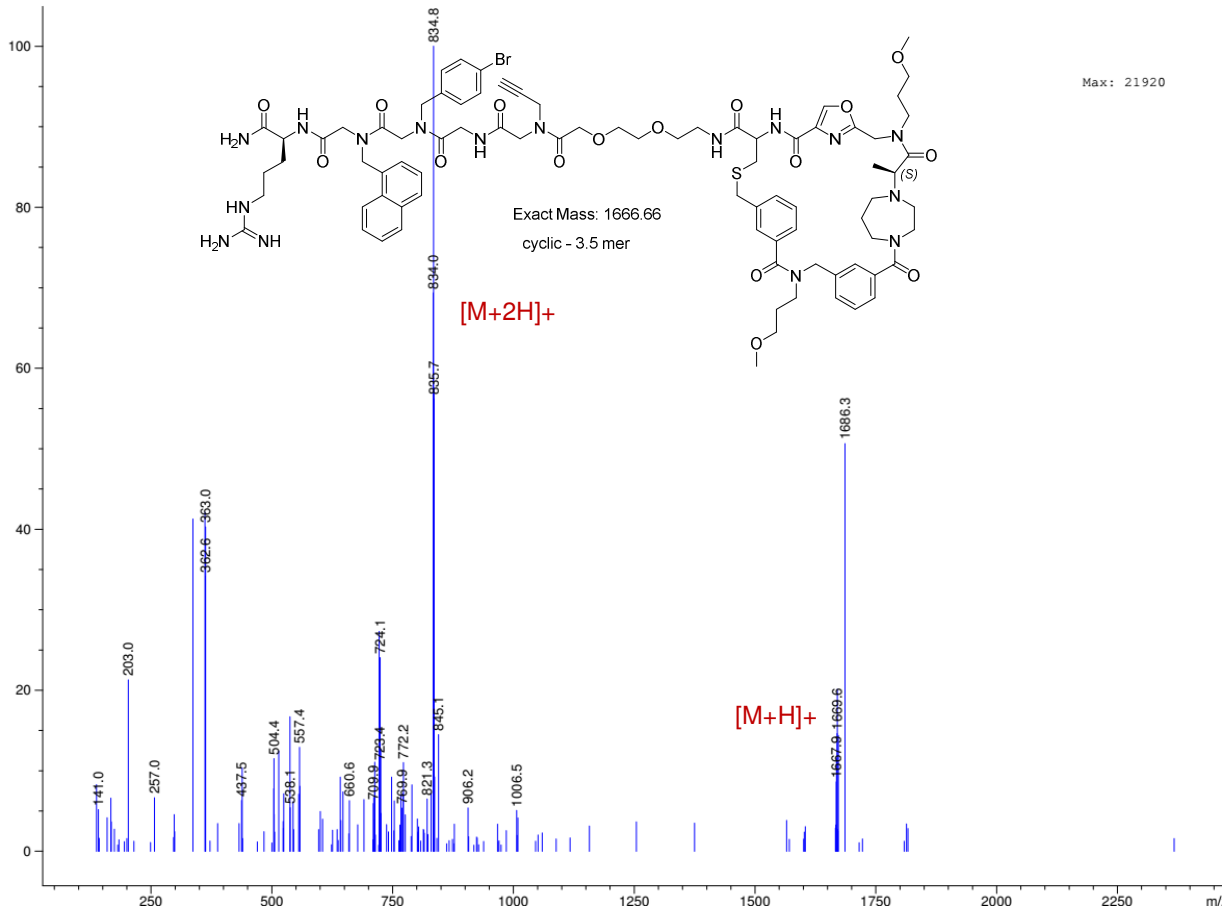
L1-[BAA]: Cyclization was incomplete on 10 μ m beads but was complete on 160 μ m beads.

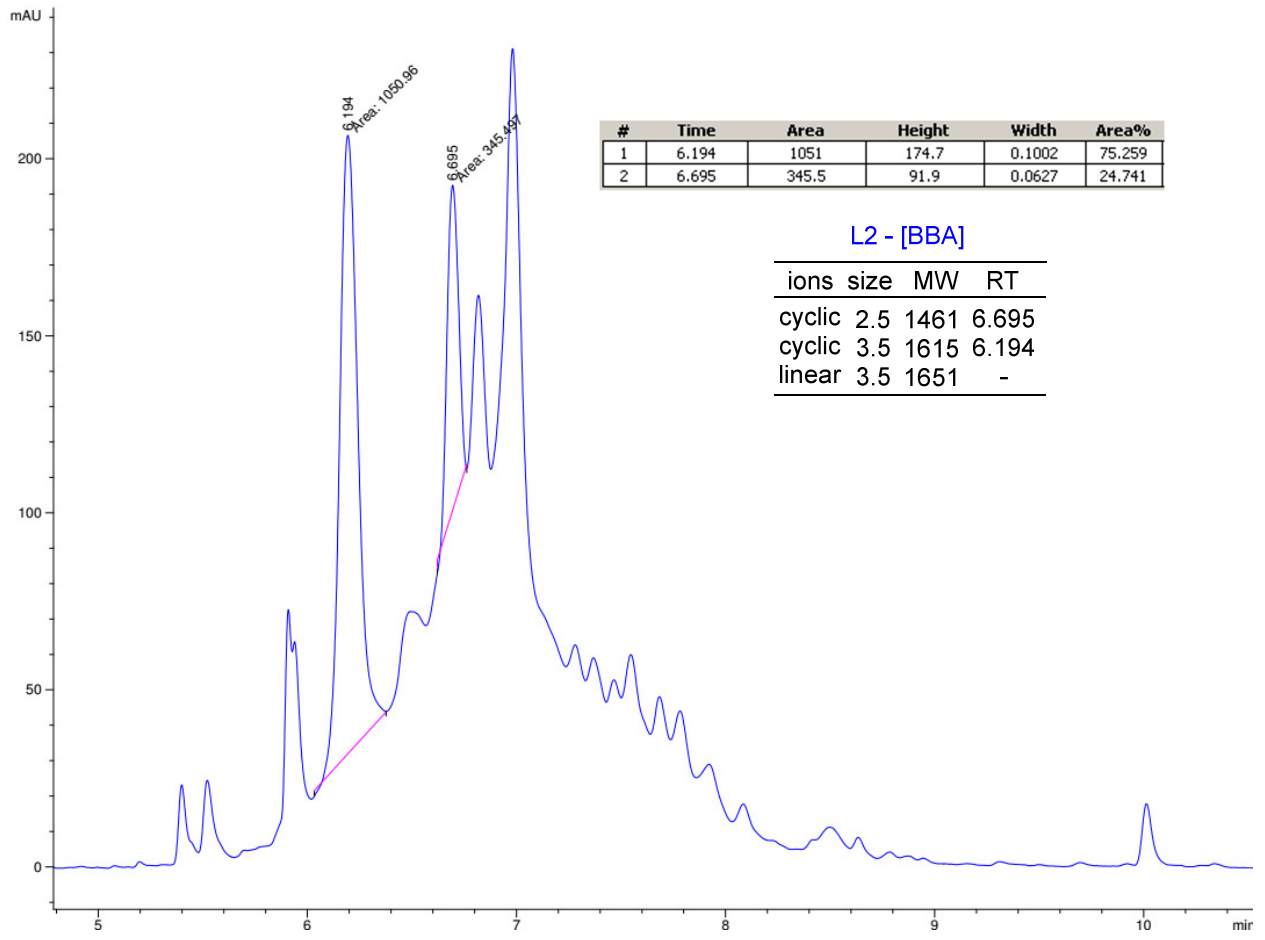
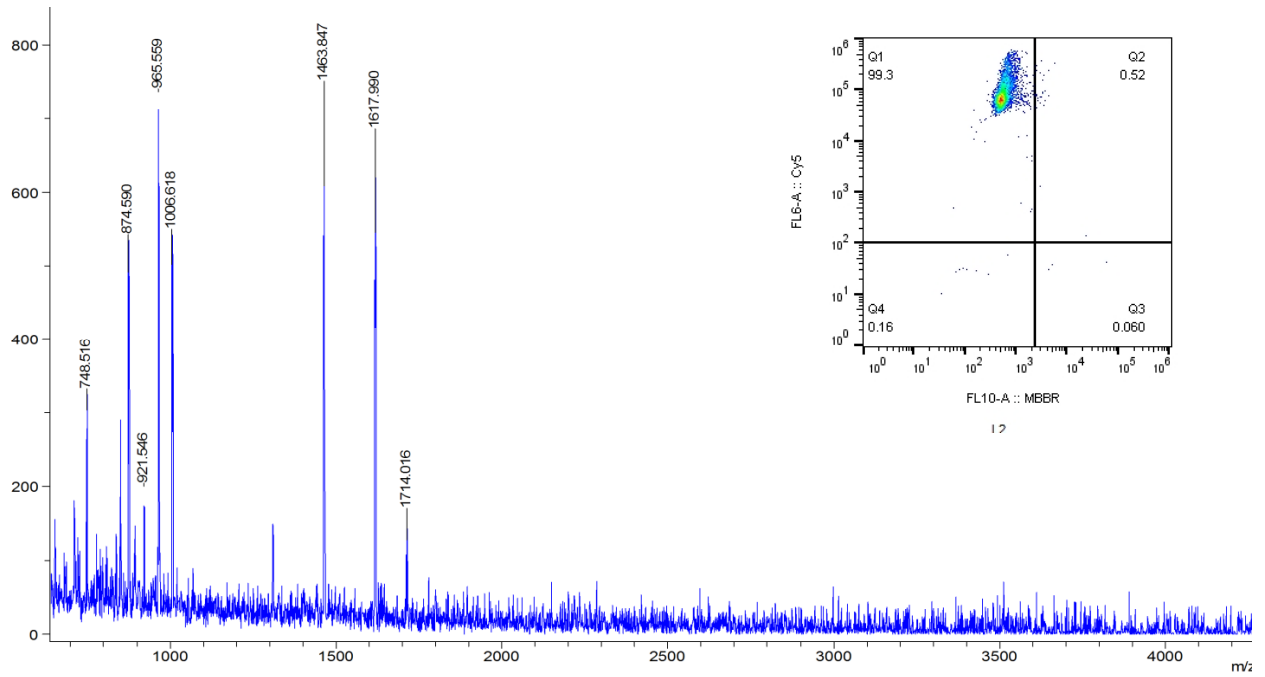


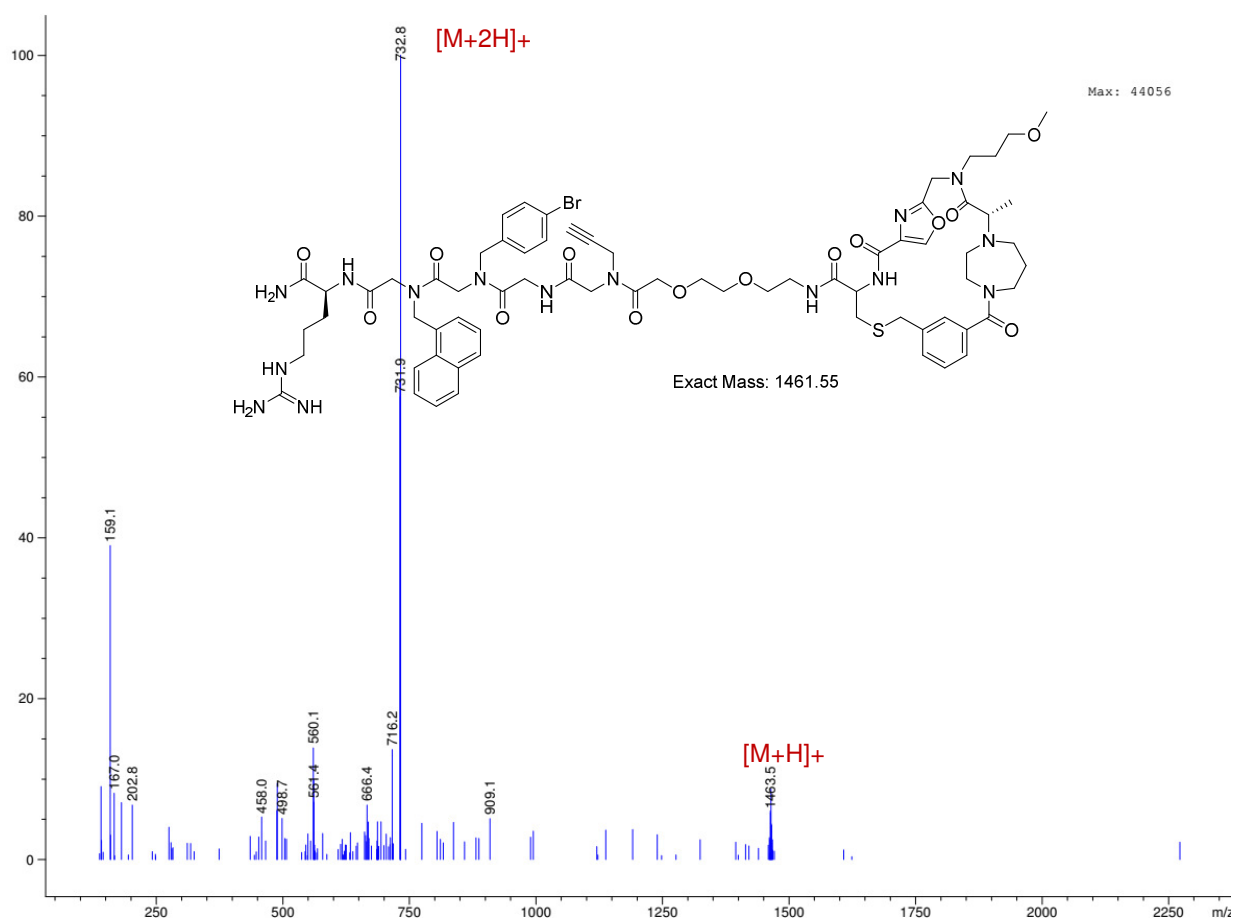
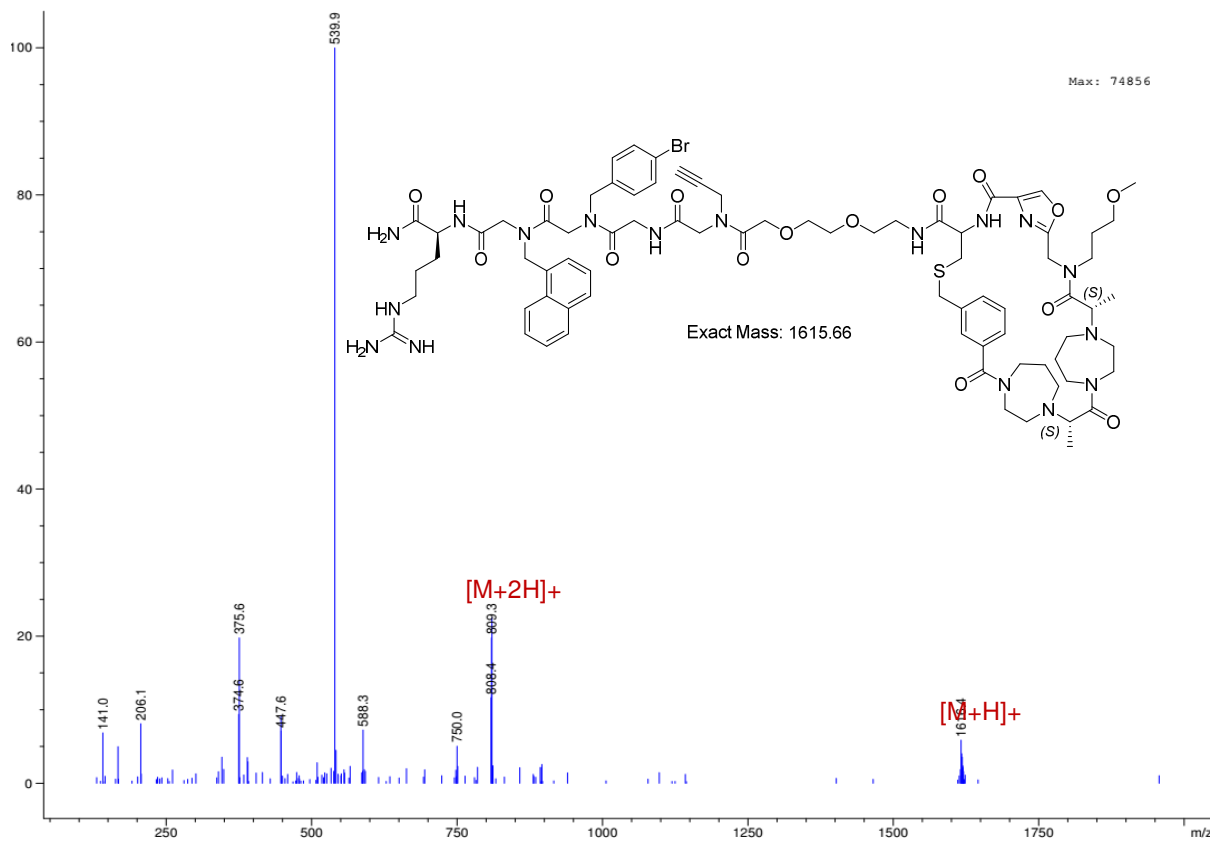


L1 - [BAA]

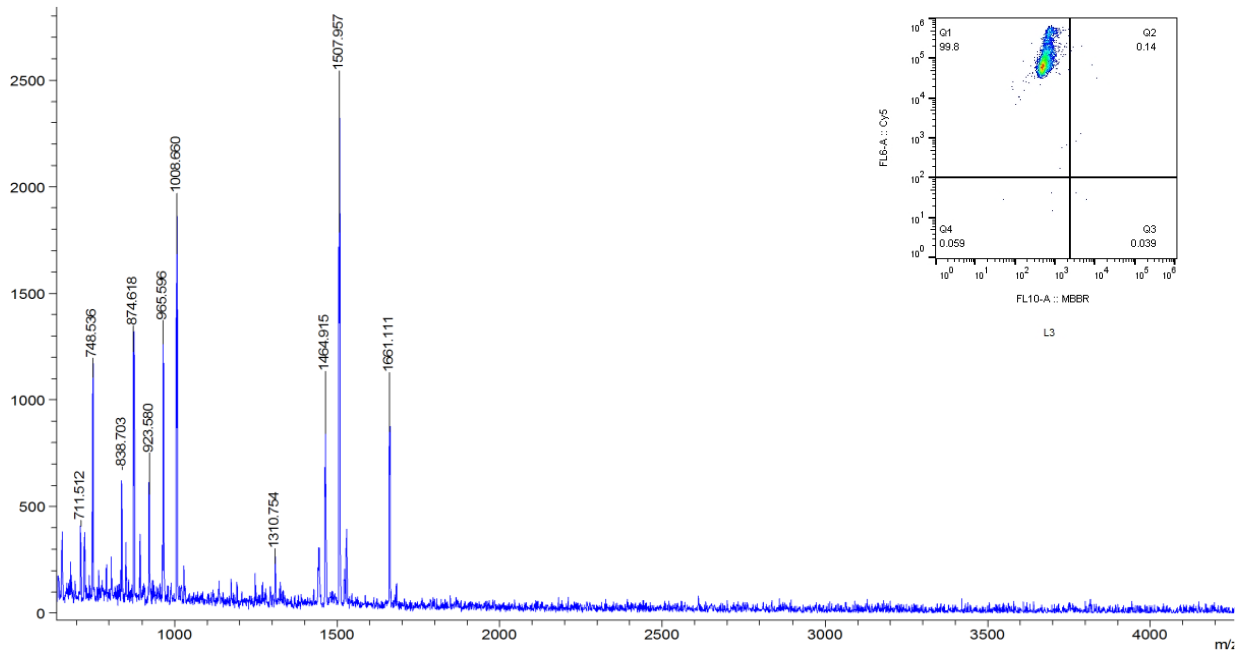
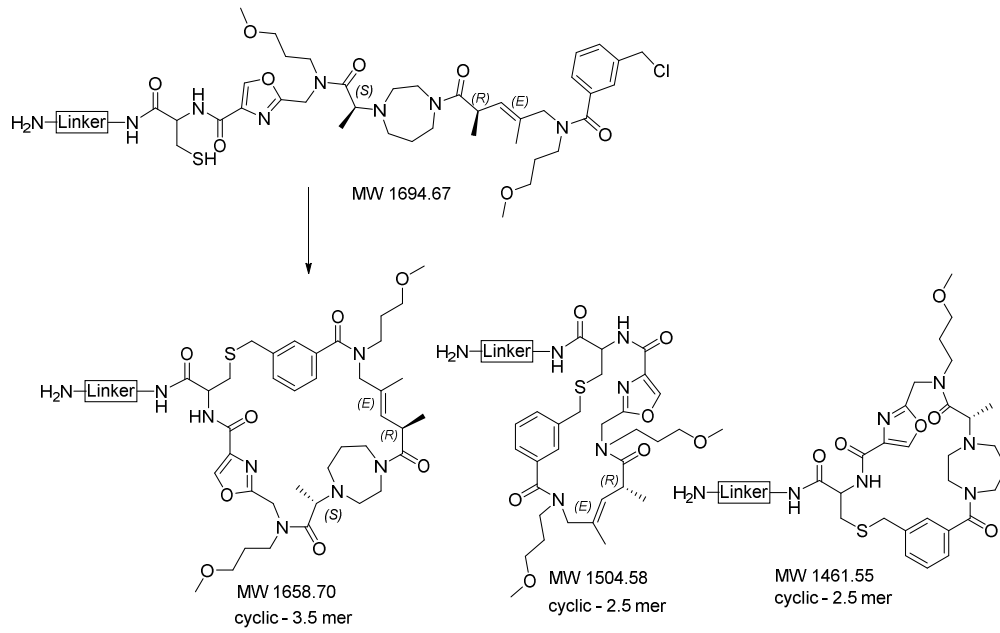
ions size	MW	RT
cyclic 3.5	1666	6.96
cyclic 2.5	1512	8.04
linear 3.5	1702	-

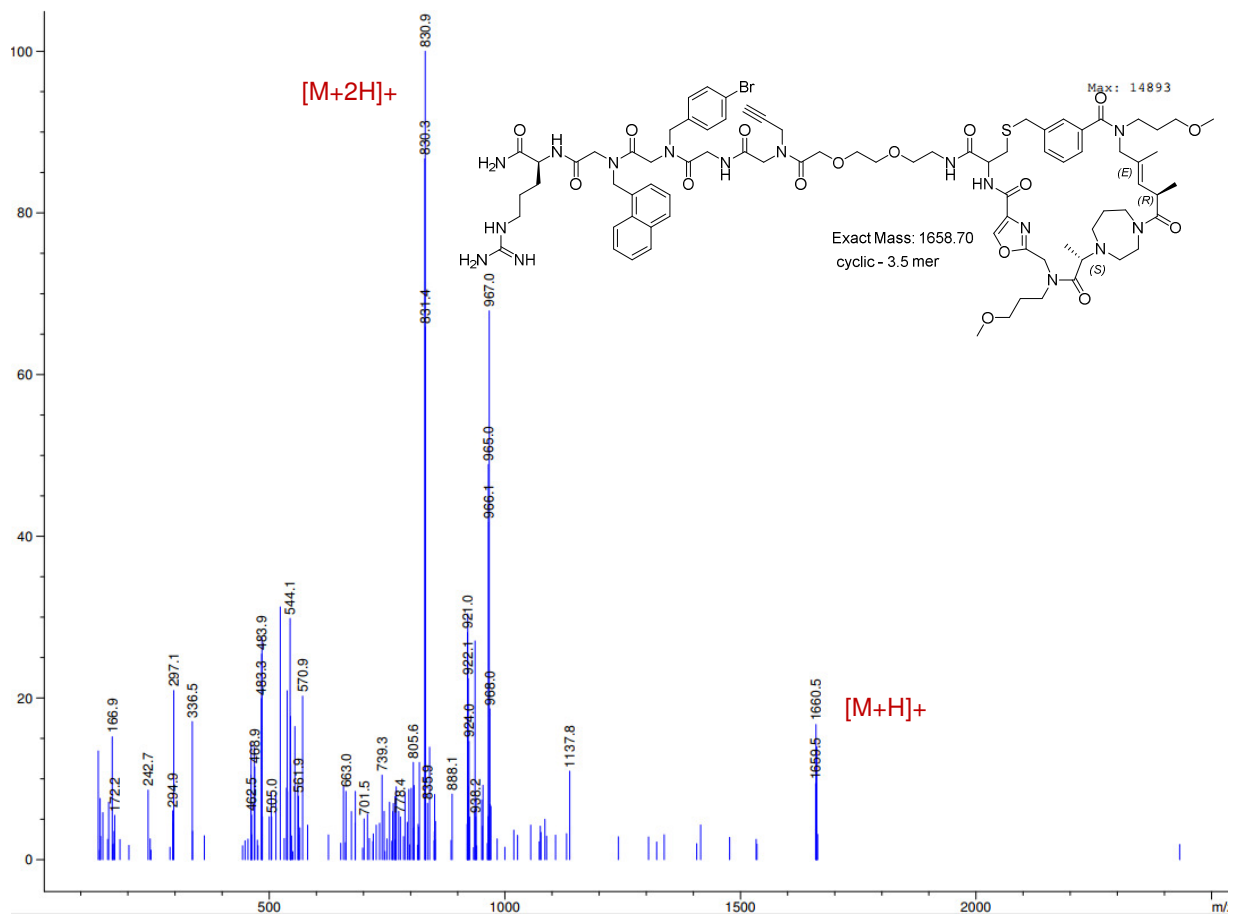
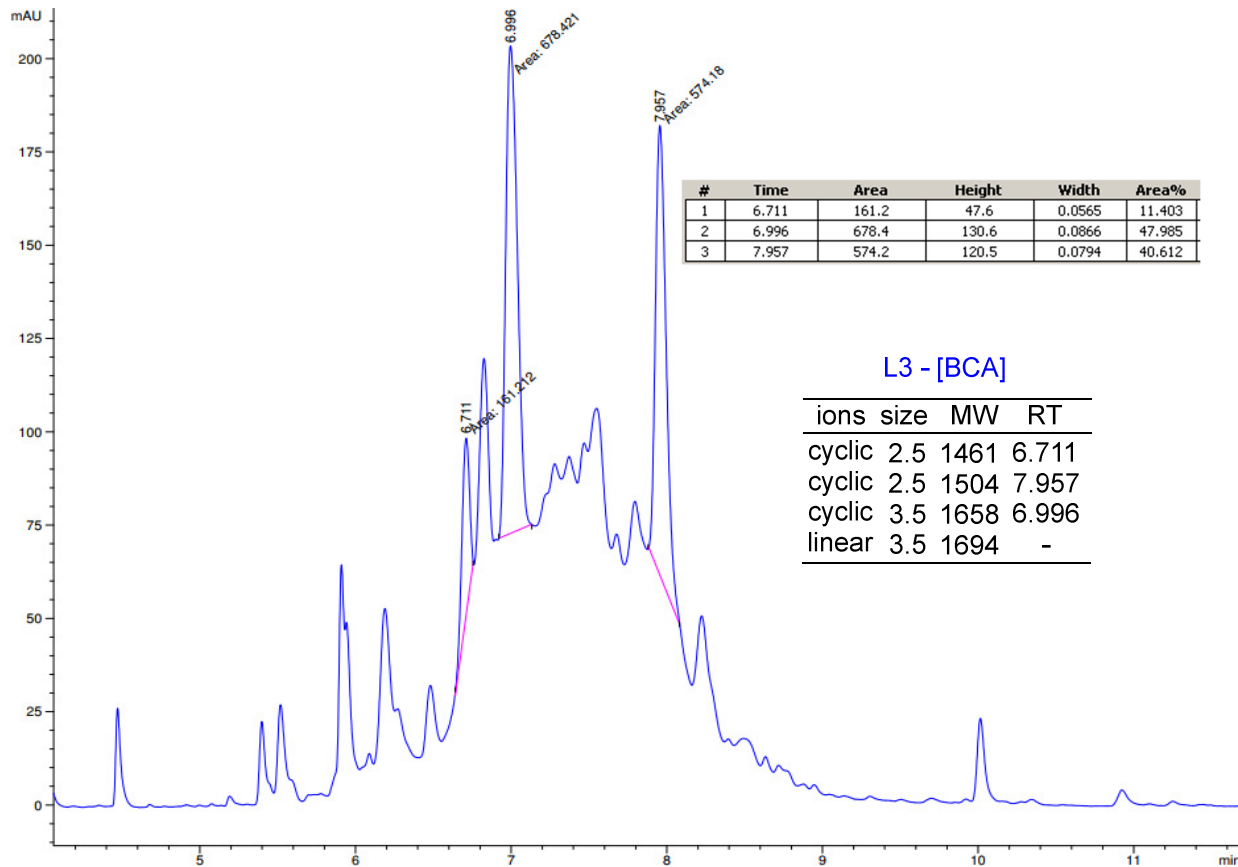


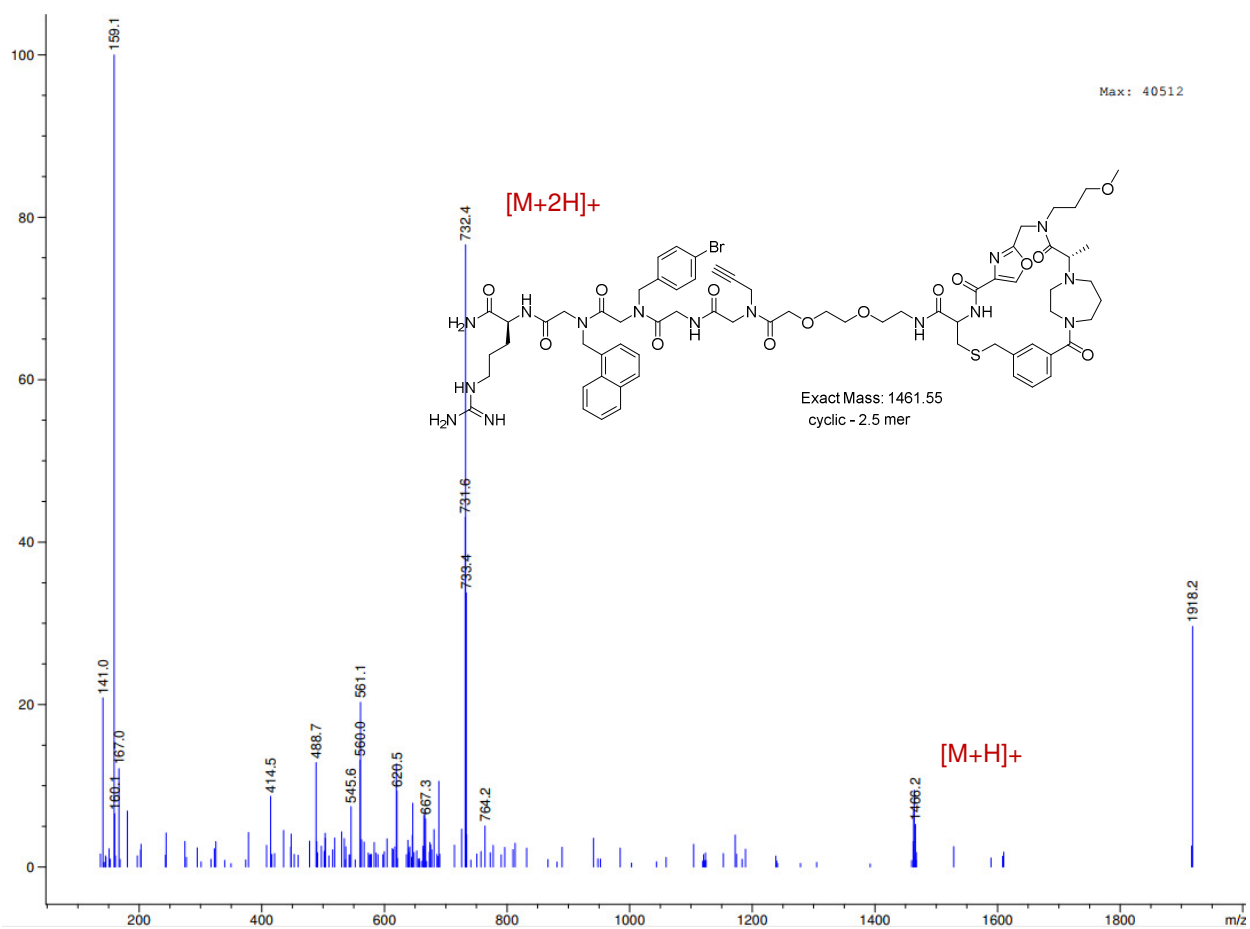
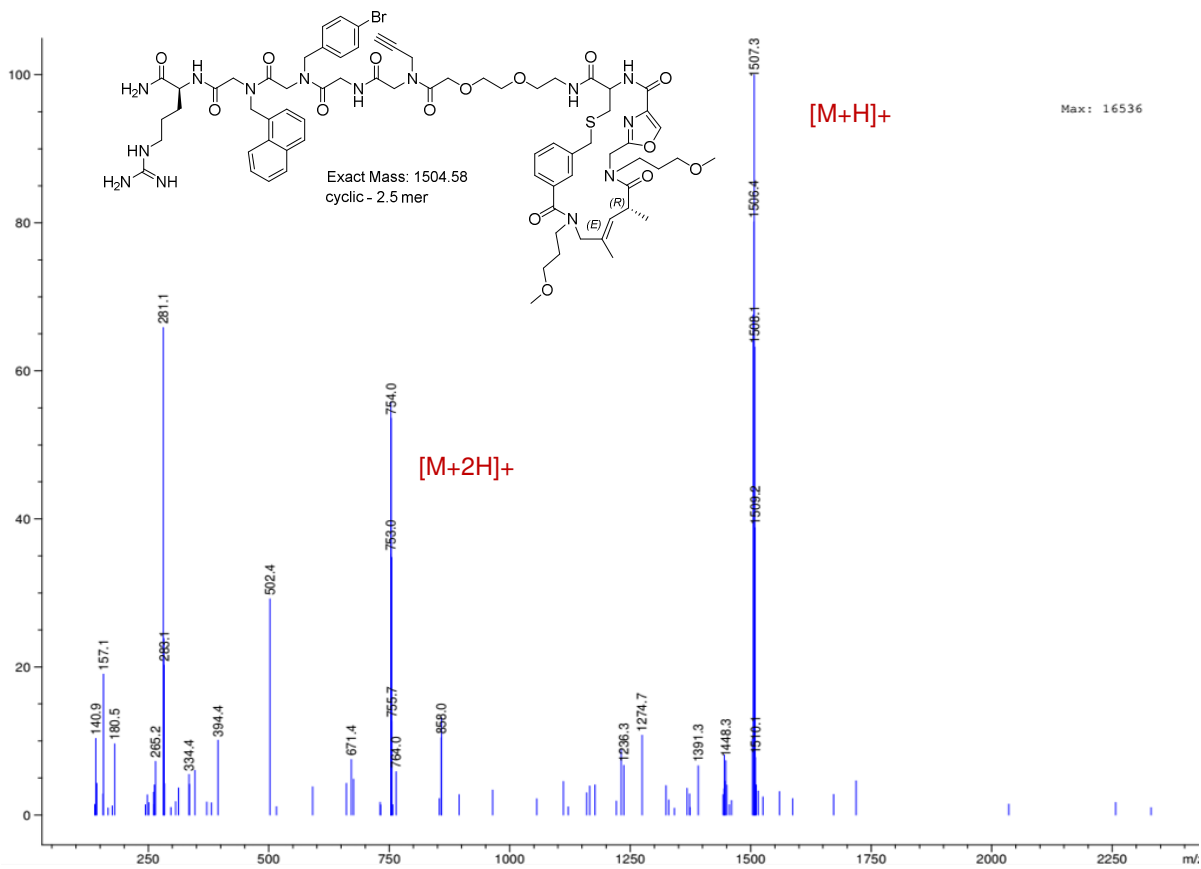




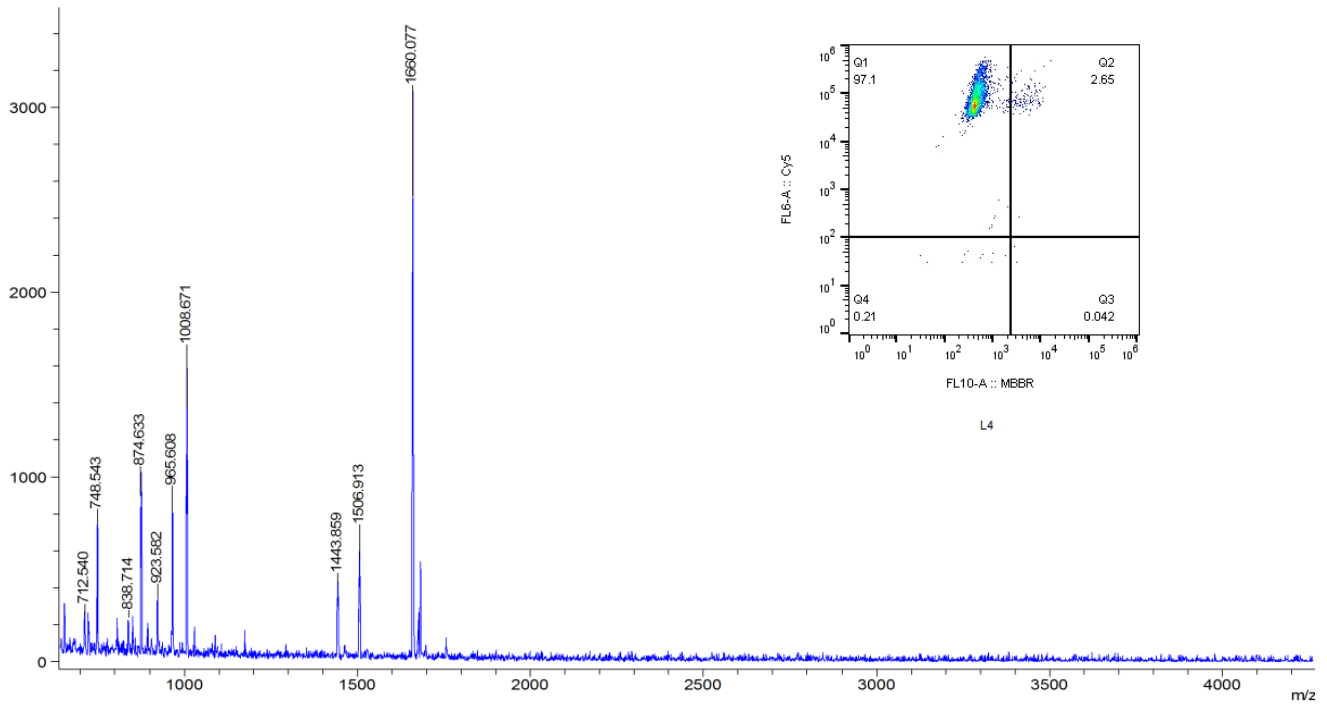
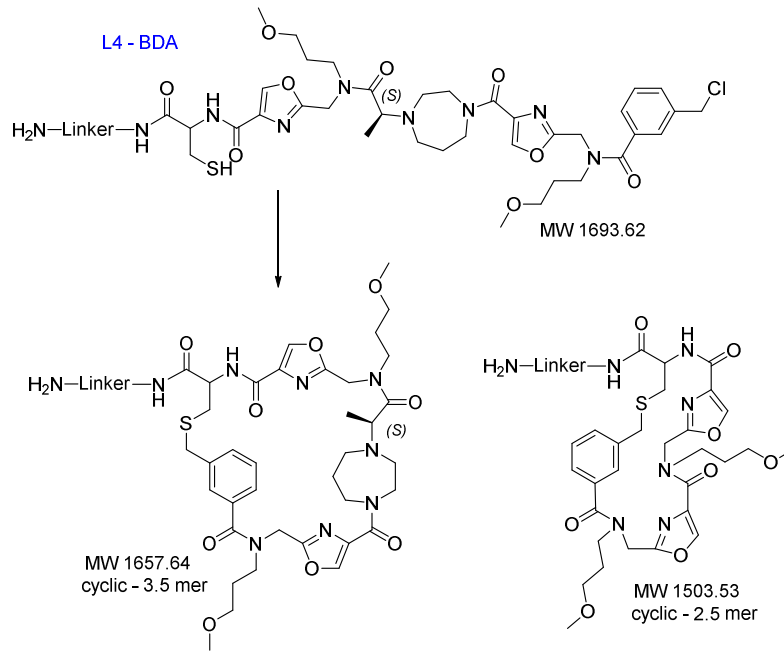
L3-[BCA]: Cyclization was complete on both 10 μm & 160 μm beads.

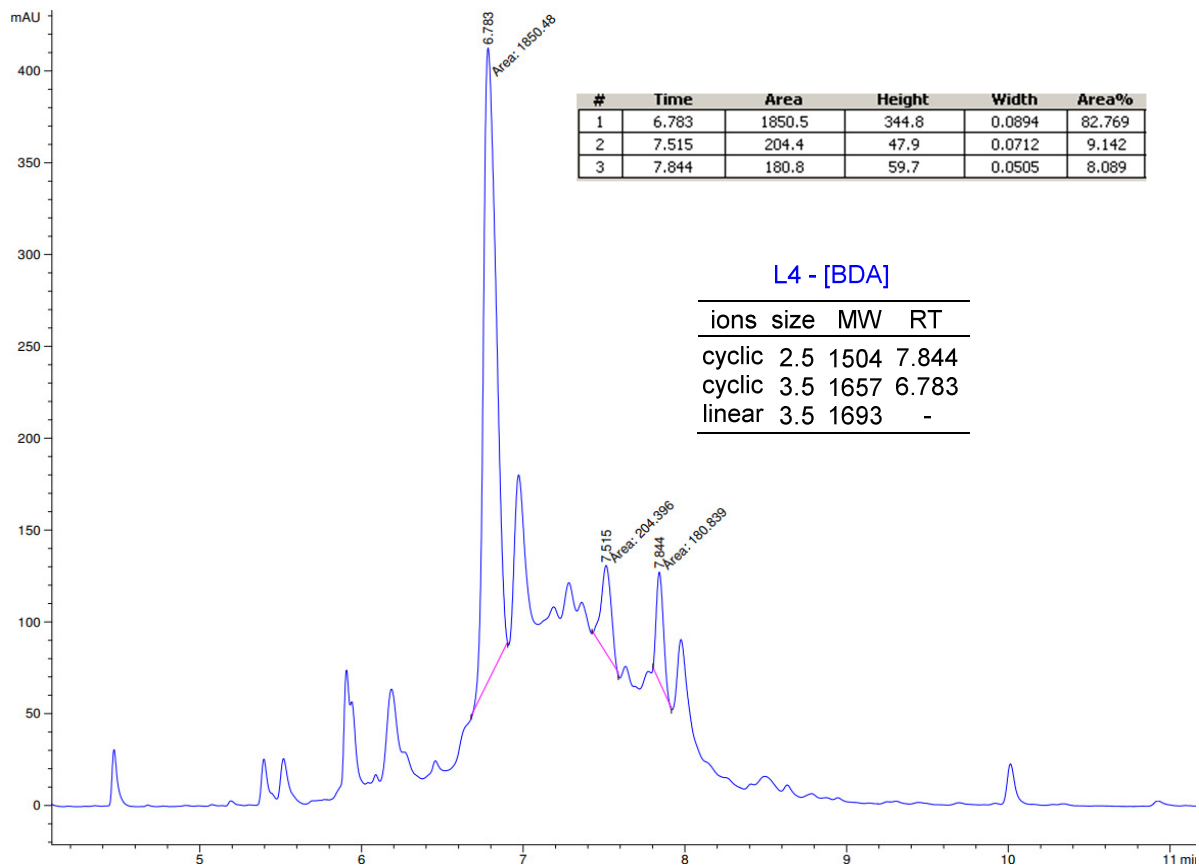






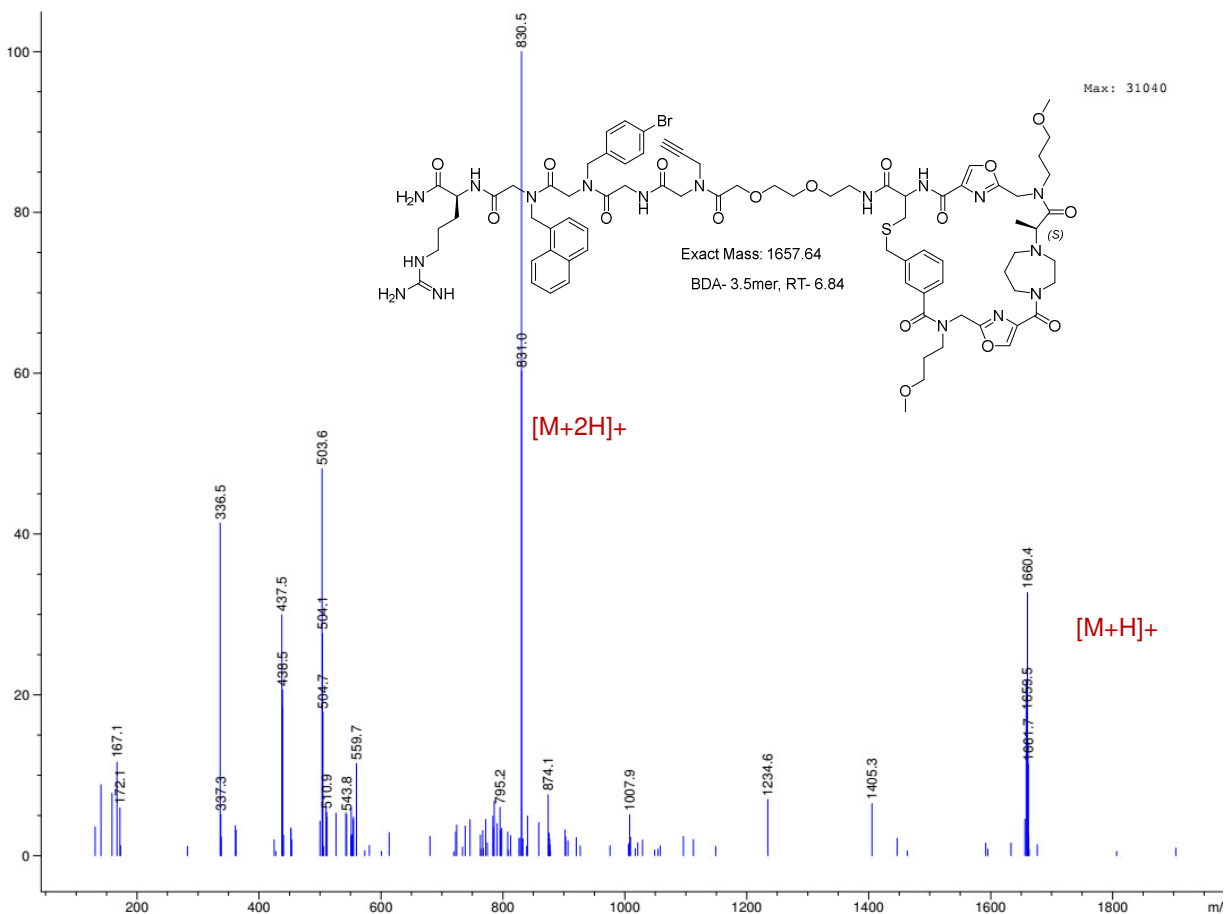
L4-[BDA]: Complete cyclization was observed on 10 μm & 160 μm beads.

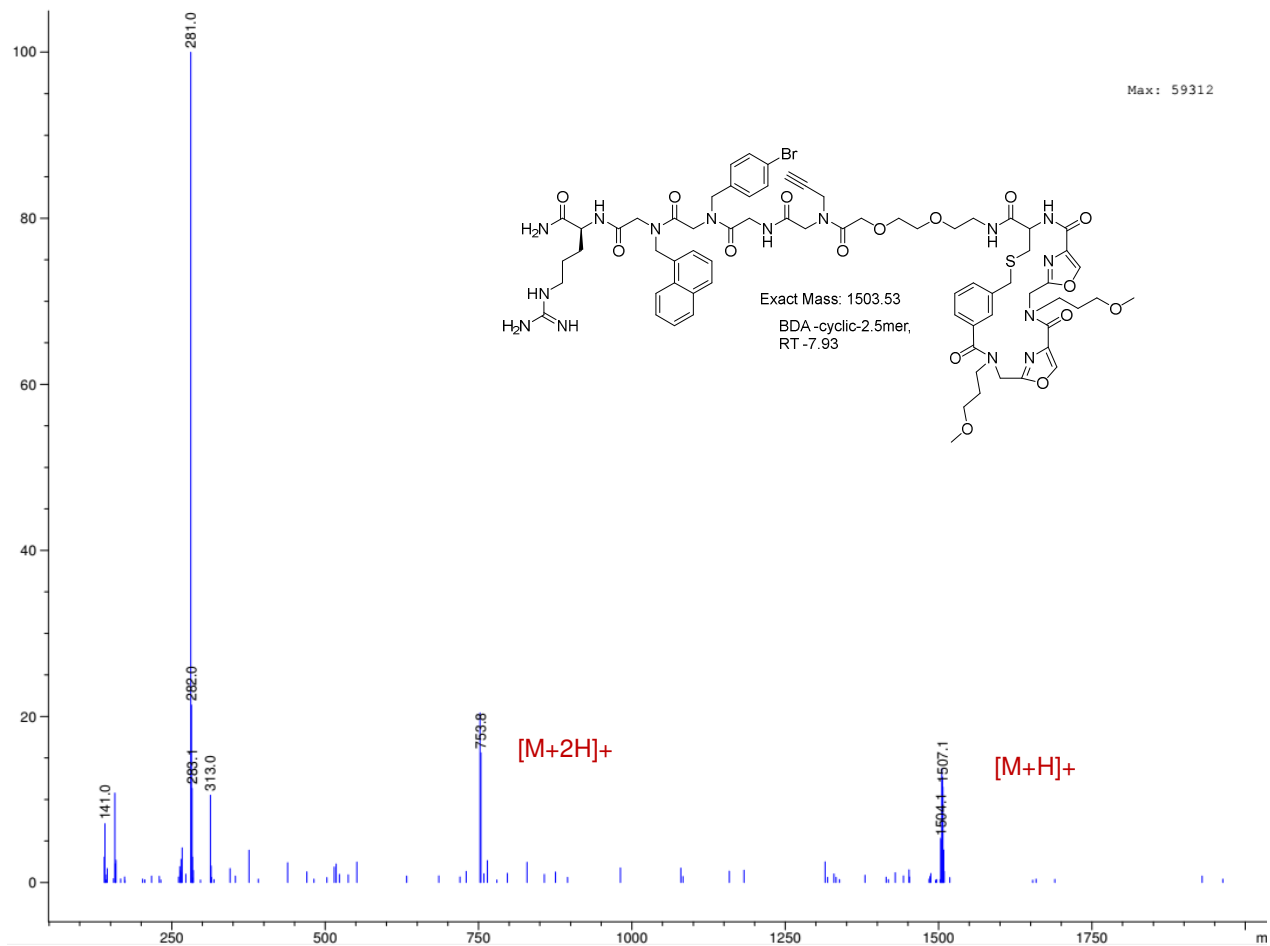




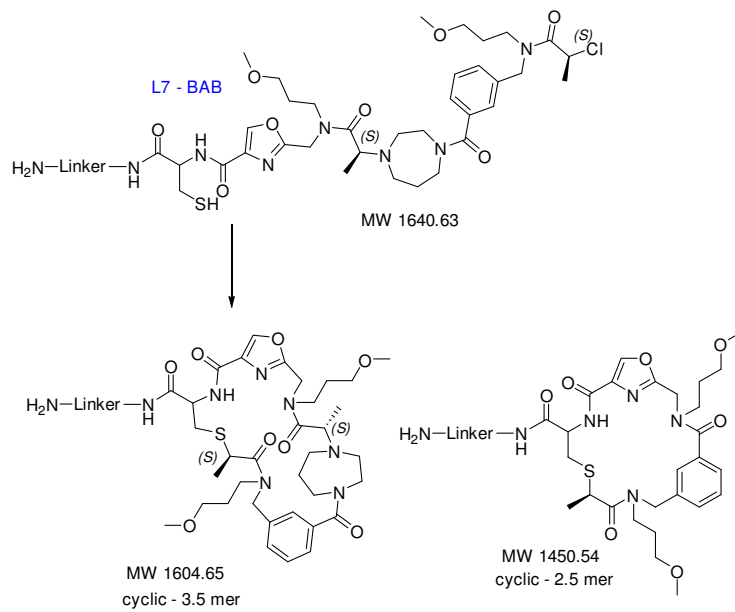
L4 - [BDA]

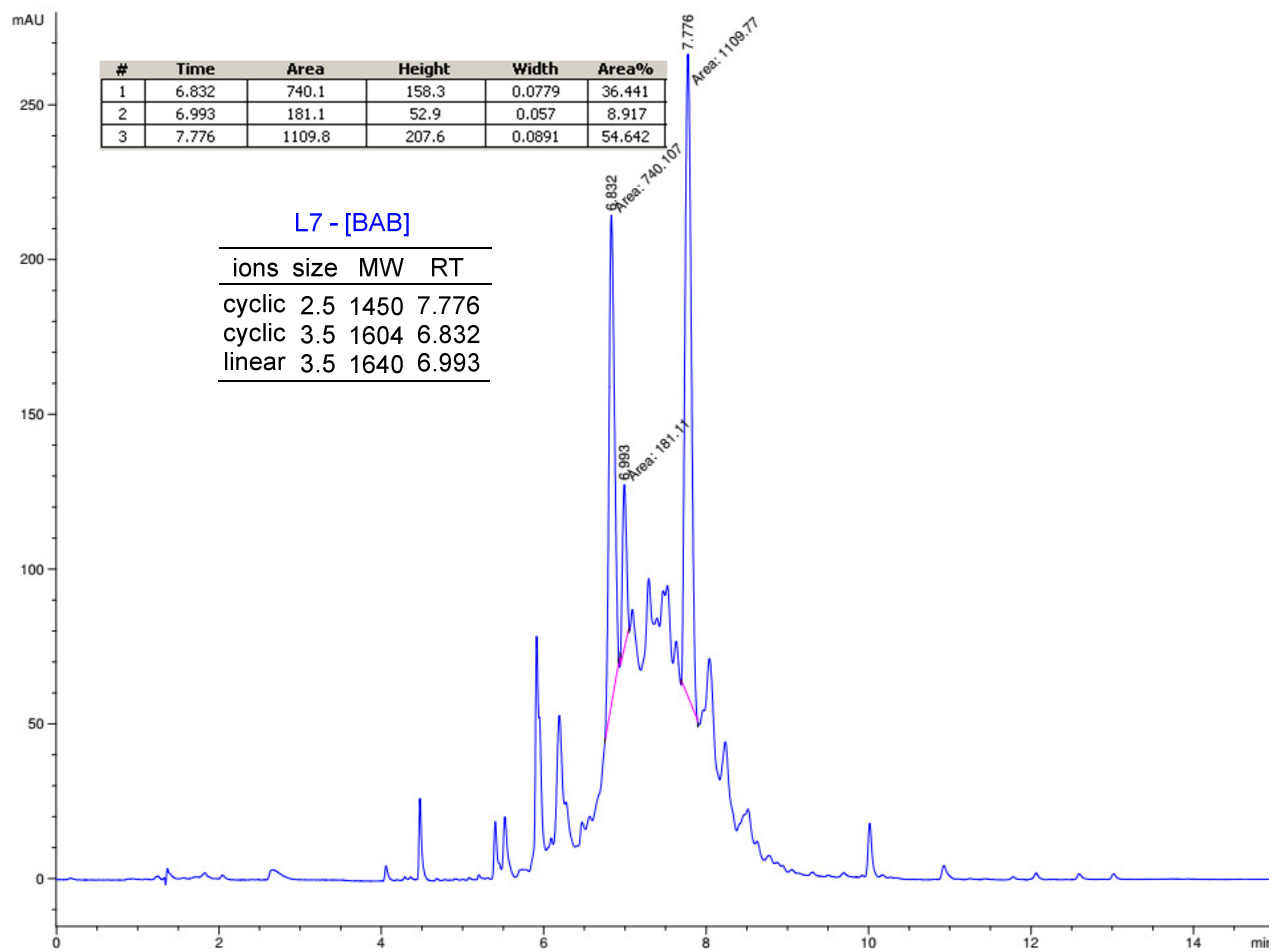
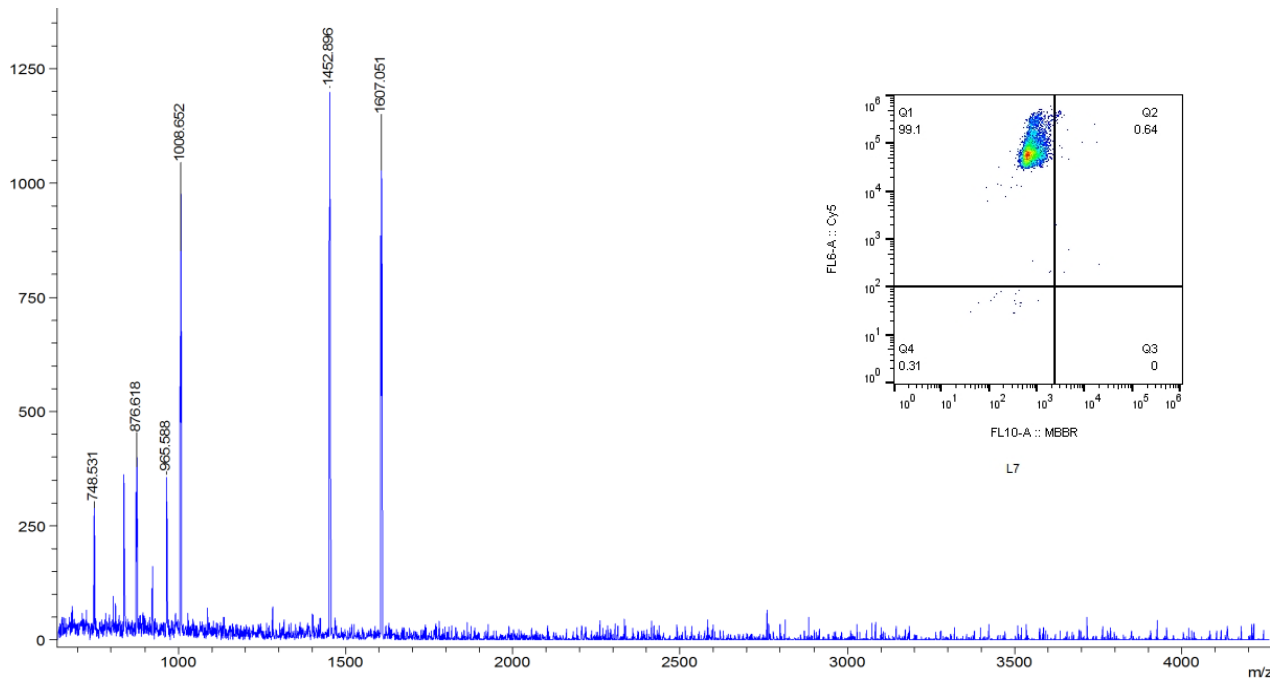
	ions size	MW	RT
cyclic	2.5	1504	7.844
cyclic	3.5	1657	6.783
linear	3.5	1693	-

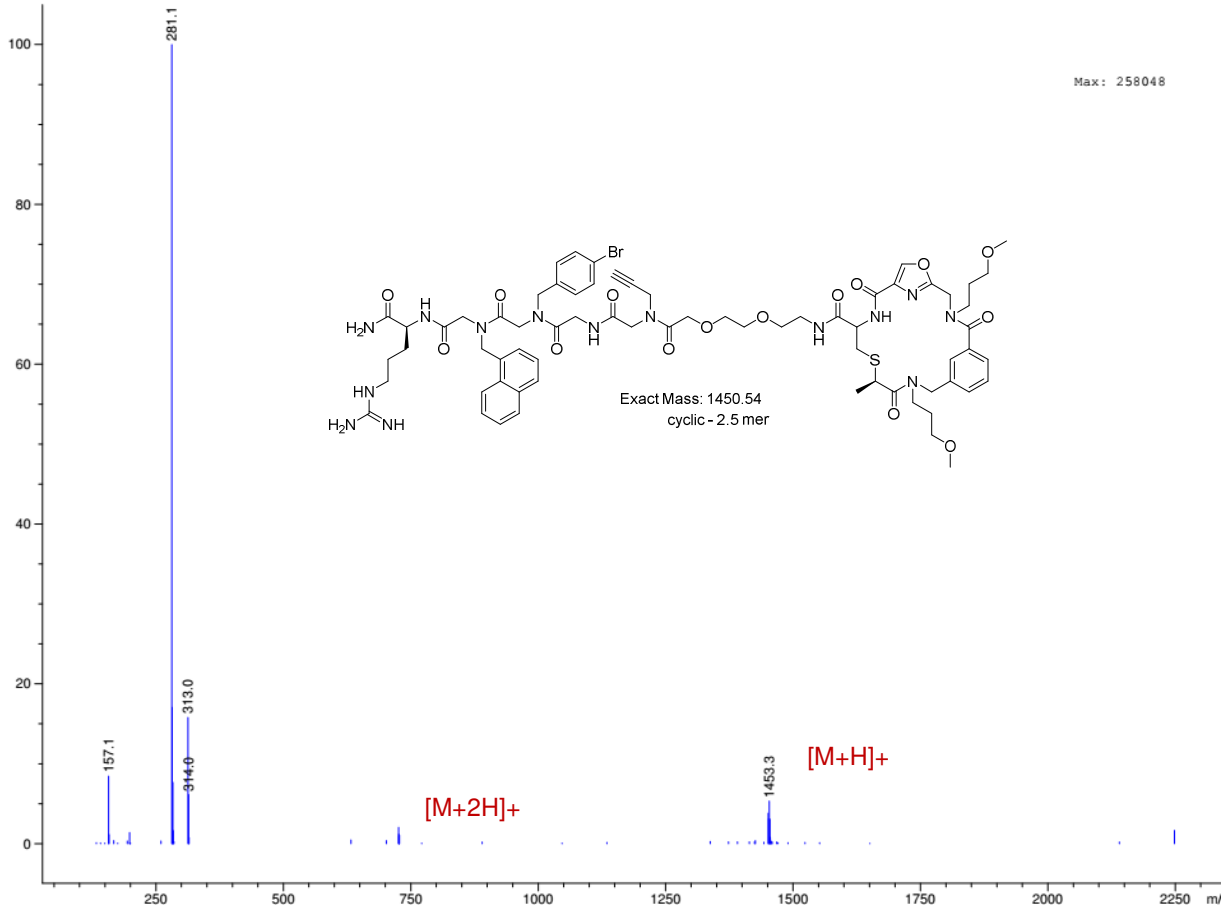
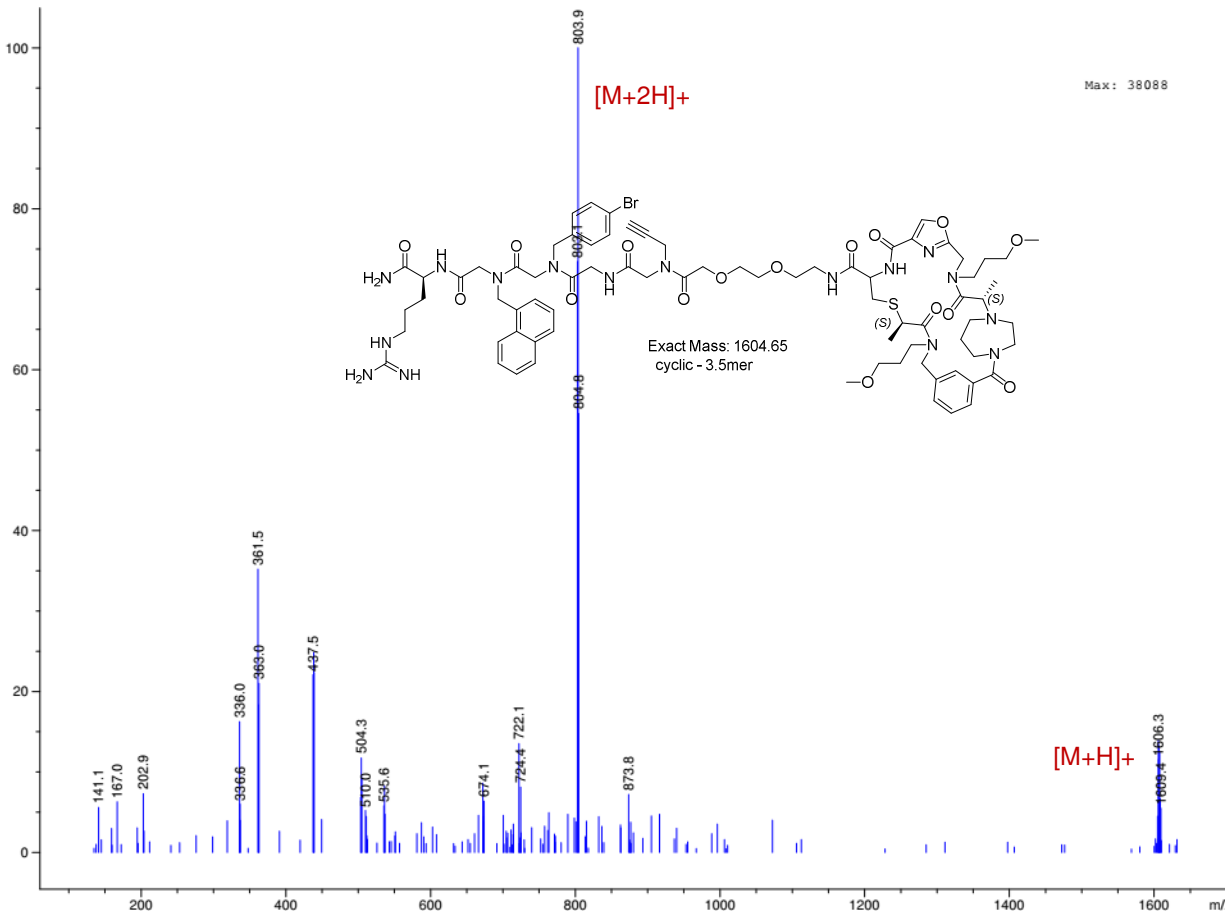


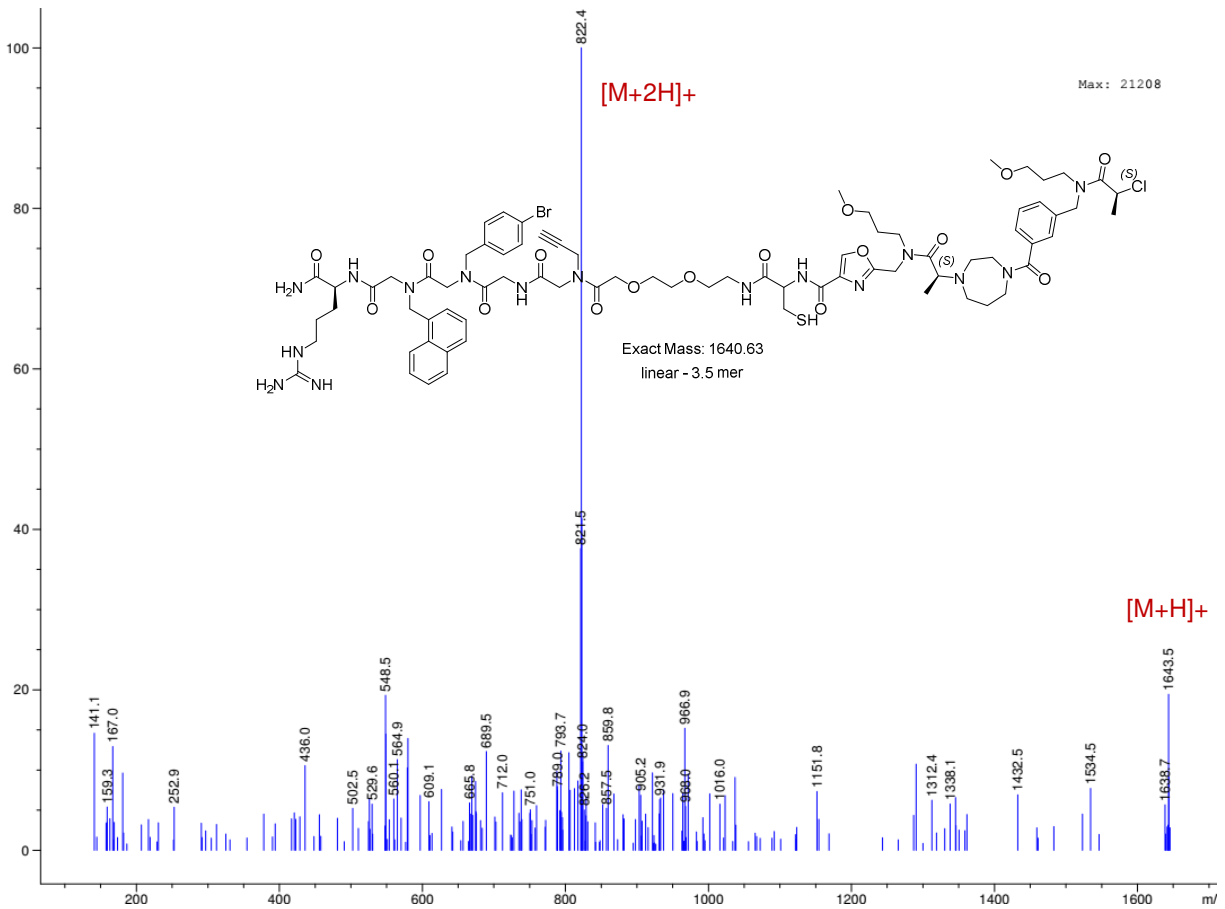


L7-[BAB]: Complete cyclization was observed on 10 μm & 160 μm beads have >90% cyclization complete.

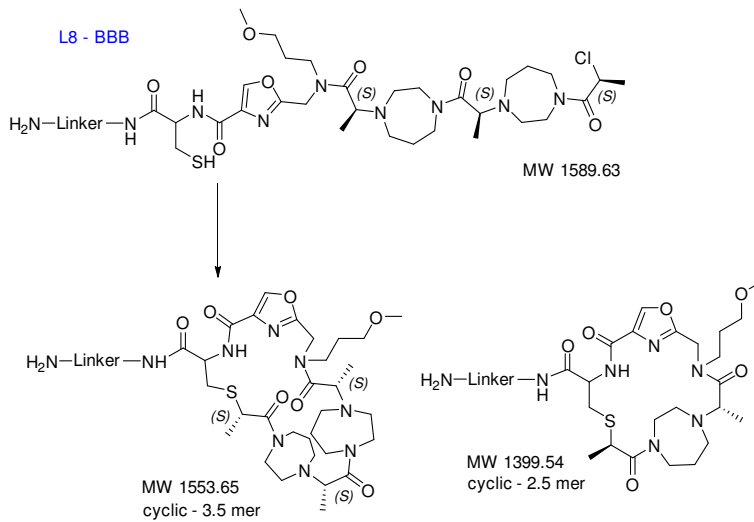


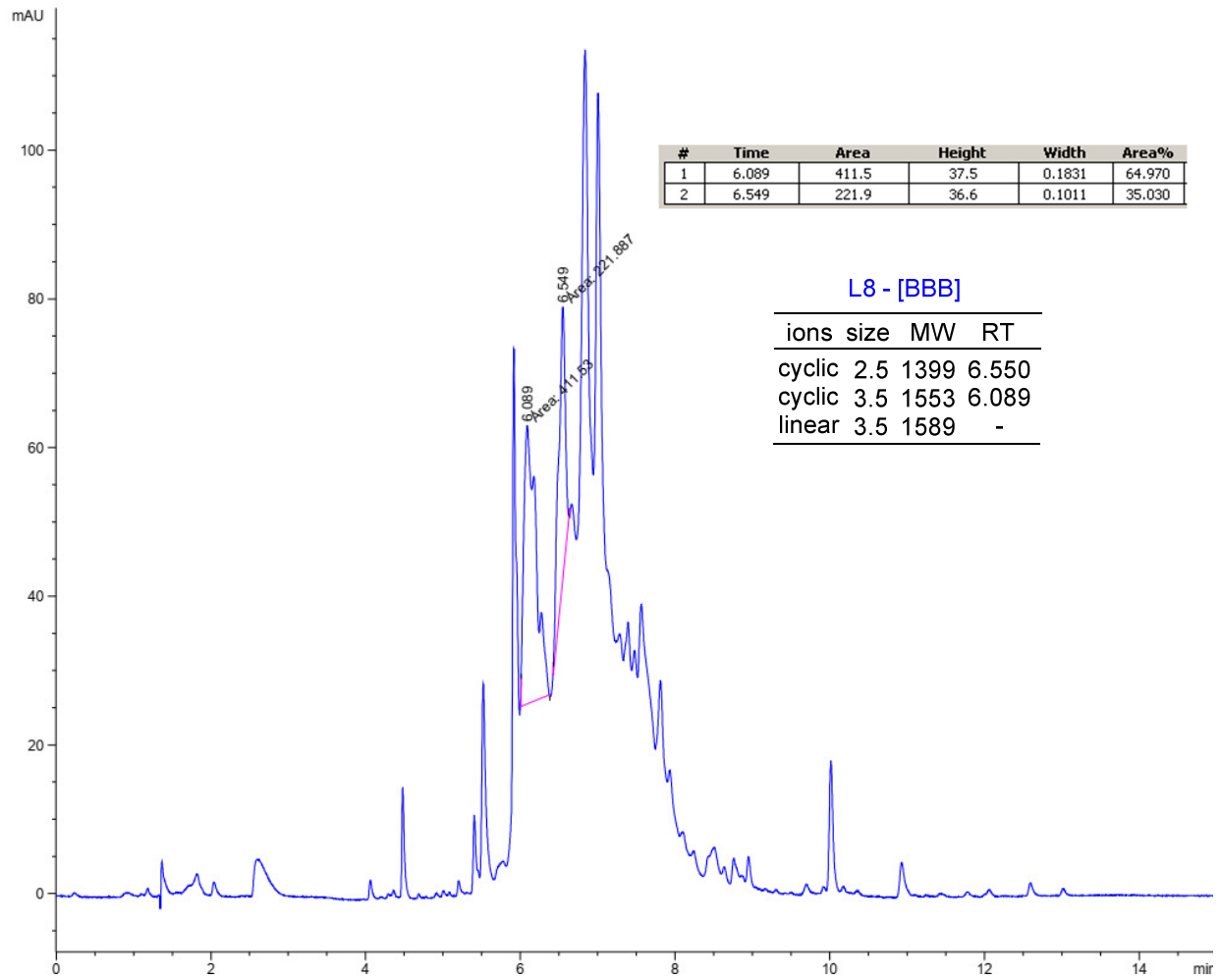
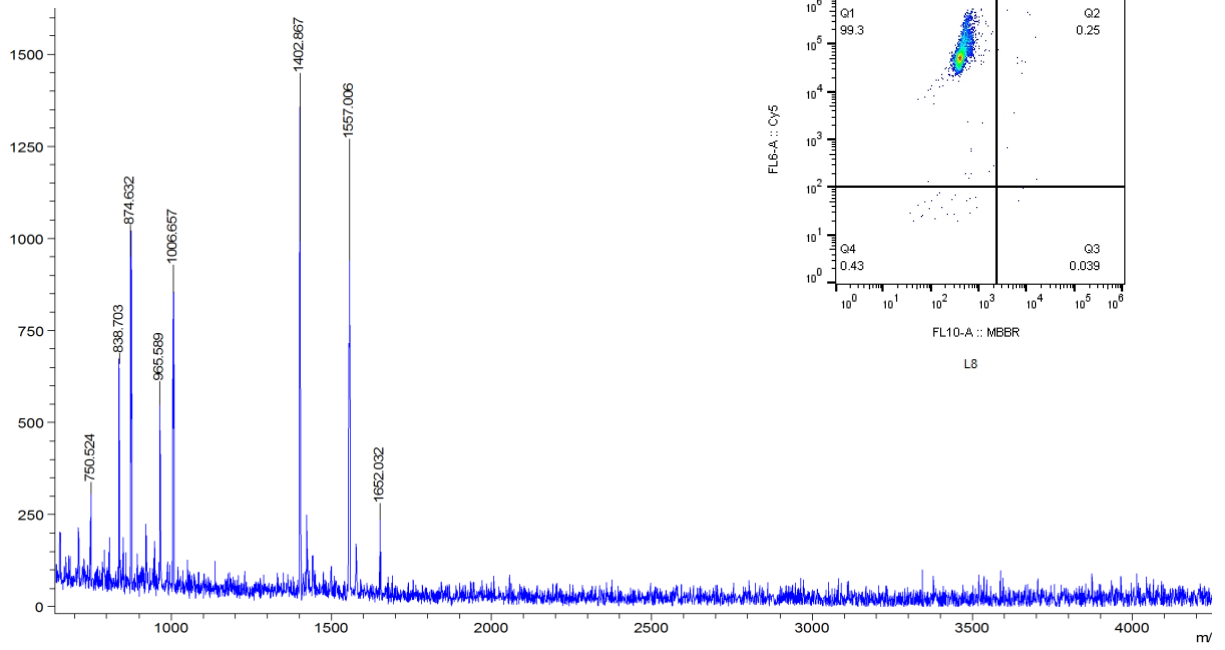


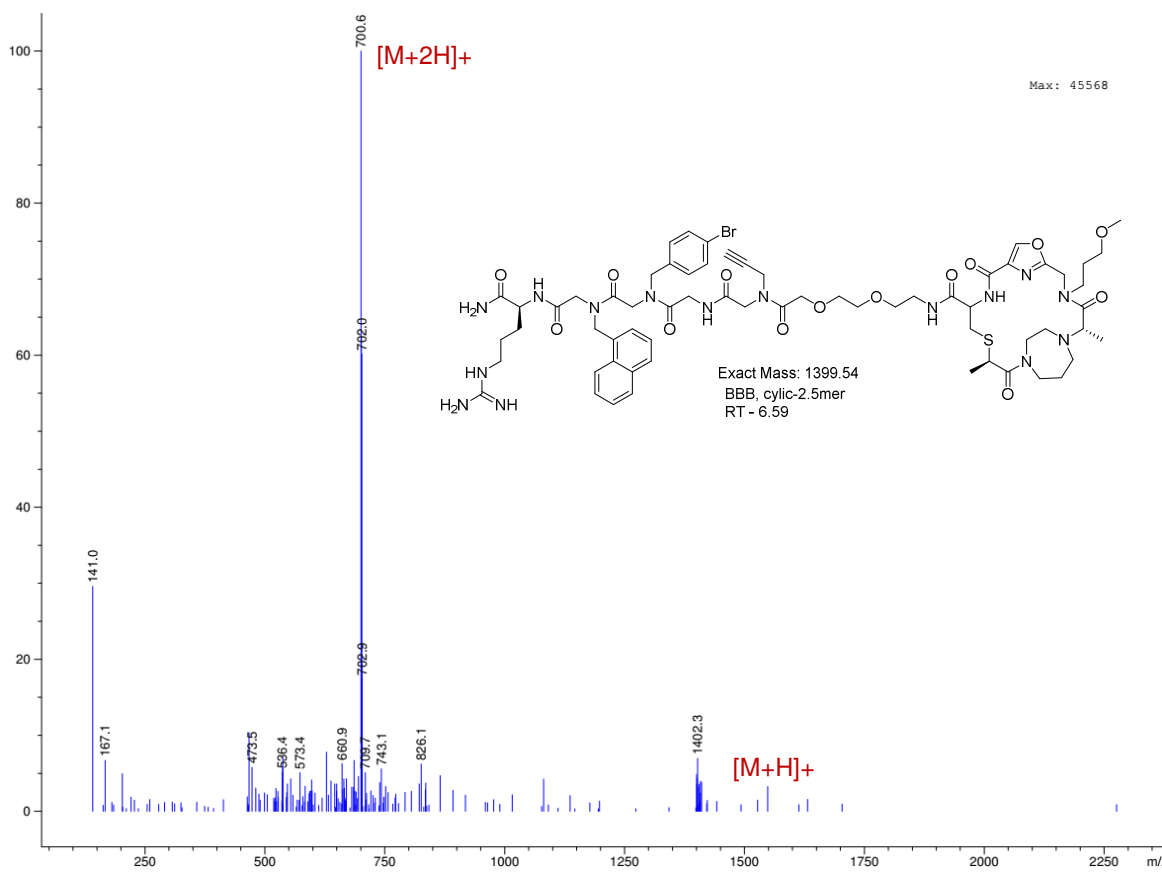
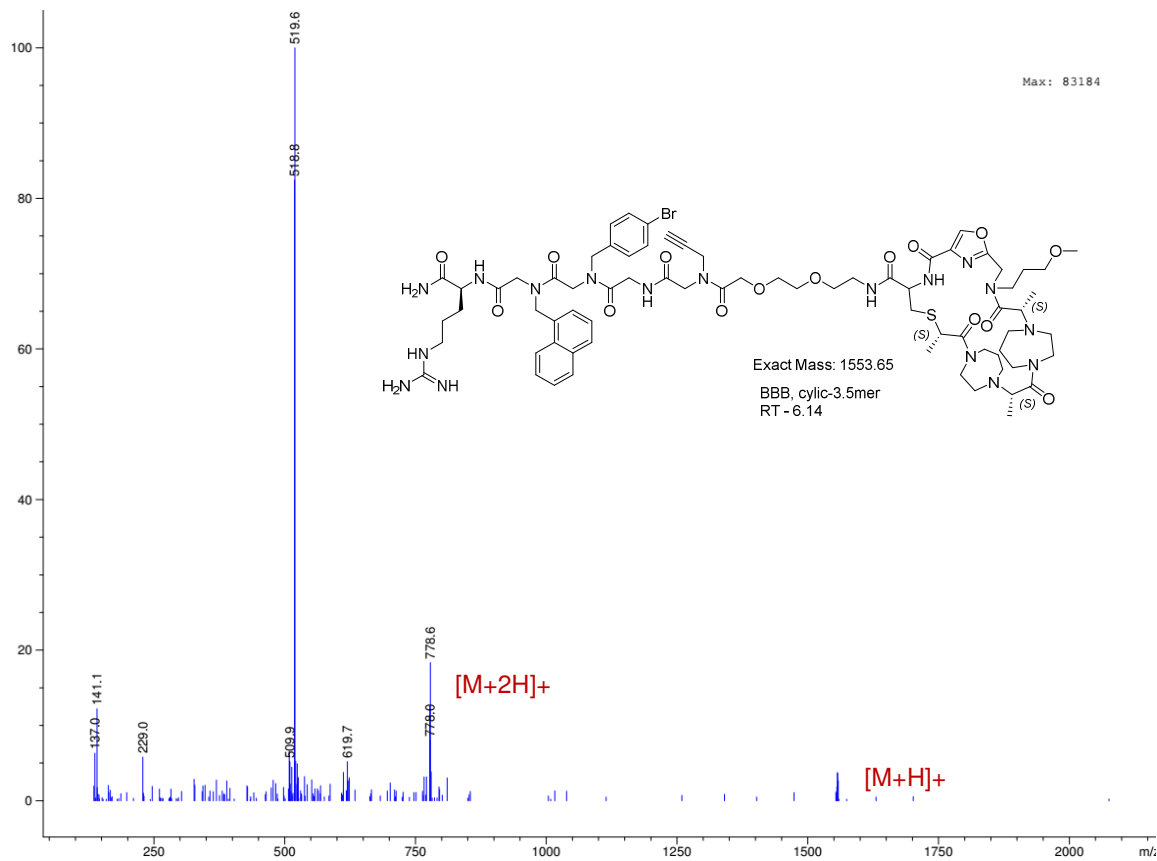




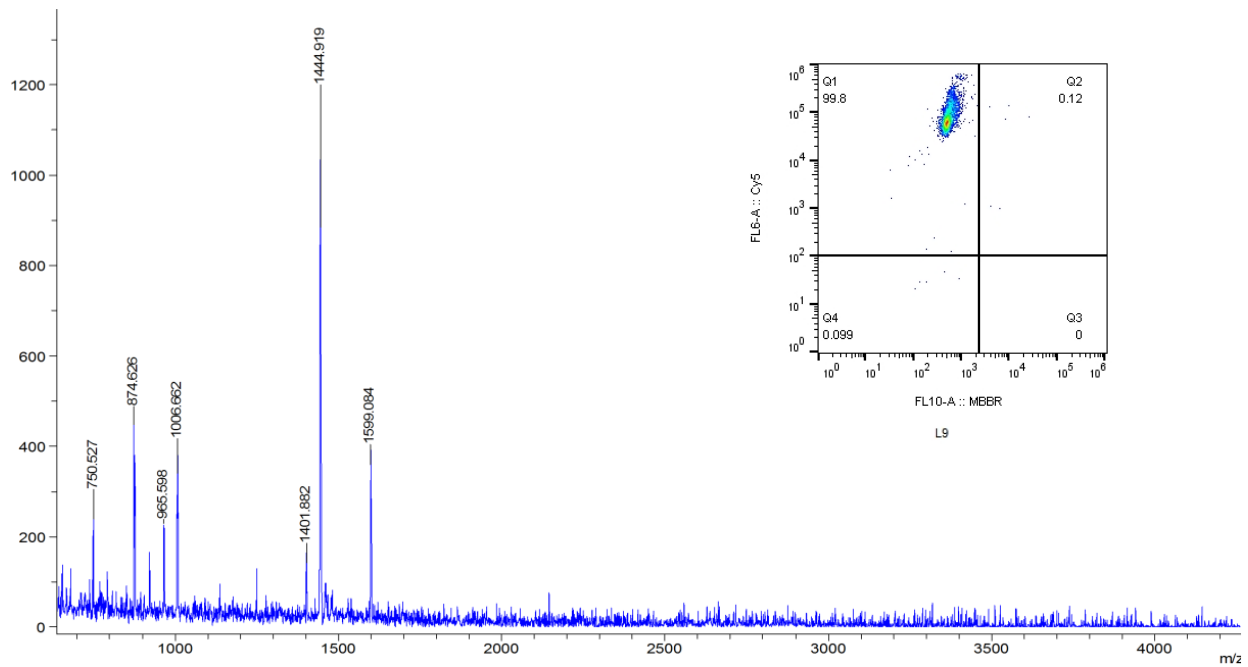
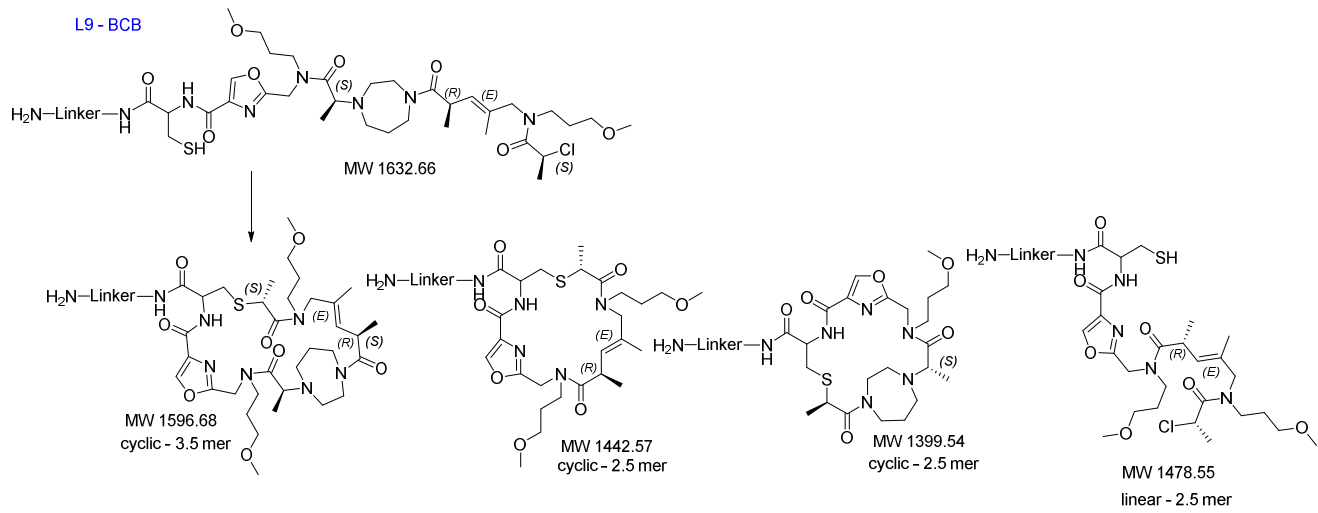
L8-[BBB]: Complete cyclization was observed on 10 μm & 160 μm beads.

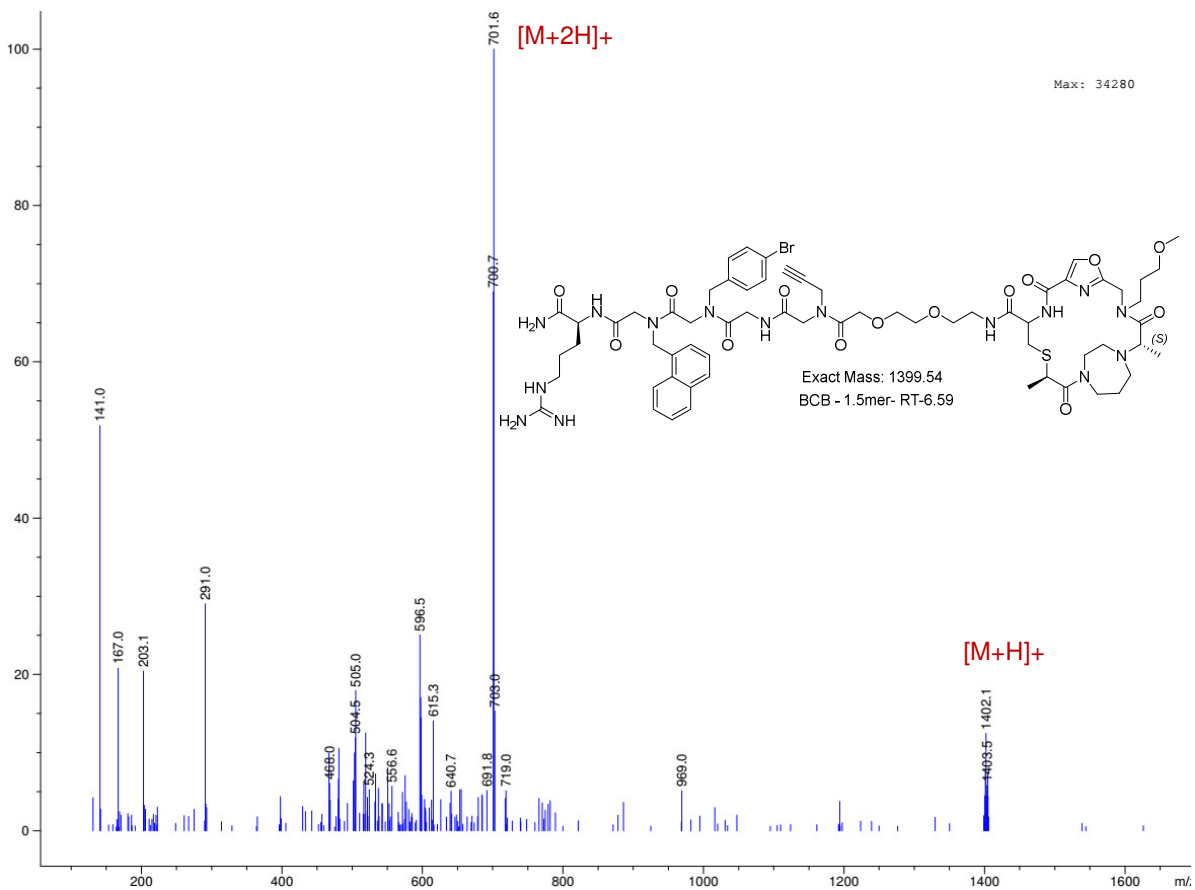
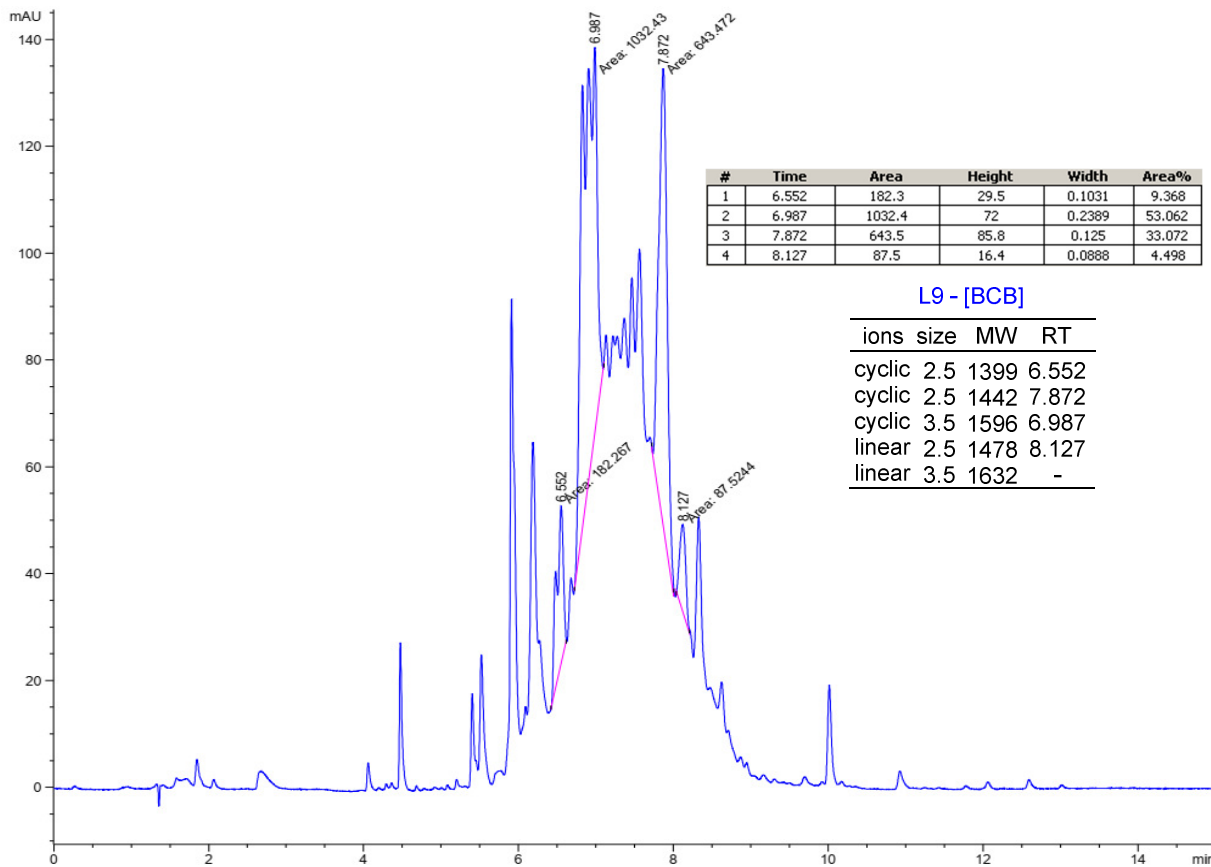


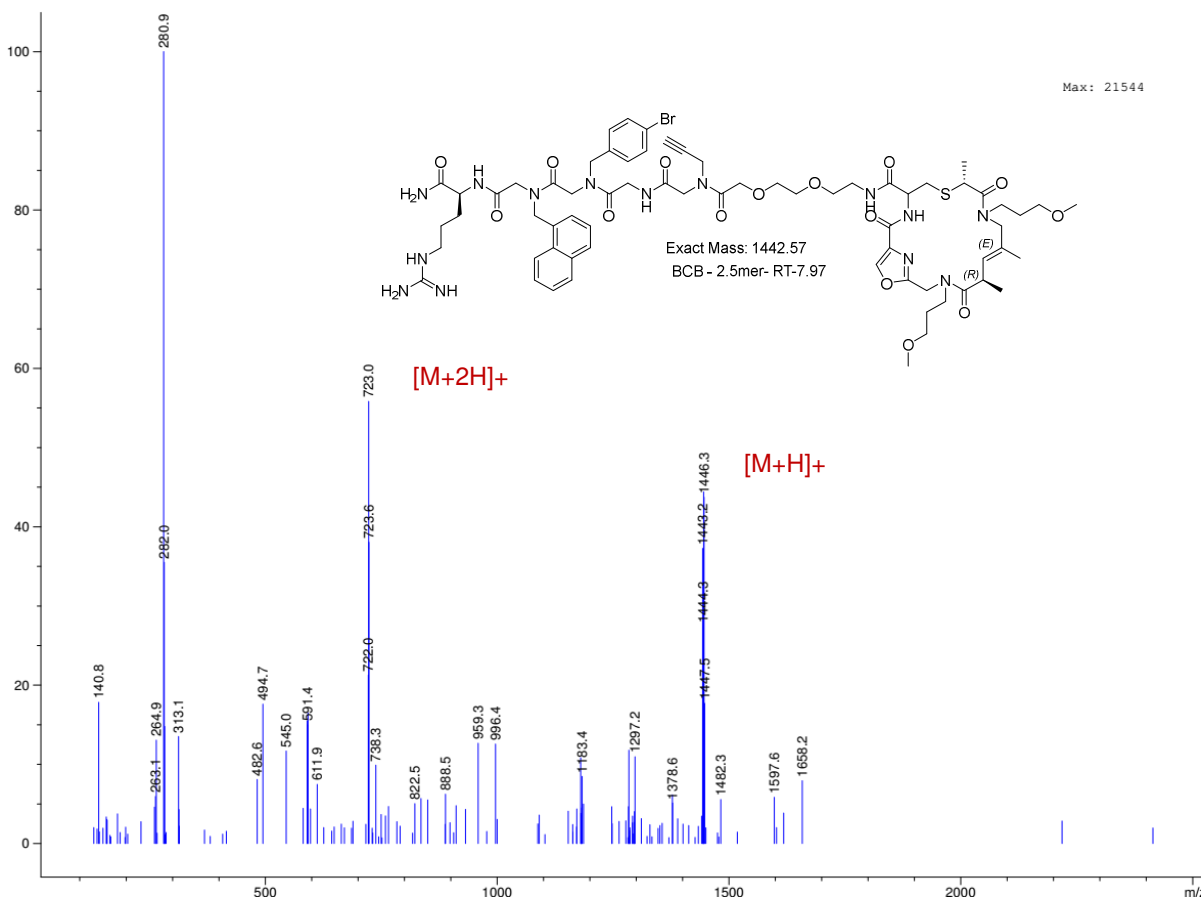
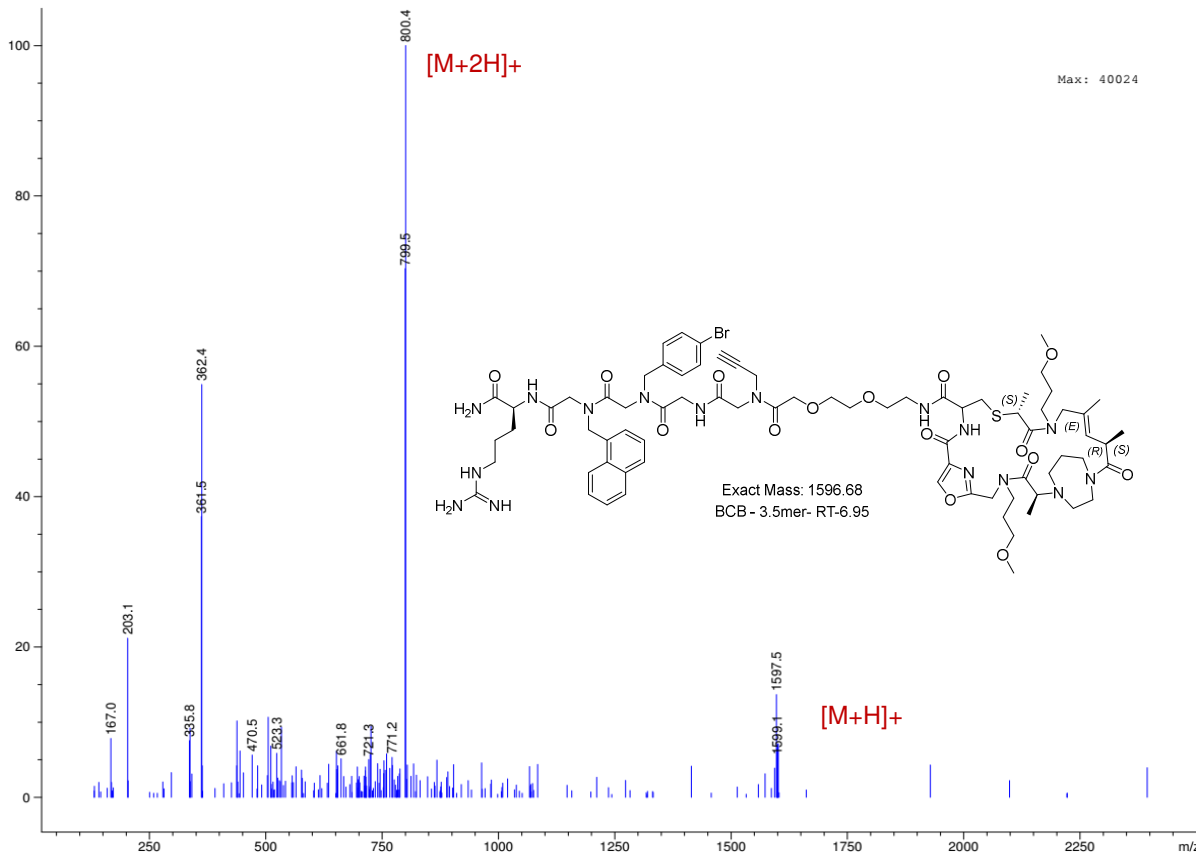


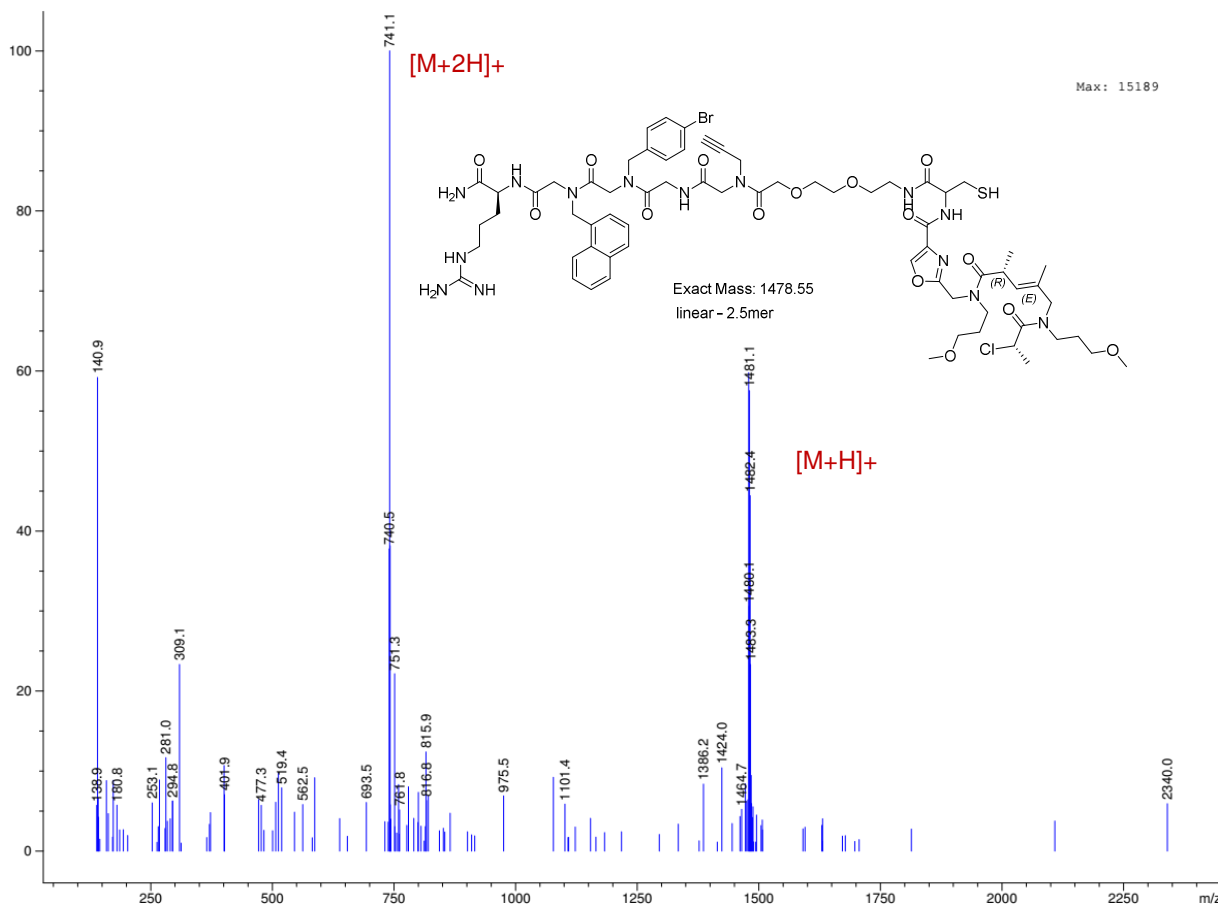


L9-[BCB]: Complete cyclization was observed on 10 μm & 160 μm beads. A linear (2.5mer) fragment could not cyclize (MW 1478, RT- 8.124). Other fragments (2.5mers) cyclized and identified.

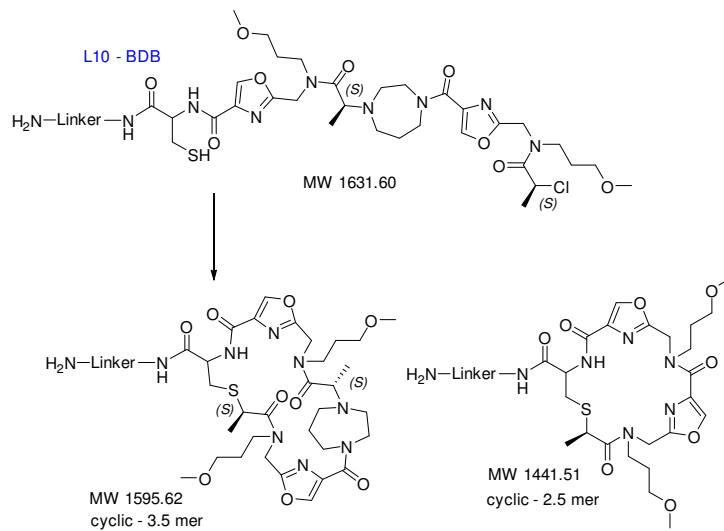


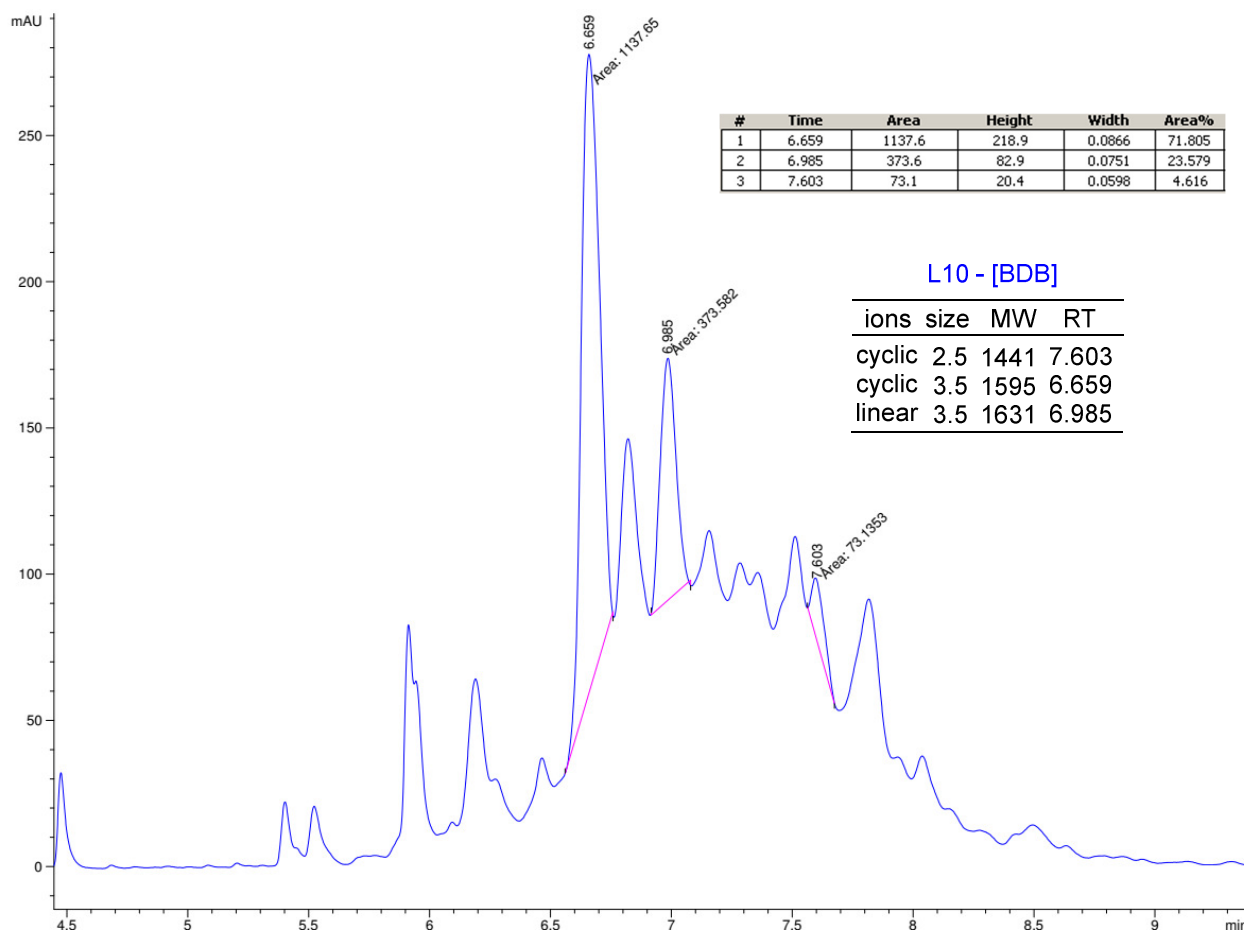
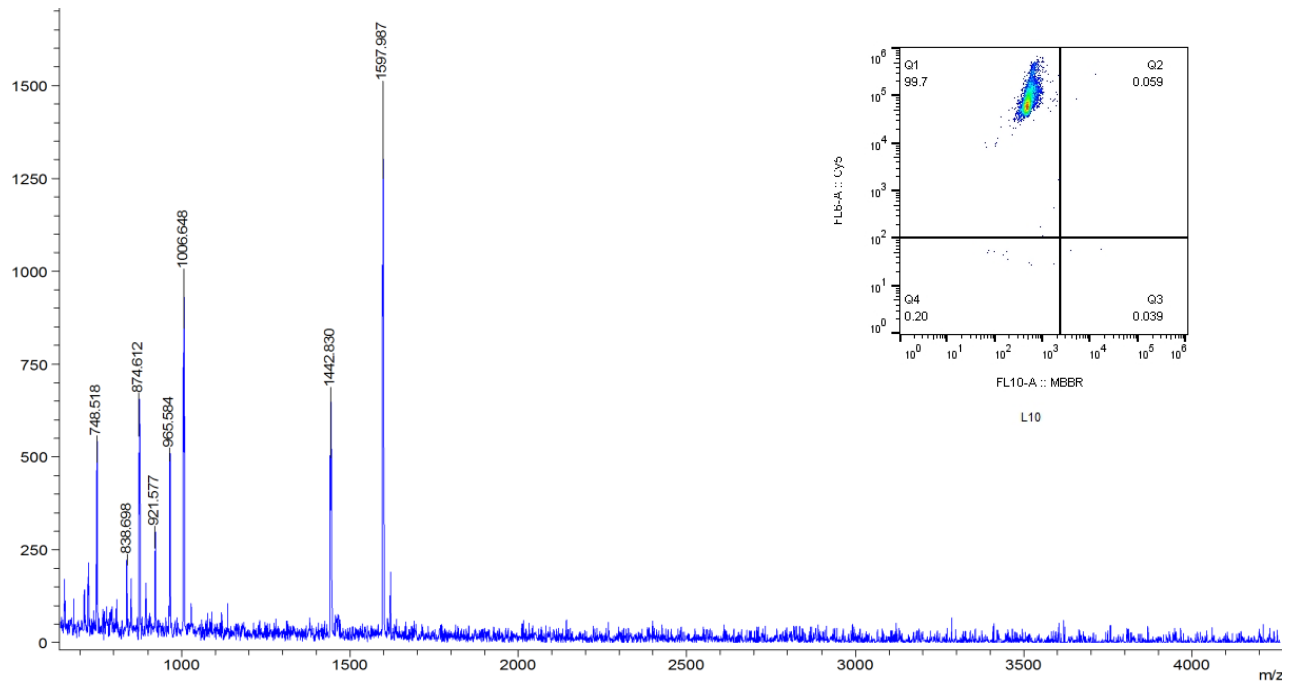


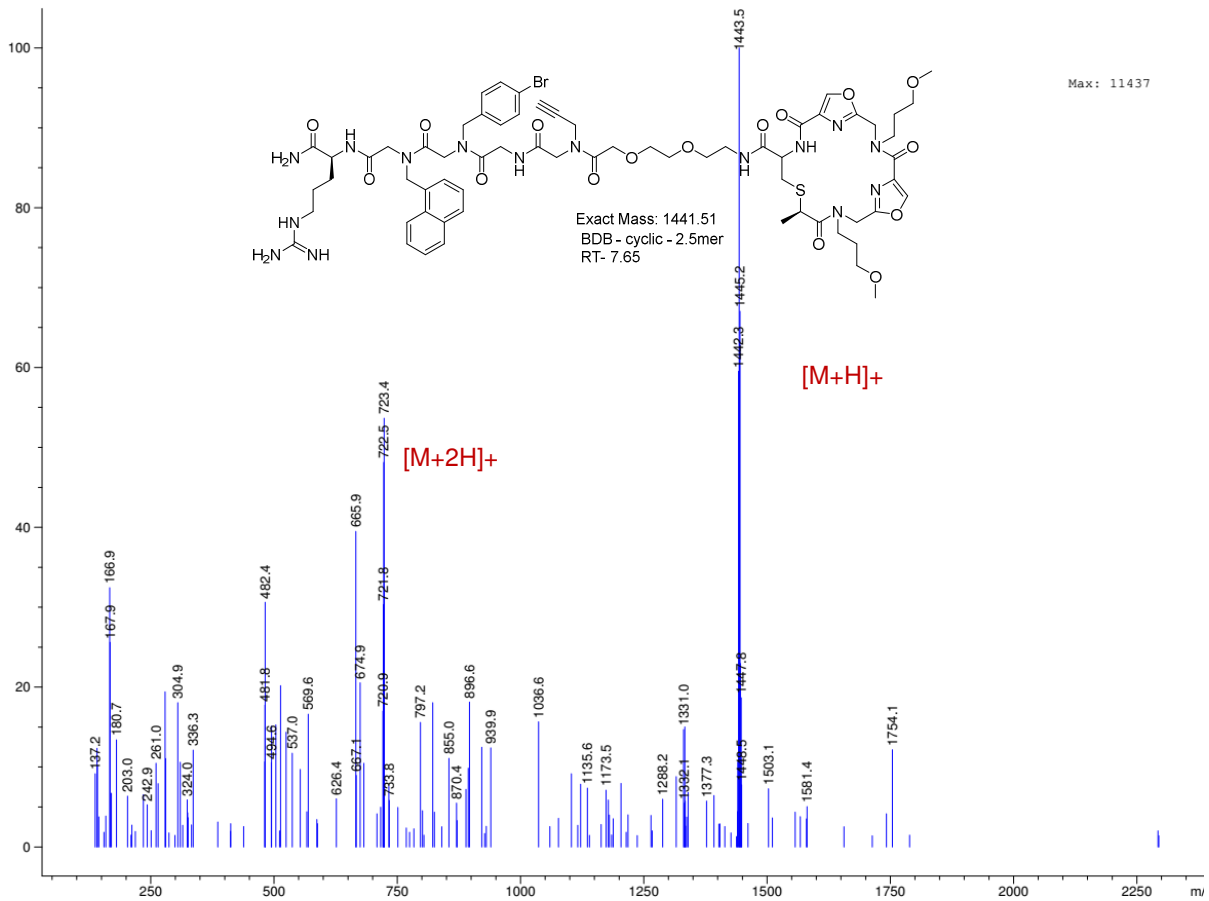
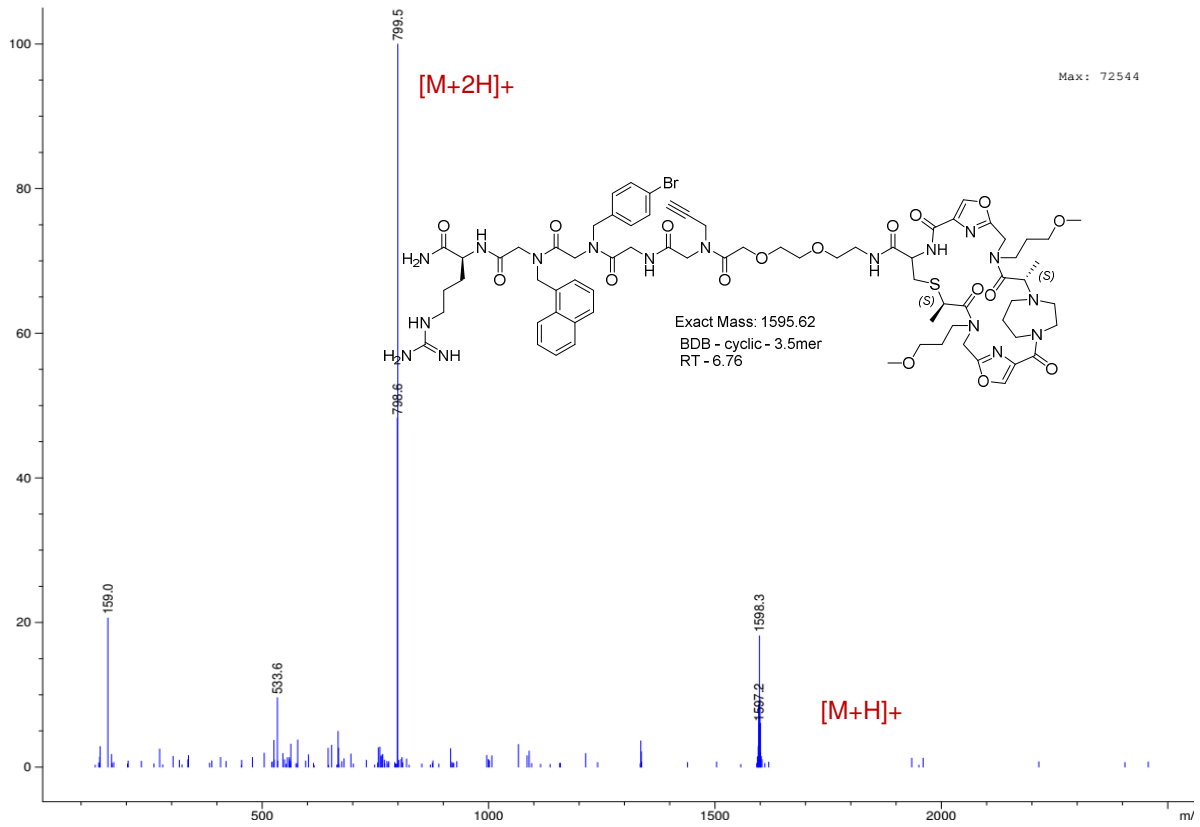


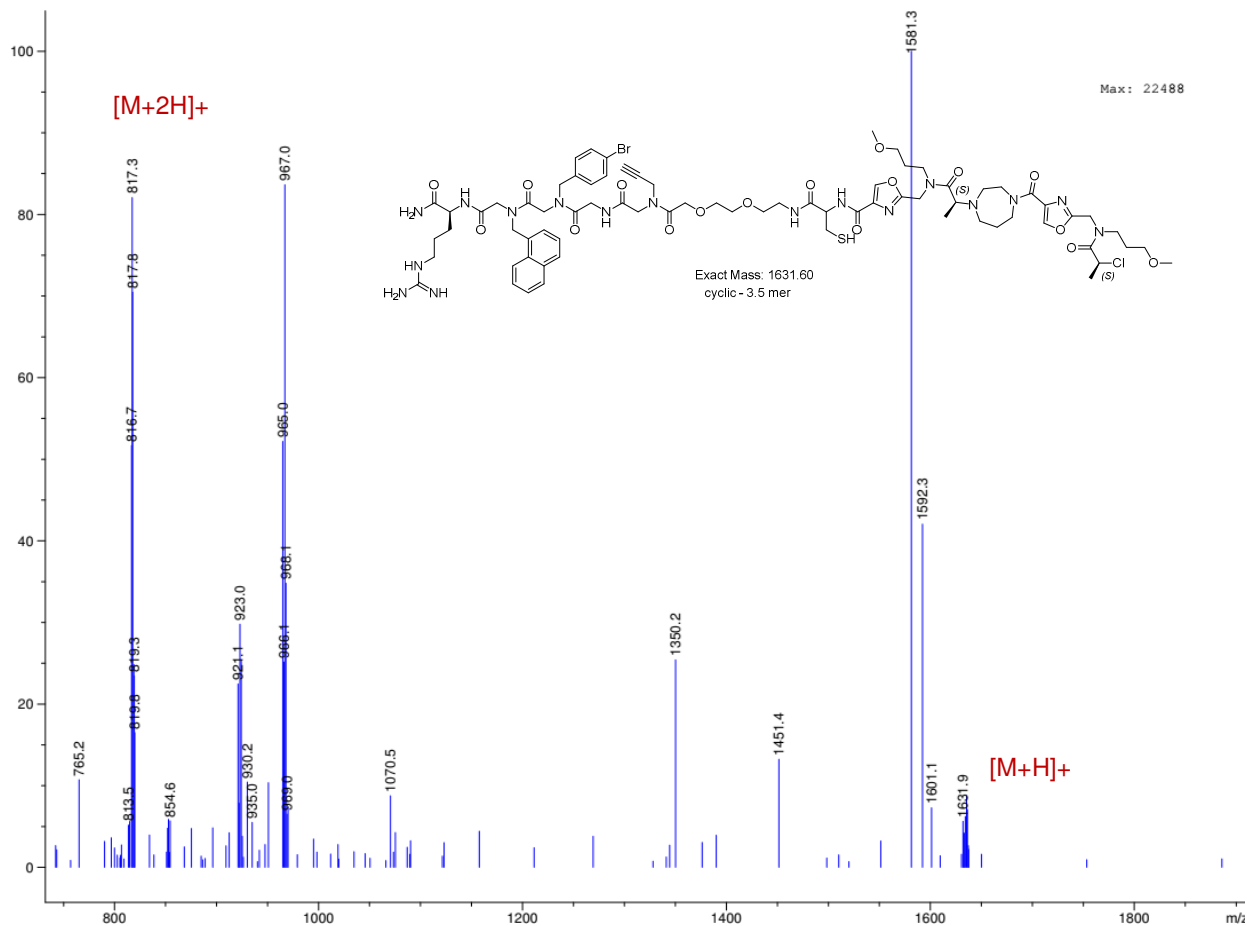


L10-[BDB]: Complete cyclization was detected on 10 μm but was incomplete on 160 μm .

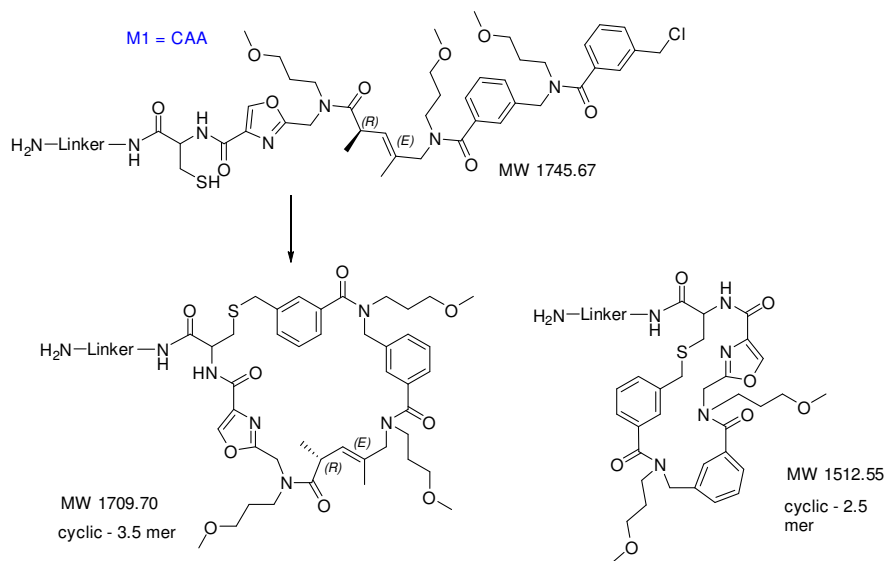


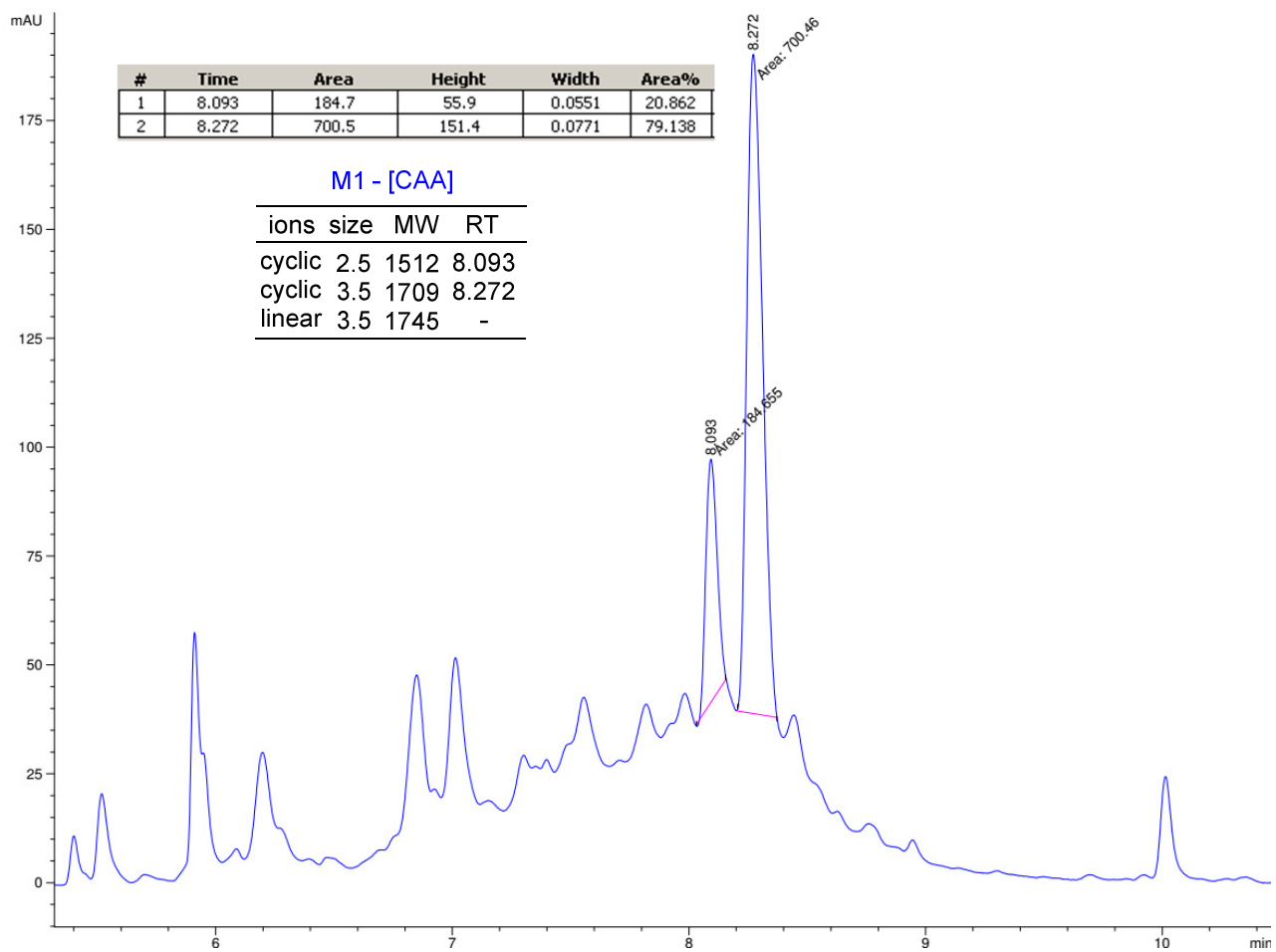
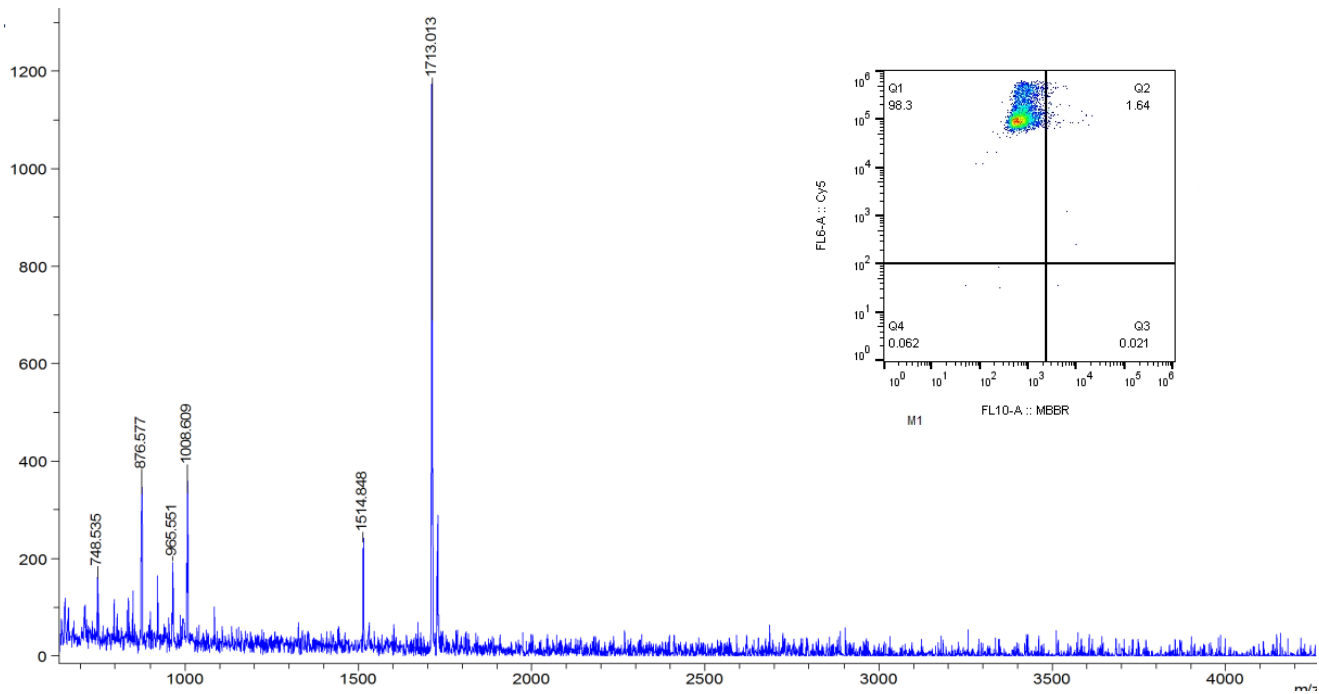


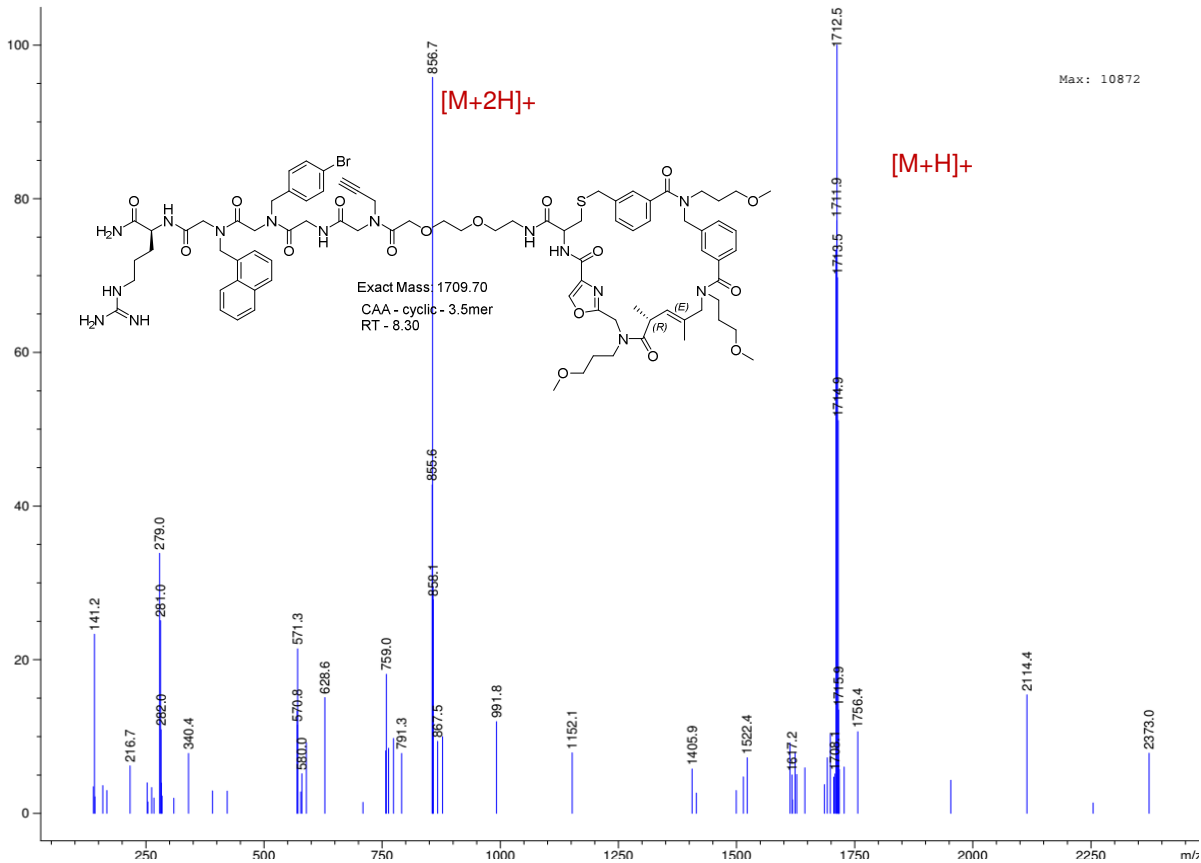
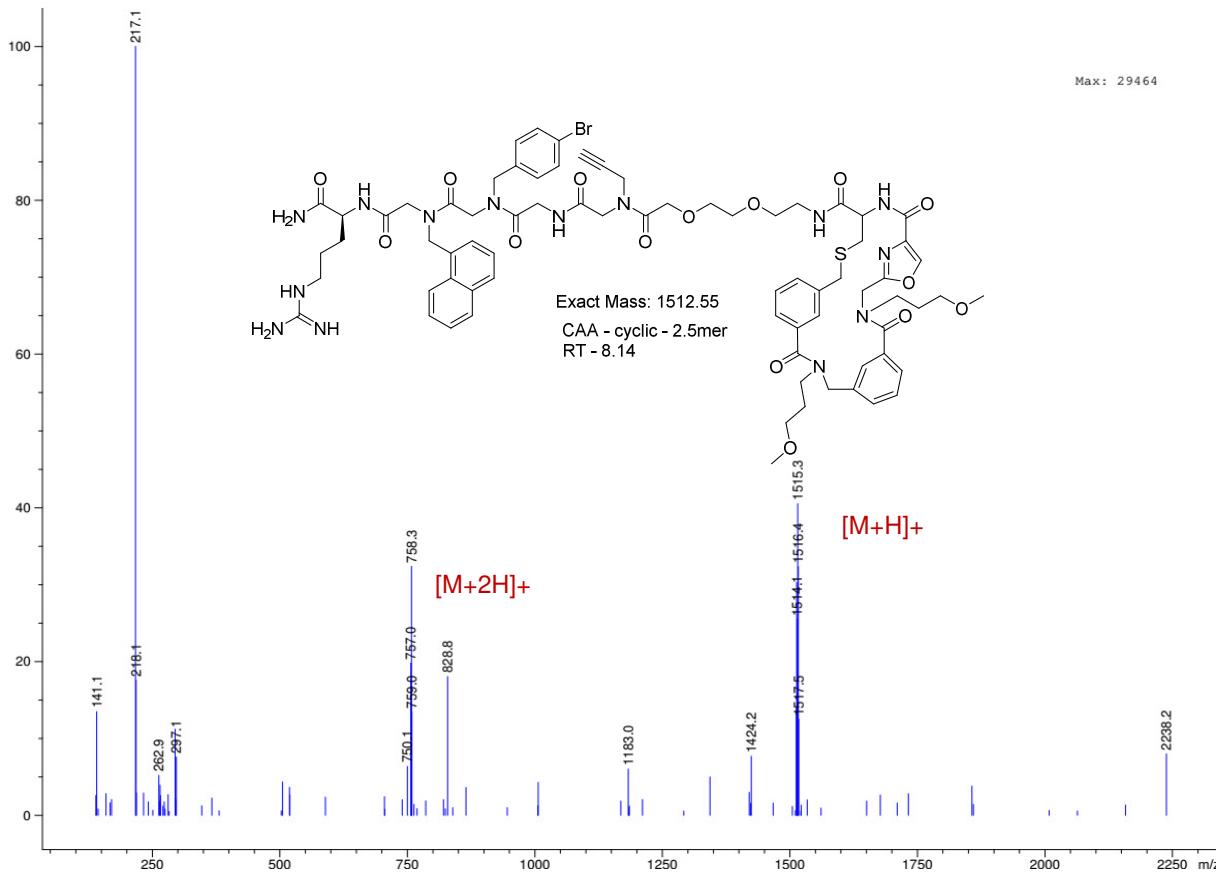




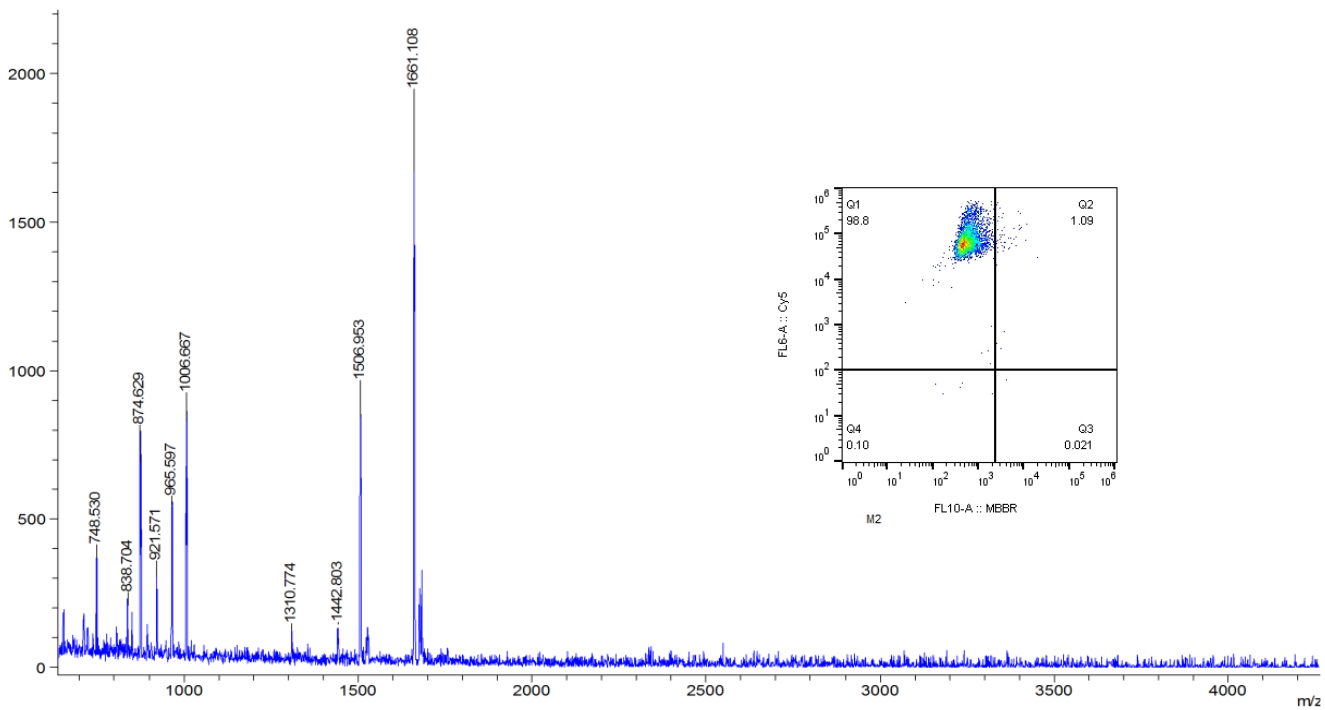
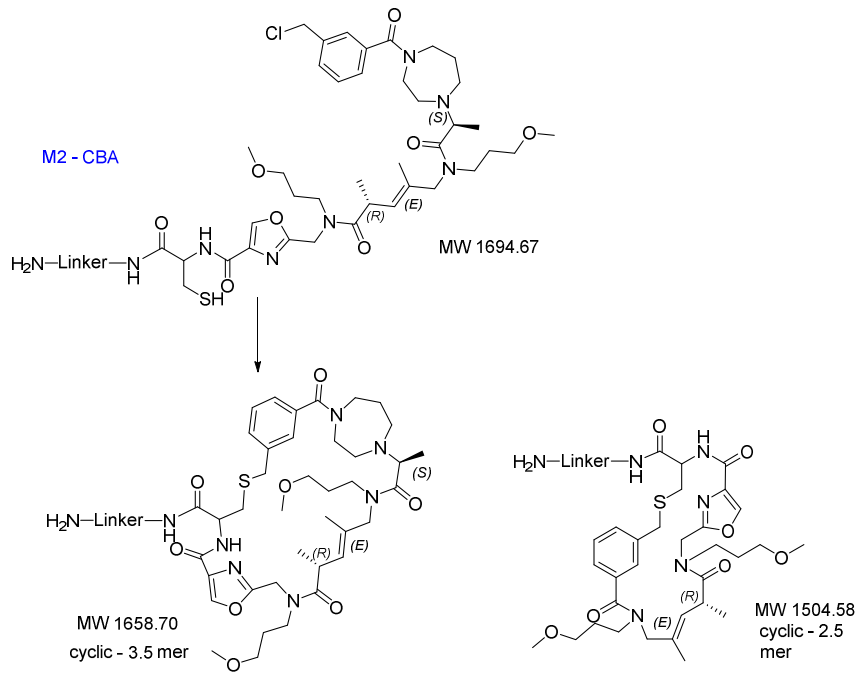
M1-[CAA]: Complete cyclization was observed on 10 μm & 160 μm beads.

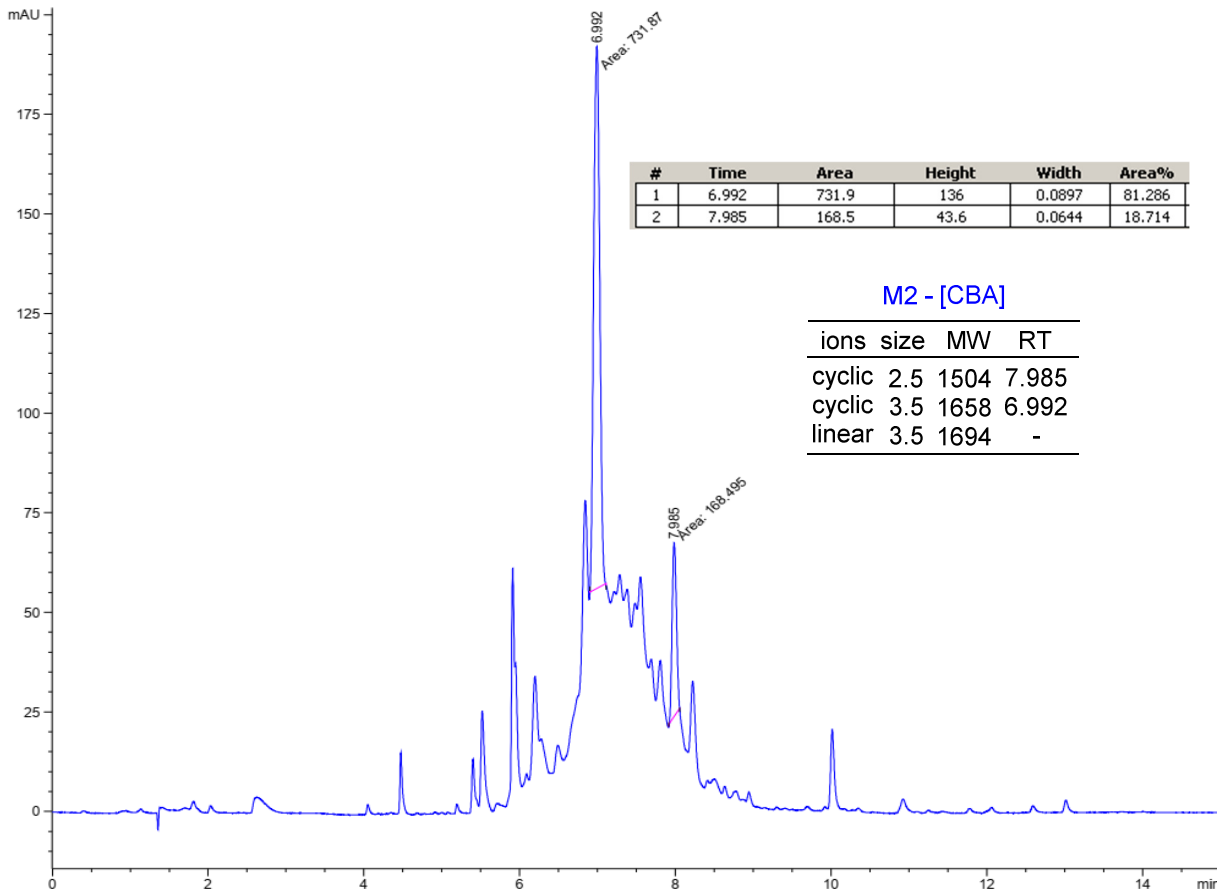






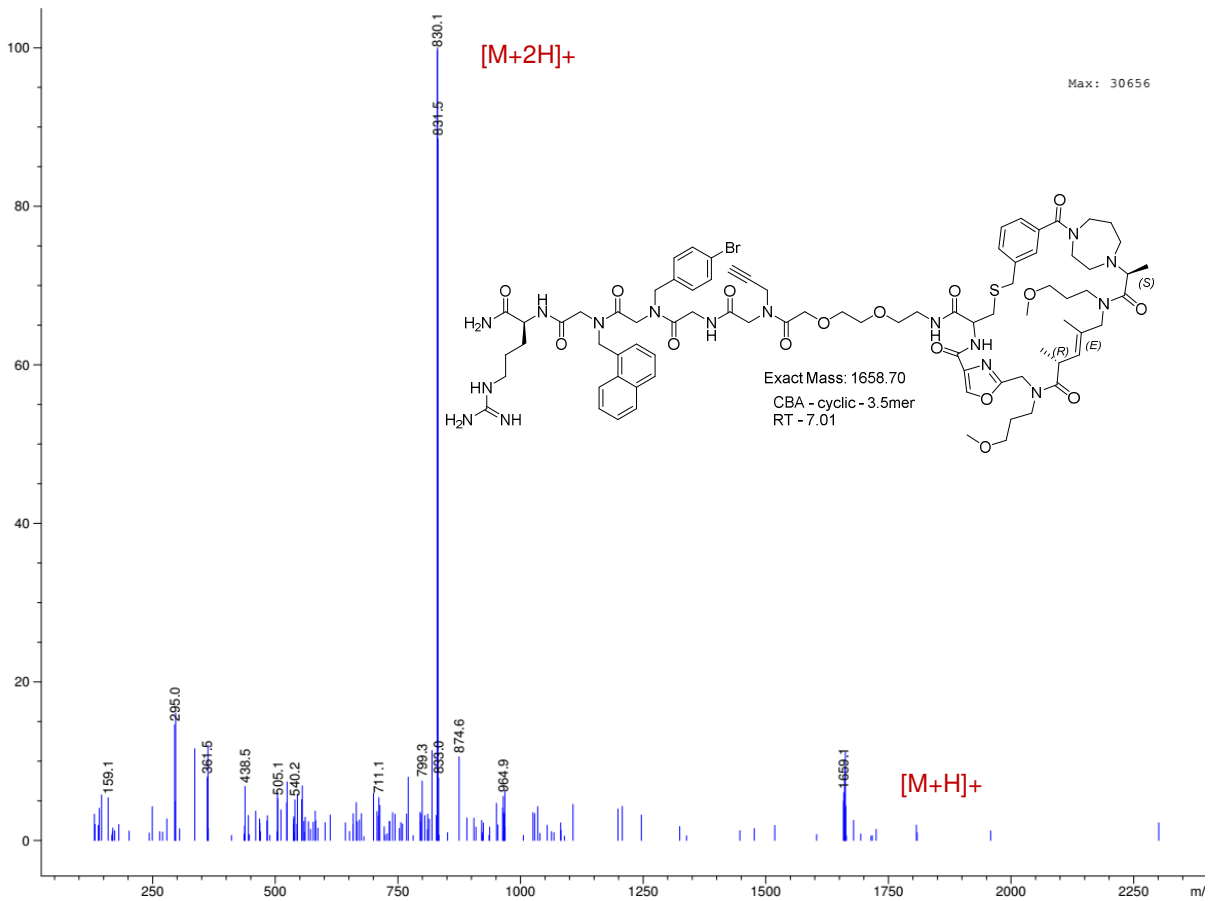
M2-[CBA]: Complete cyclization was observed on 10 μm & 160 μm beads.

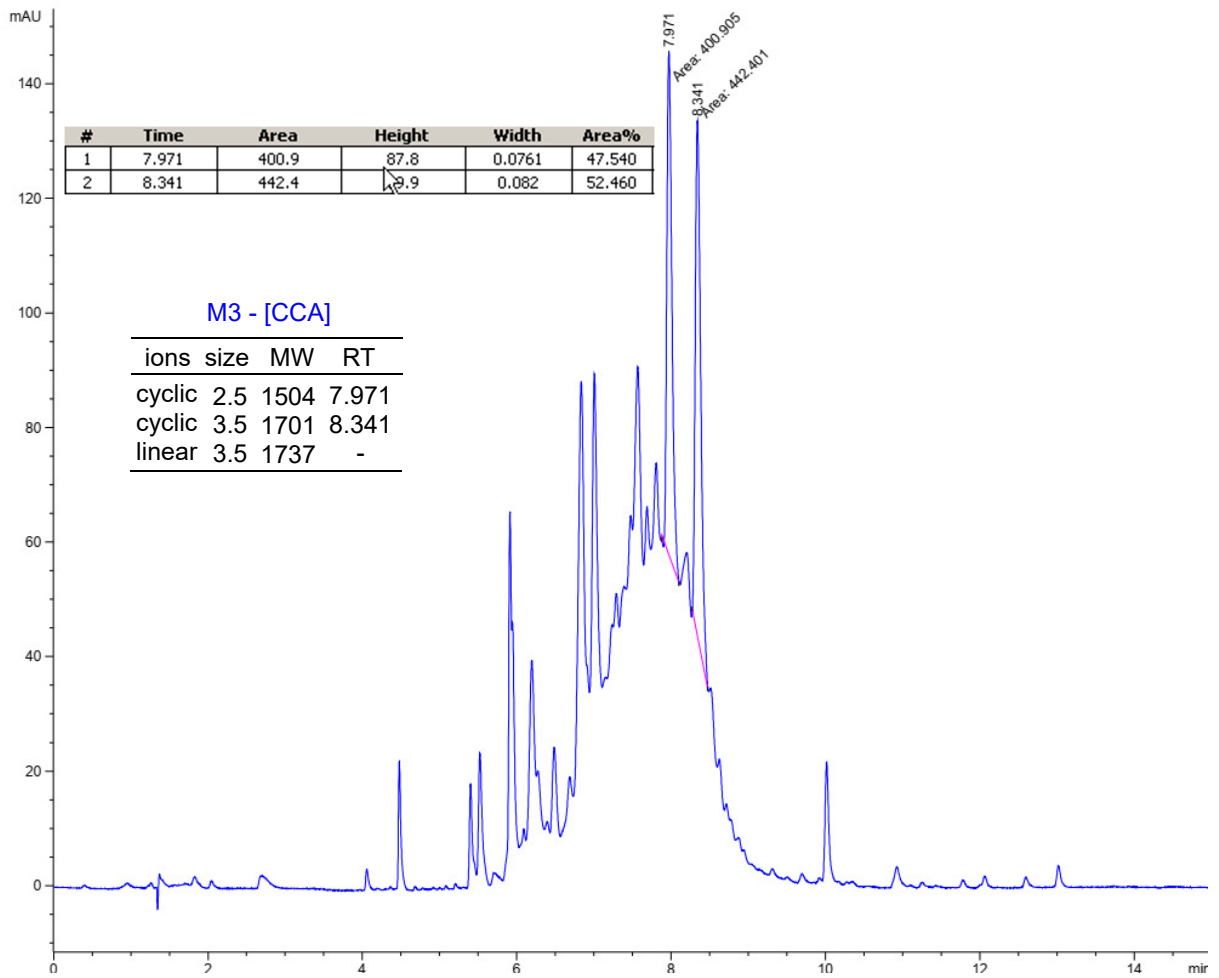
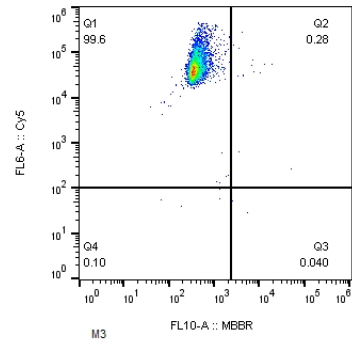
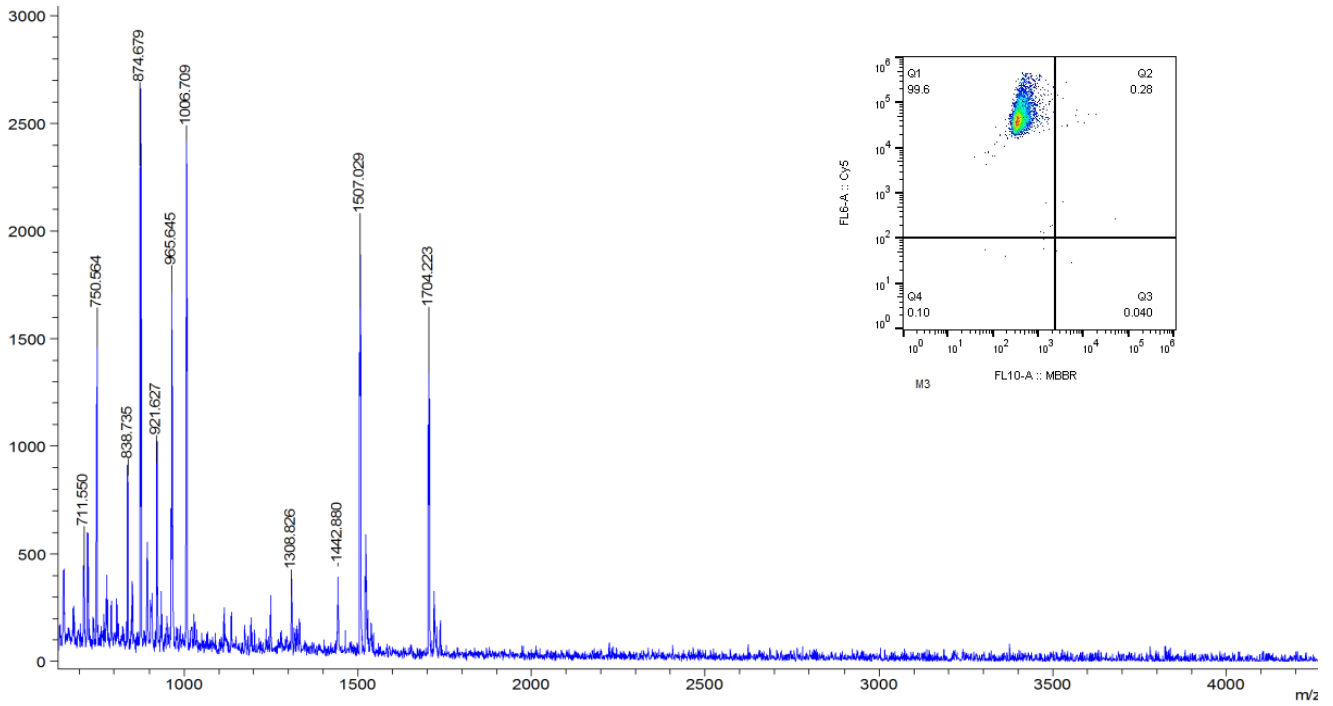


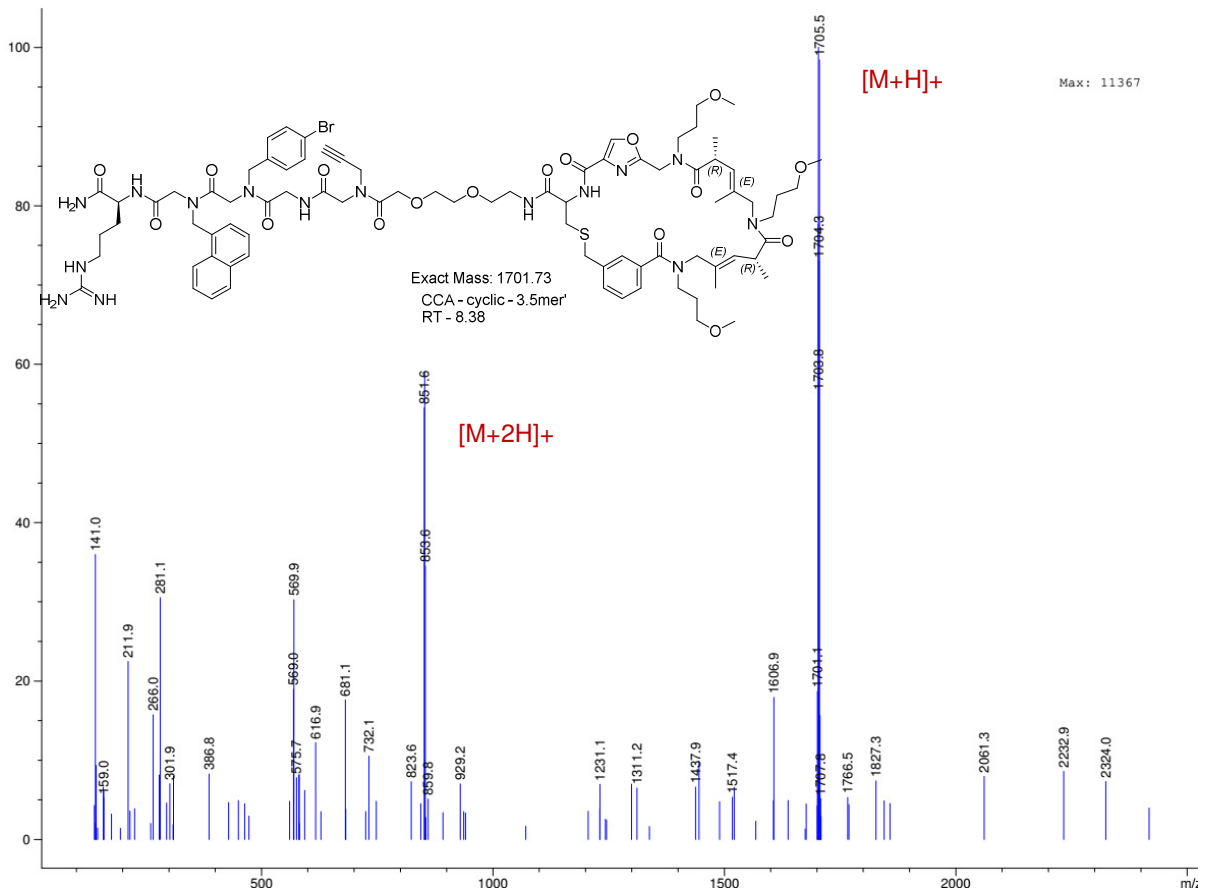
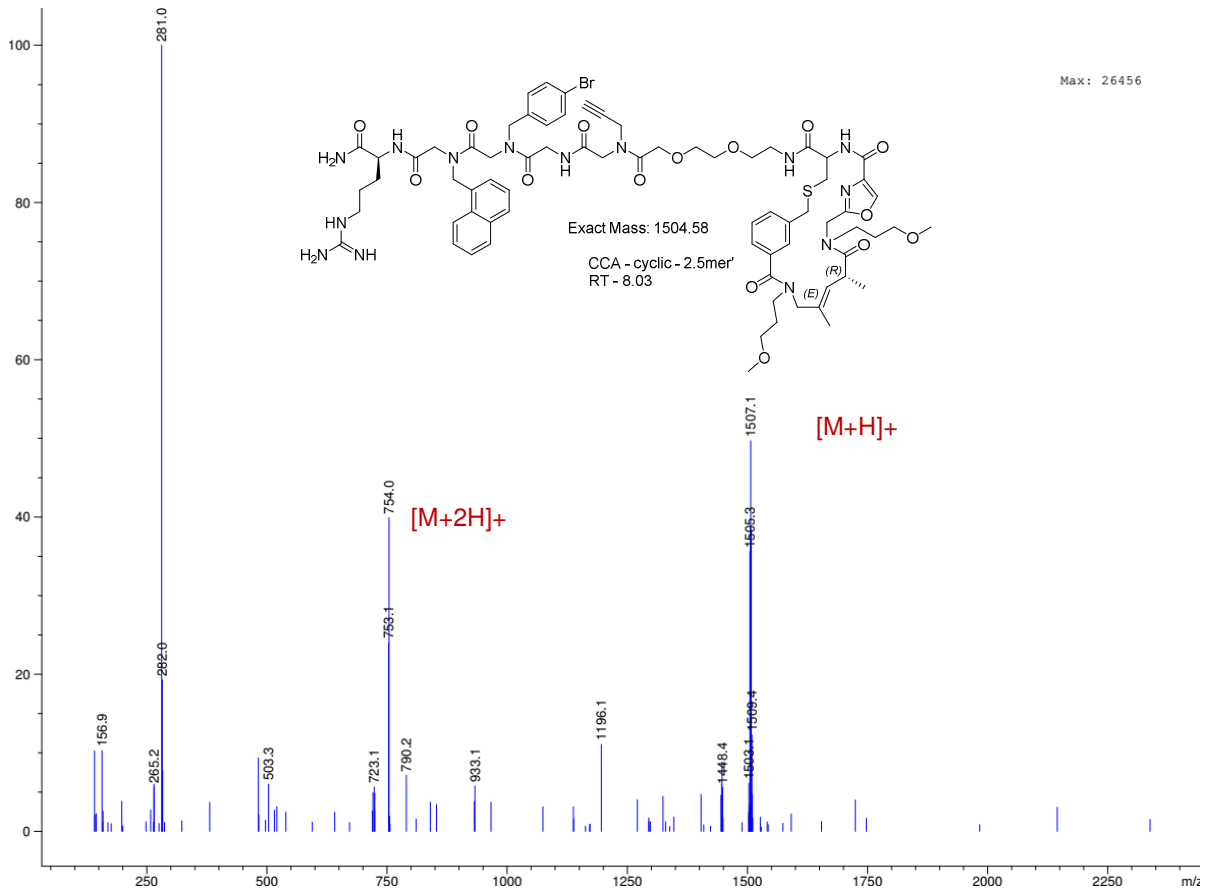


M2 - [CBA]

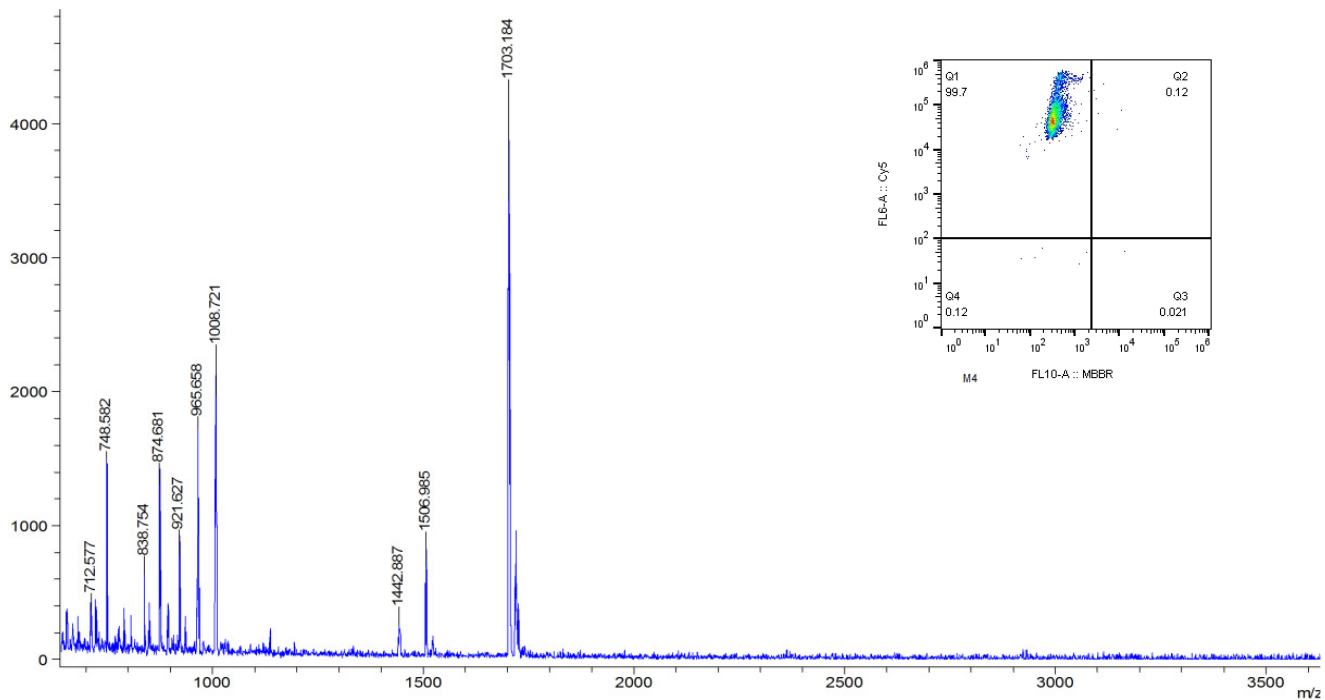
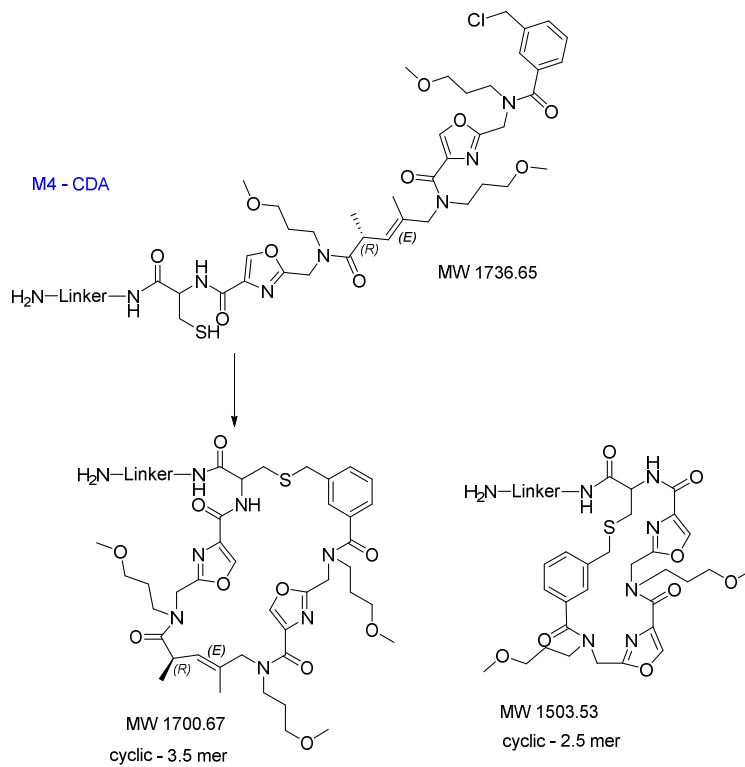
	ions size	MW	RT
cyclic	2.5	1504	7.985
cyclic	3.5	1658	6.992
linear	3.5	1694	-

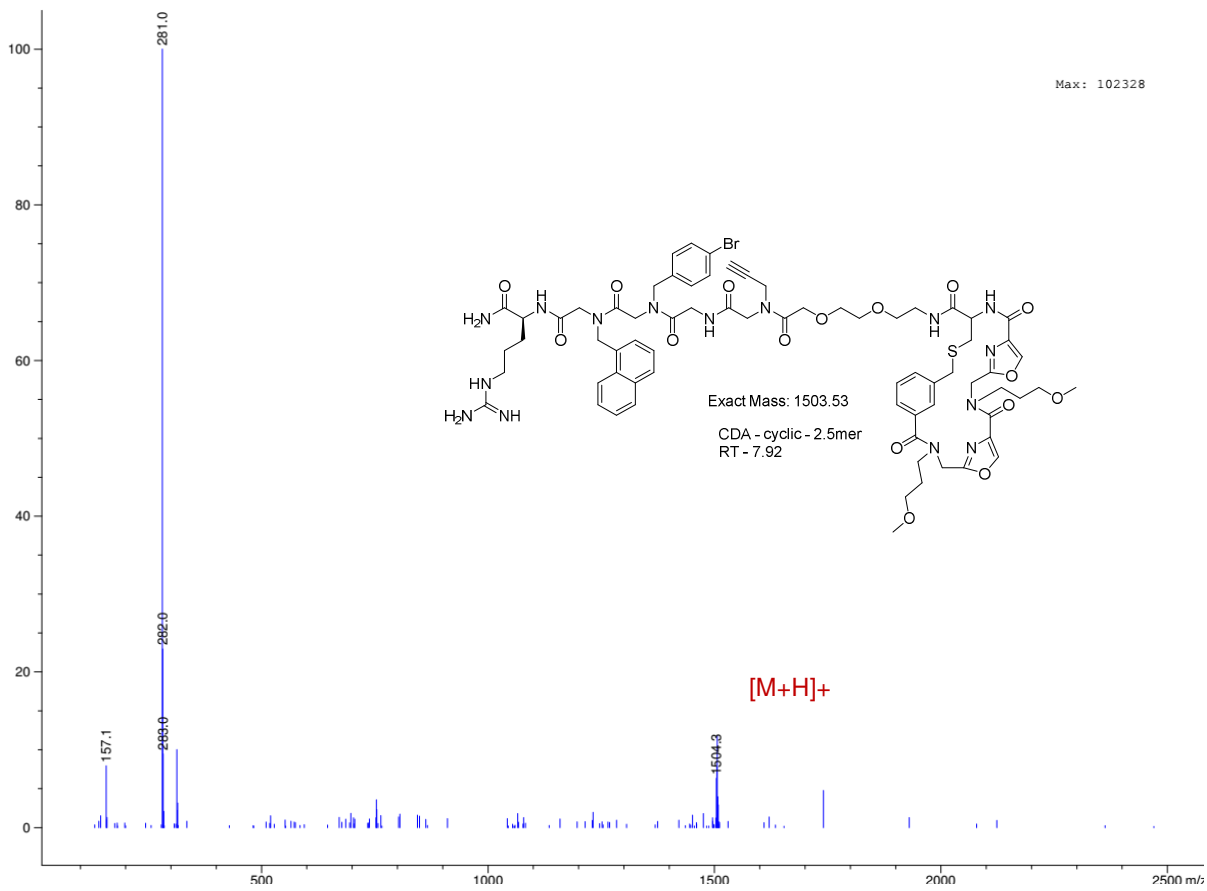
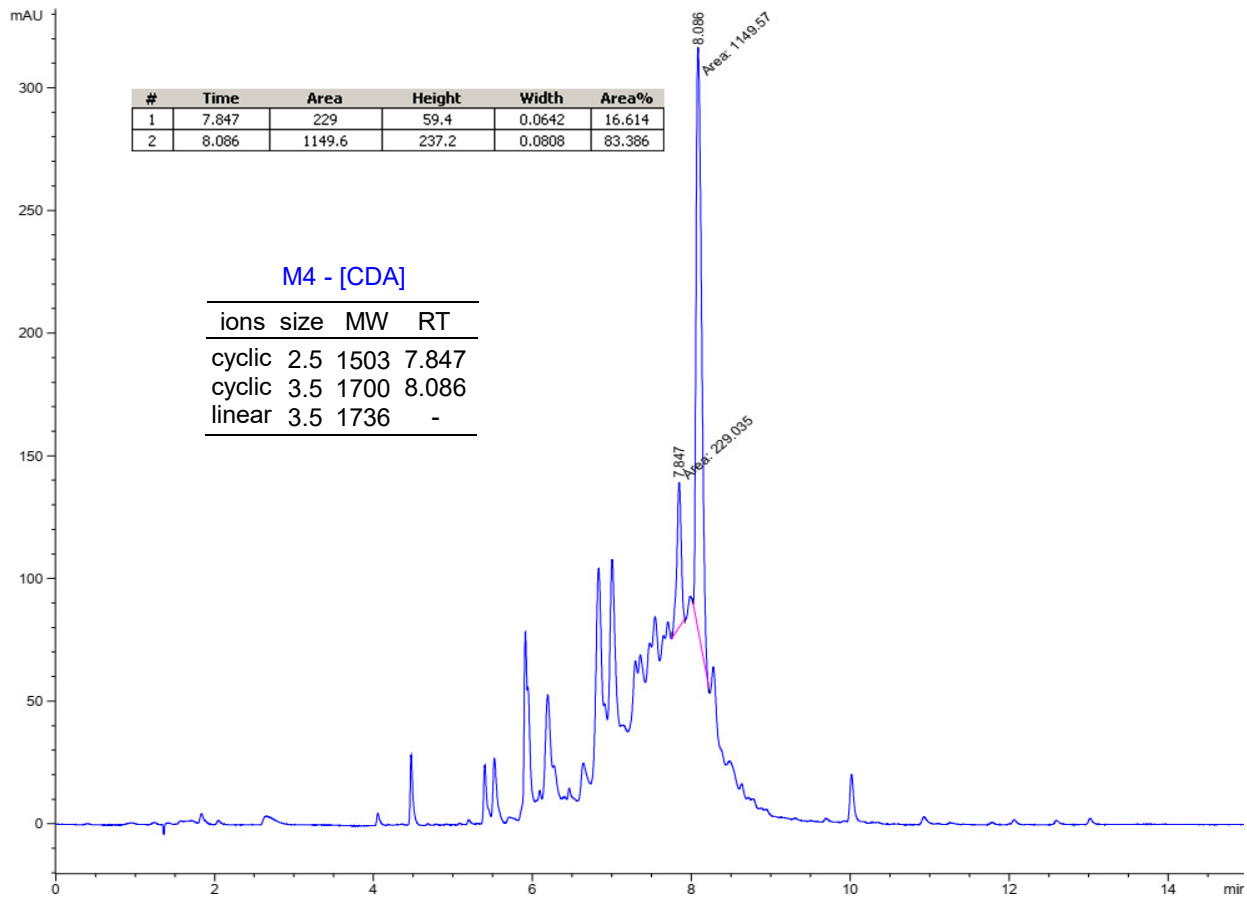


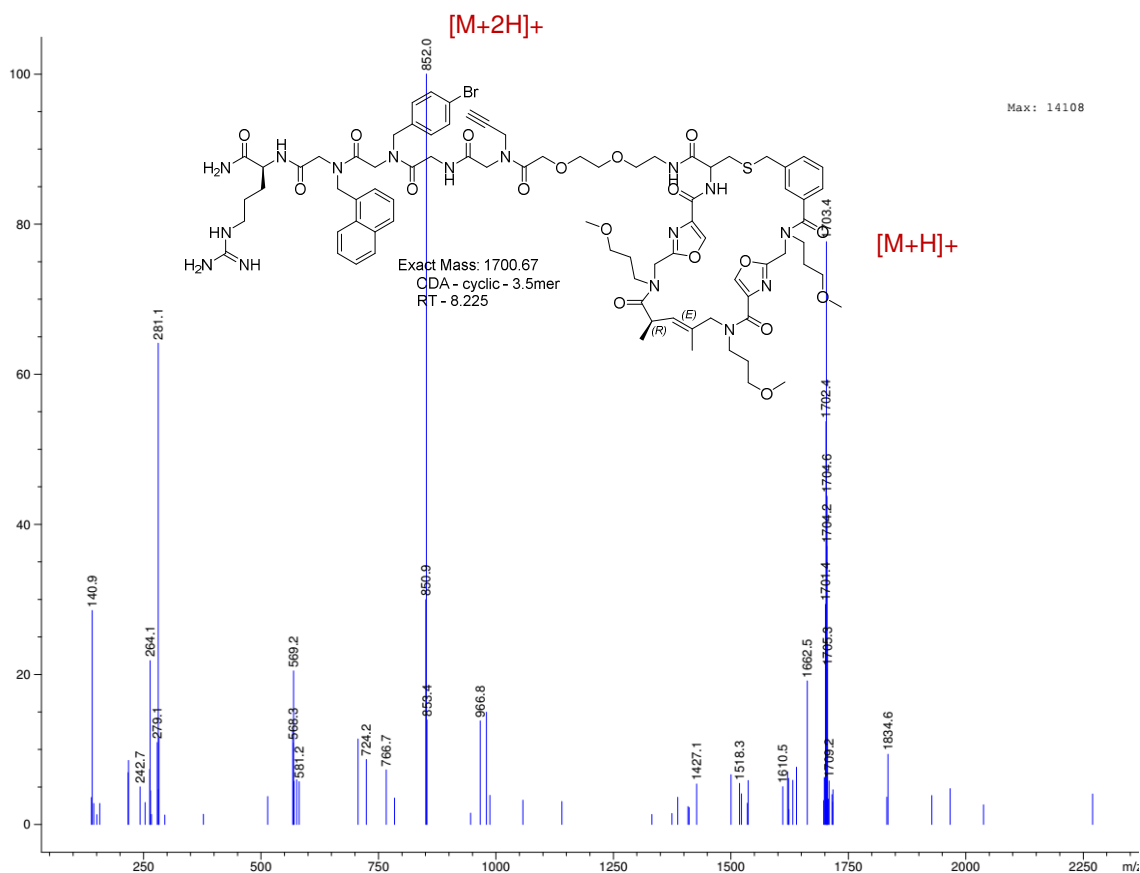




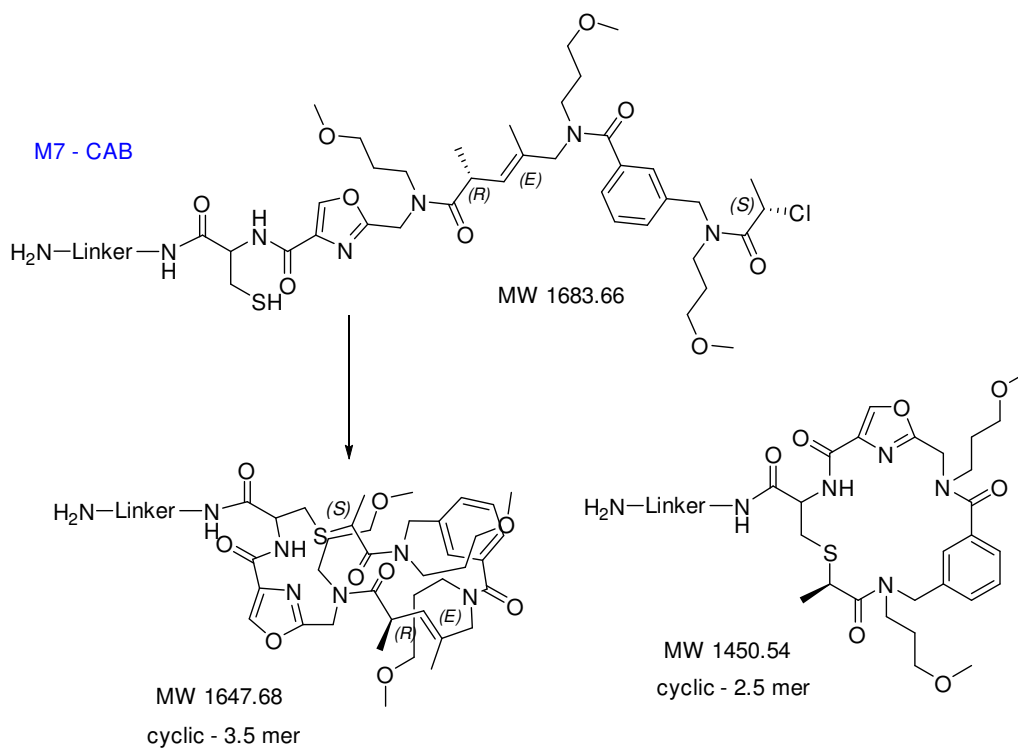
M4-[CDA]: Complete cyclization was observed on both 10 μm & 160 μm beads.

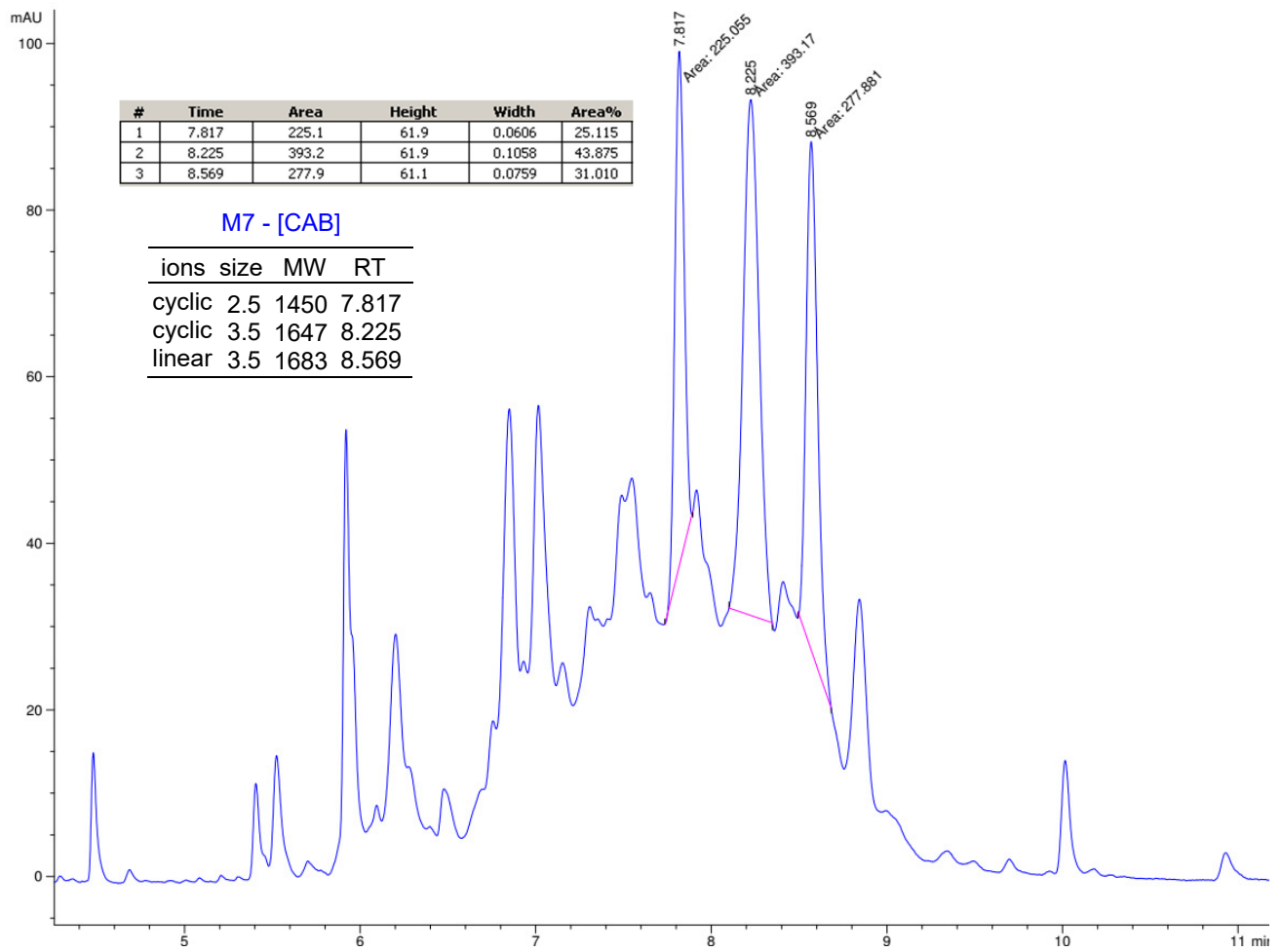
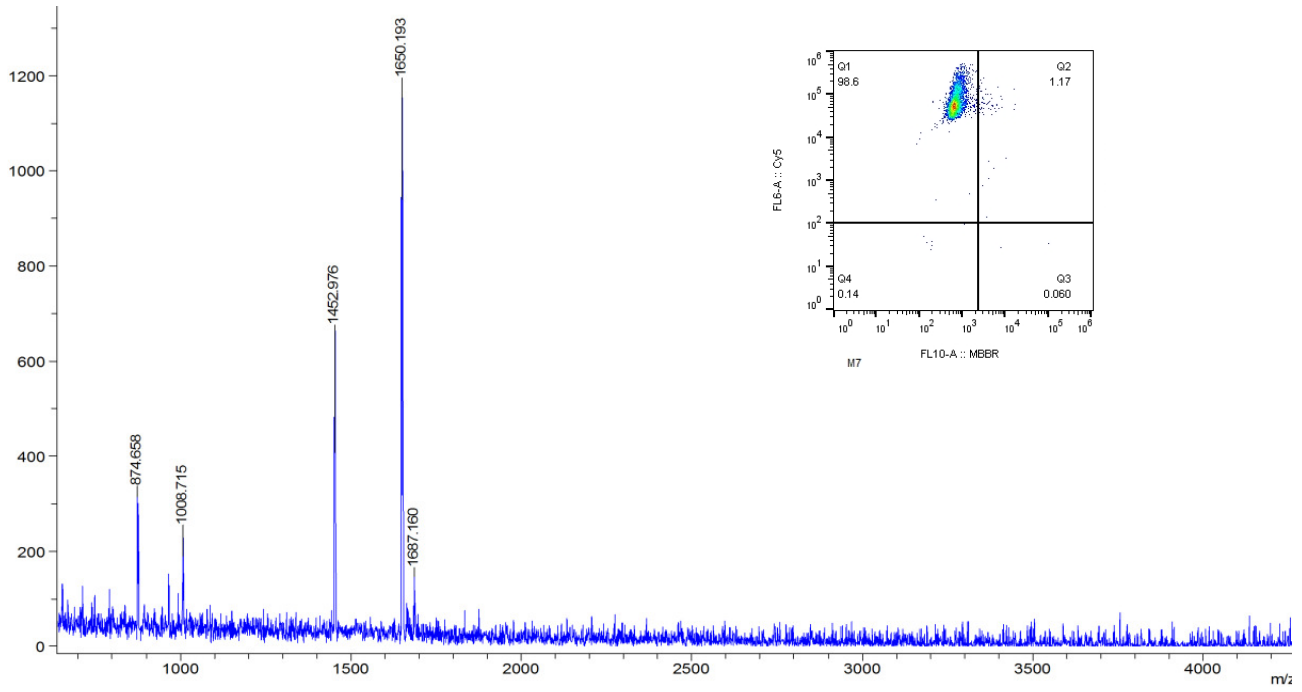


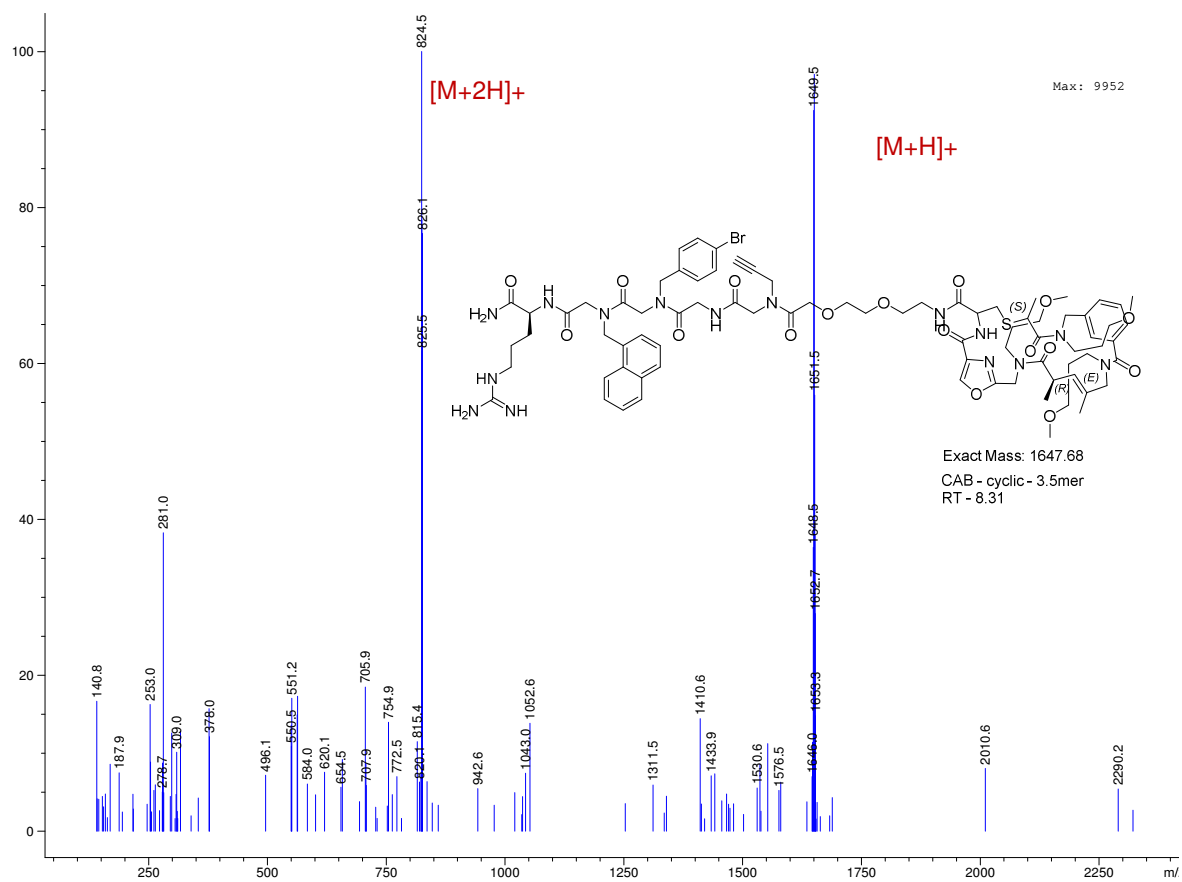
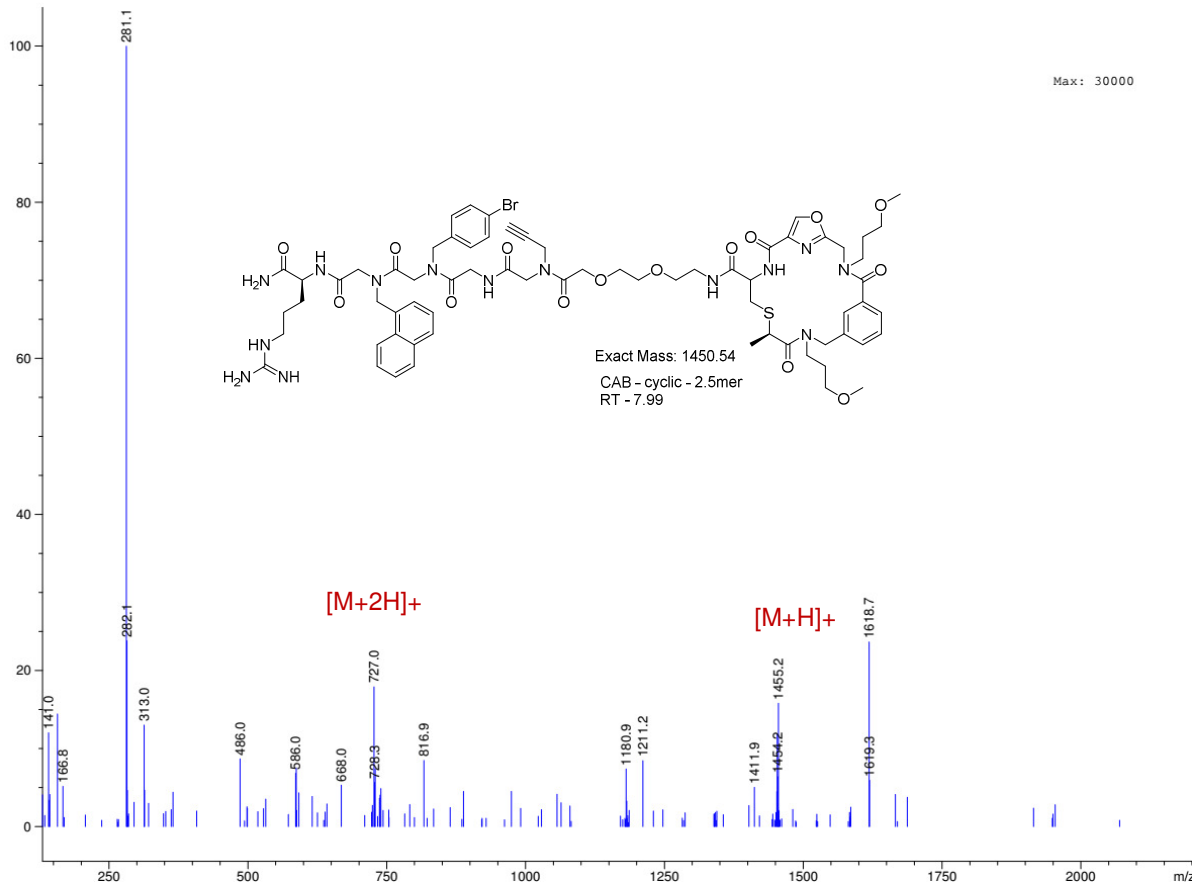


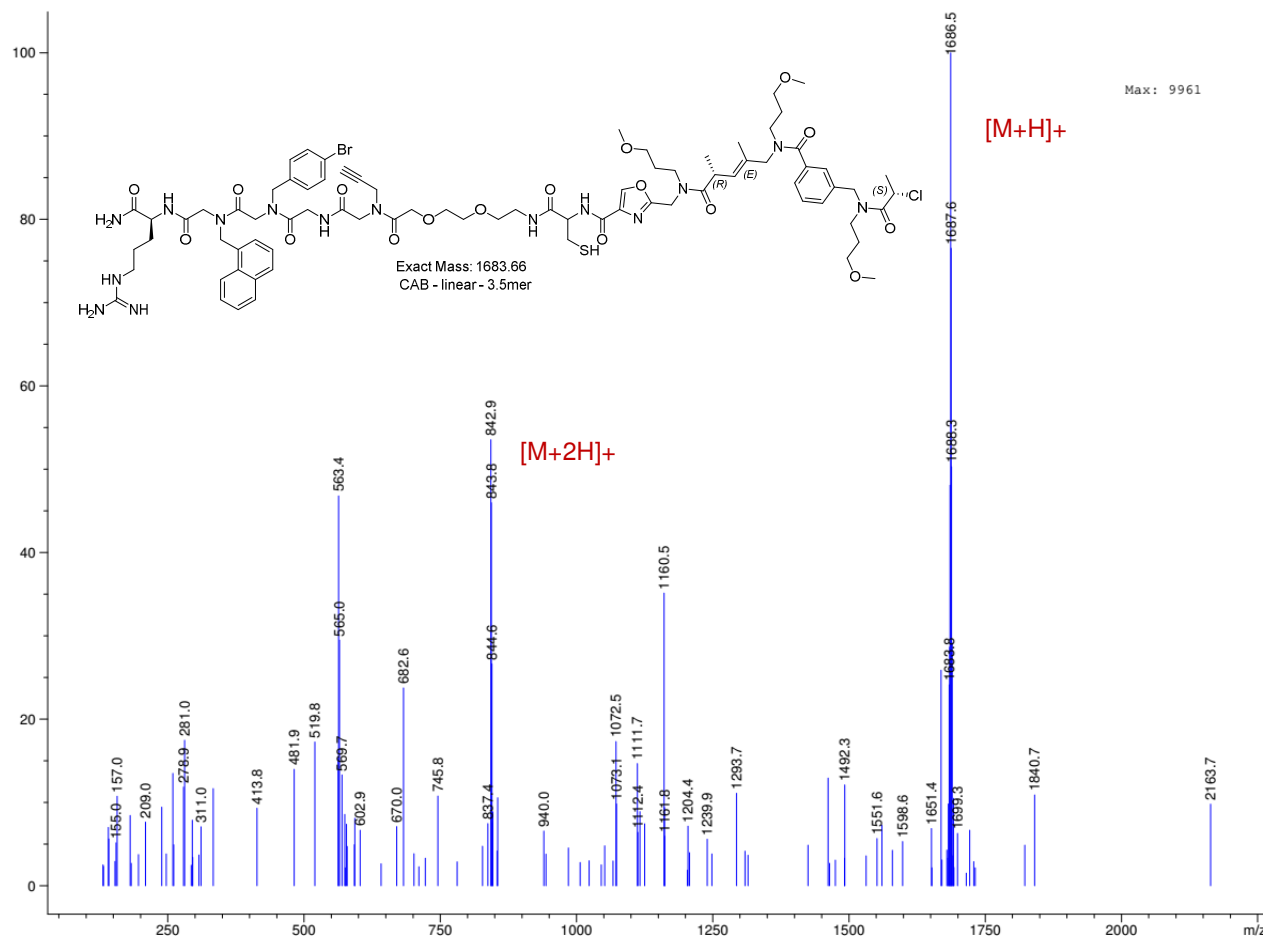


M7-[CAB]: Complete cyclization was detected on 10 μm but was incomplete on 160 μm beads.

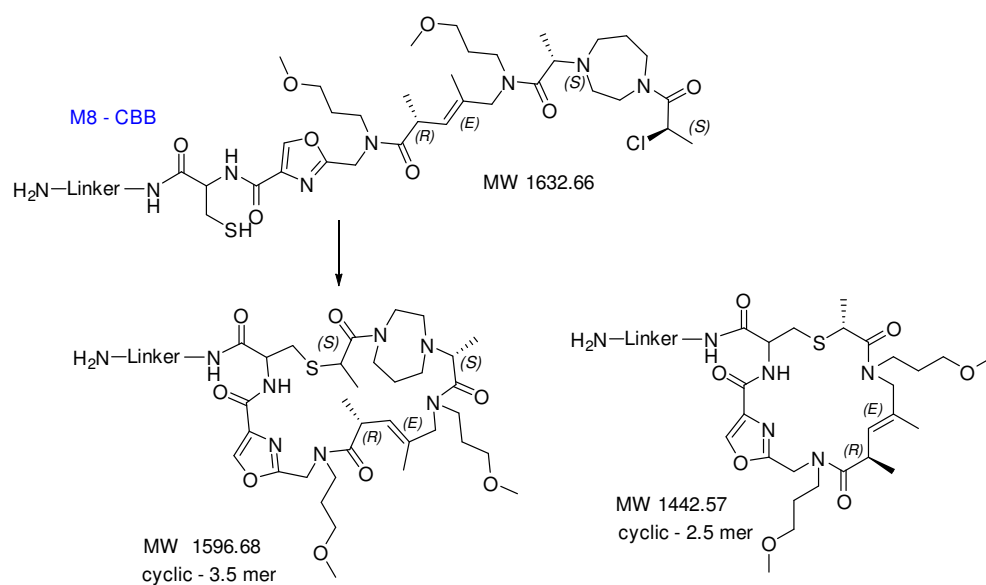


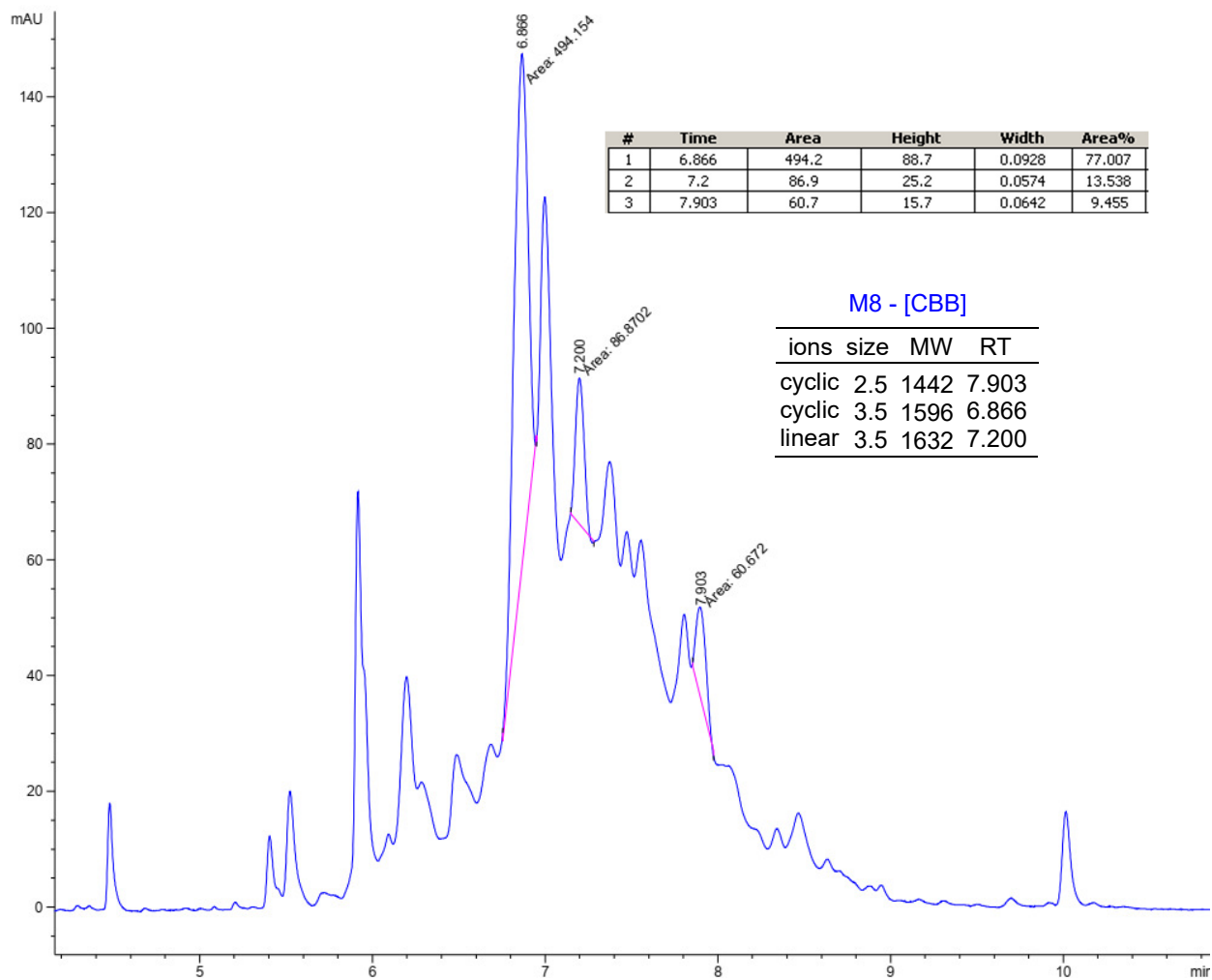
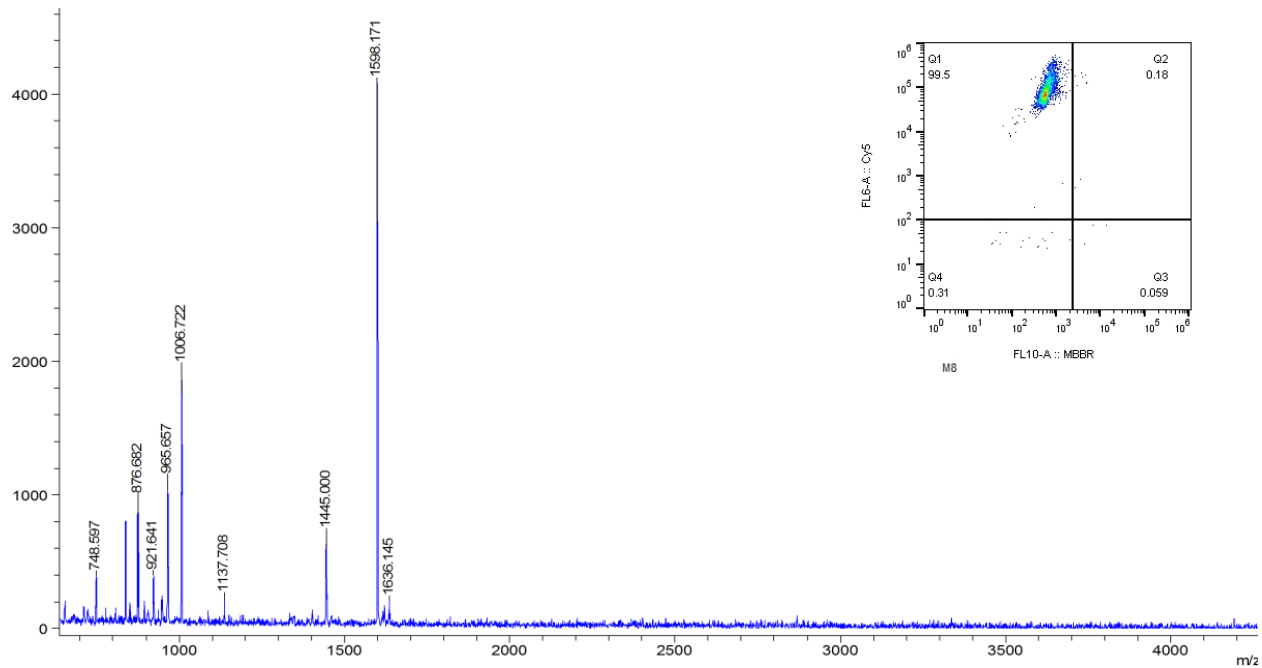


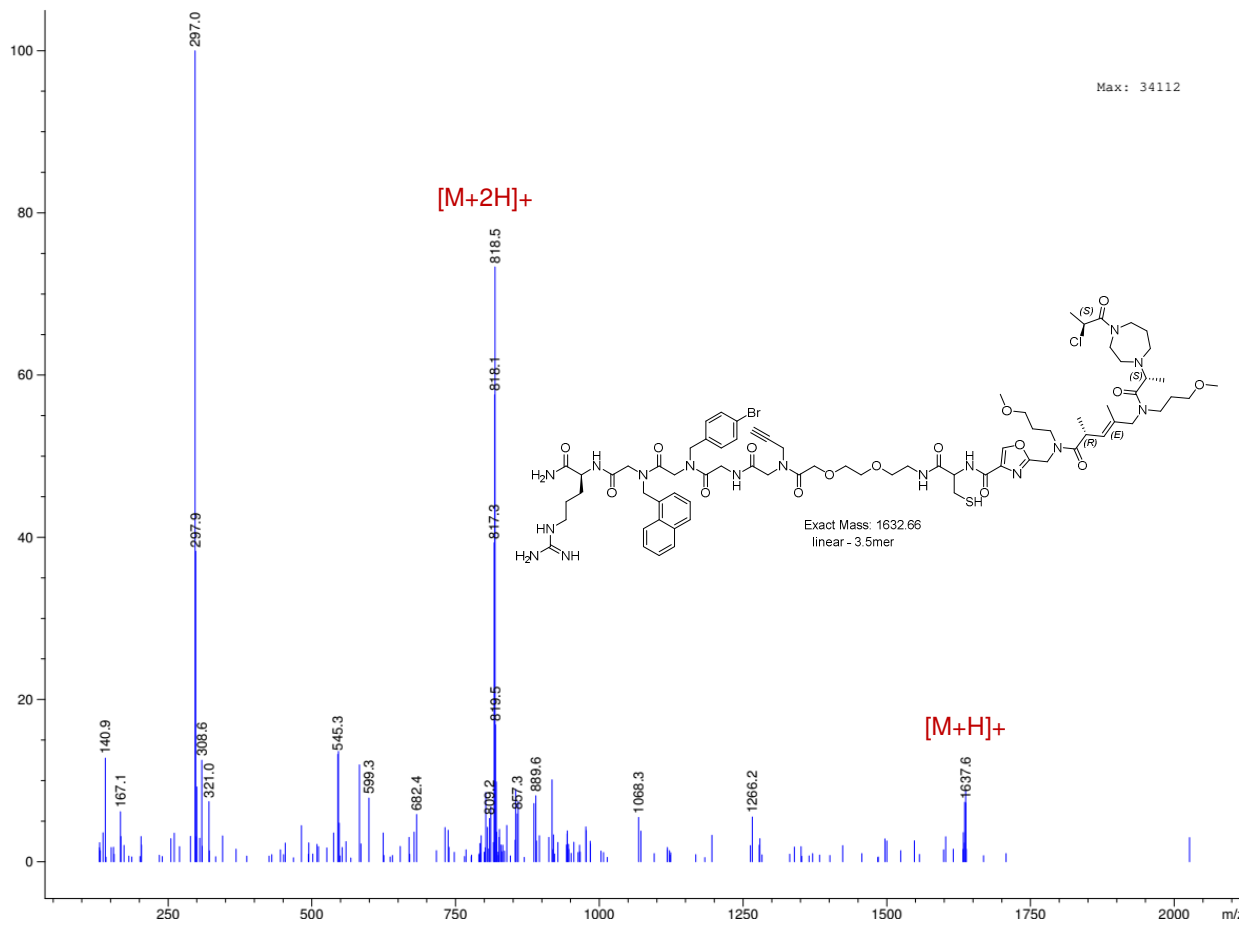
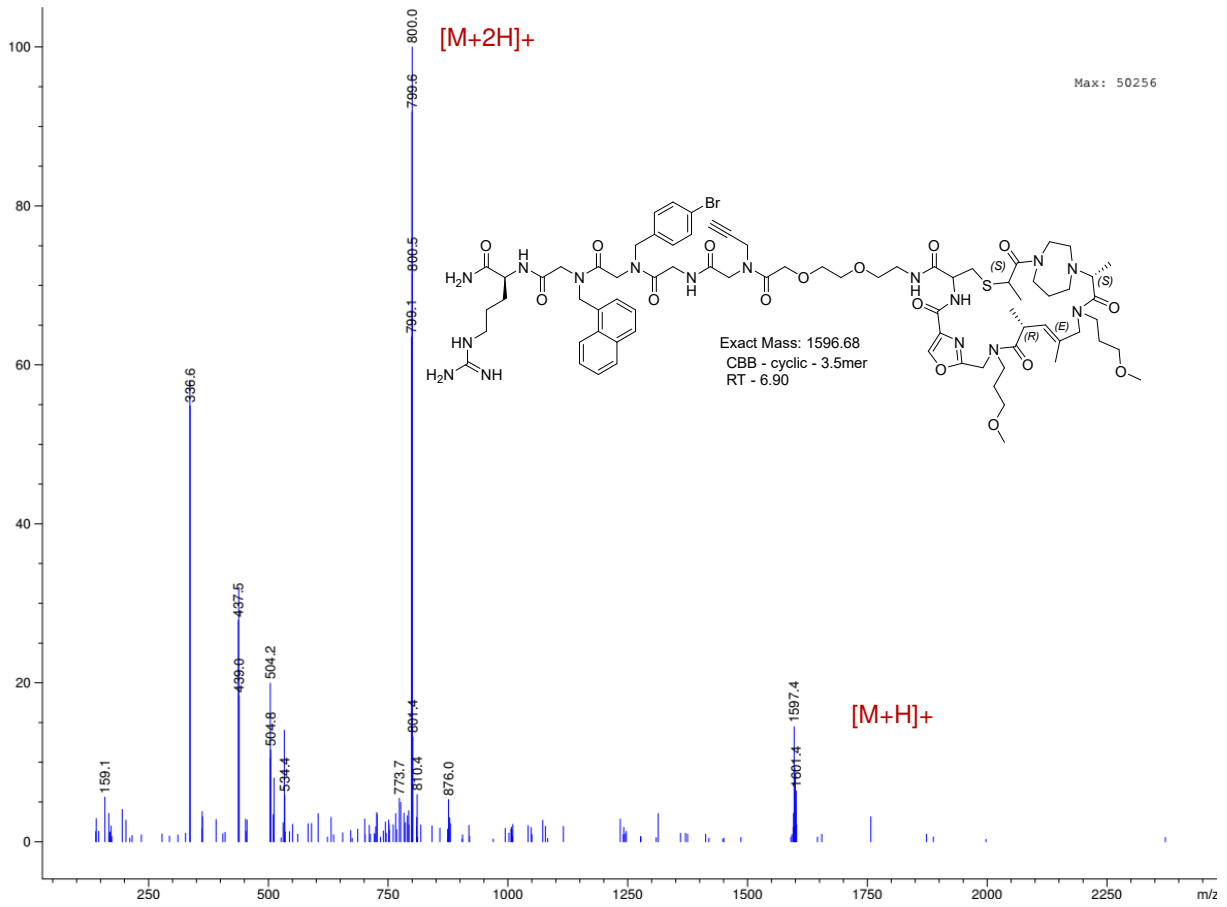


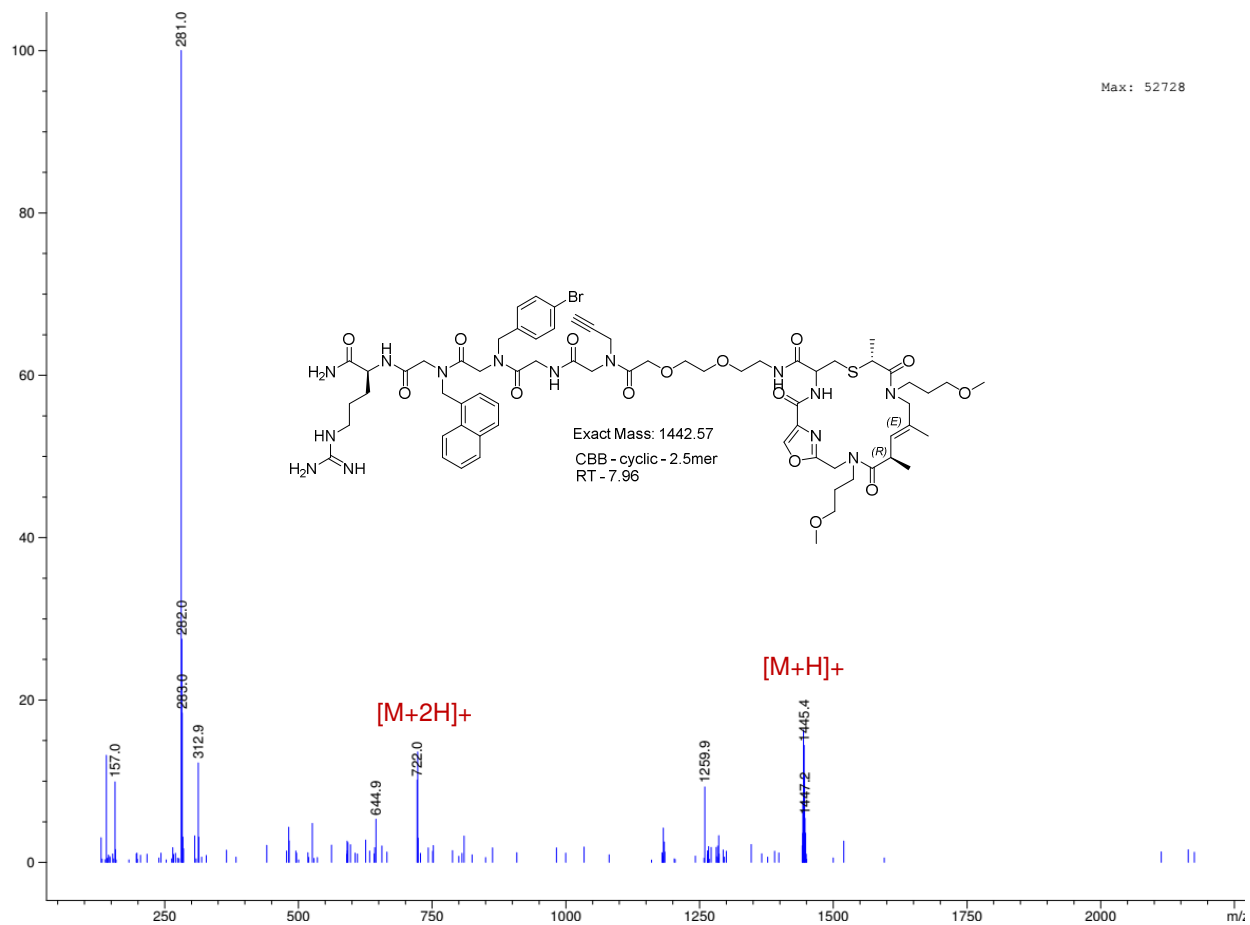


M8-[CBB]: Complete cyclization was observed on 10 μm but 160 μm had incomplete cyclization.

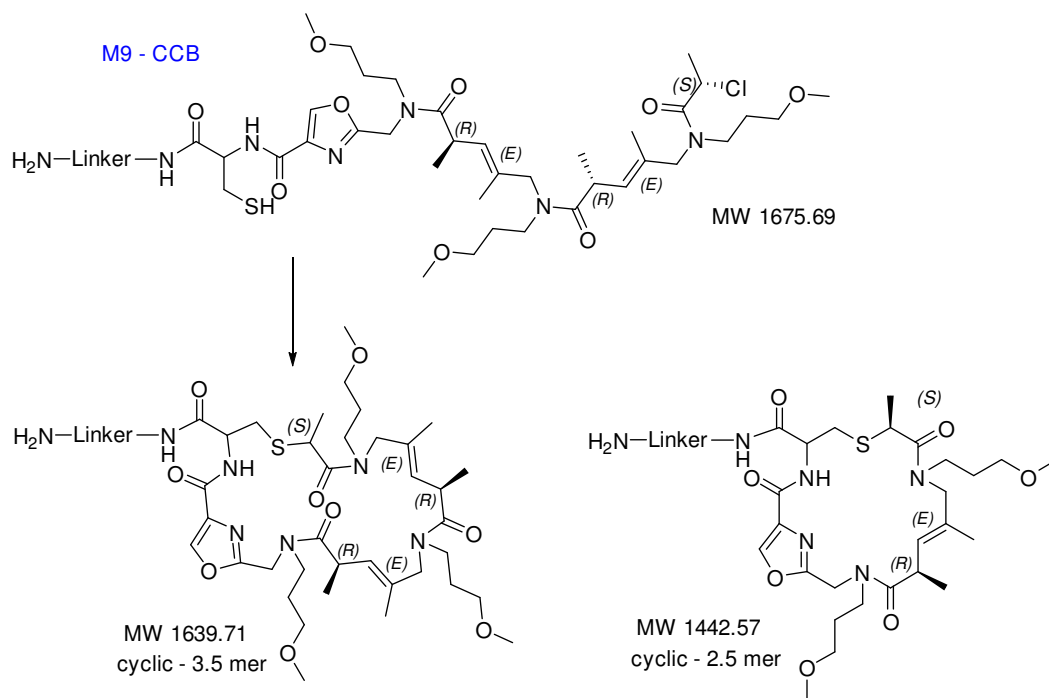


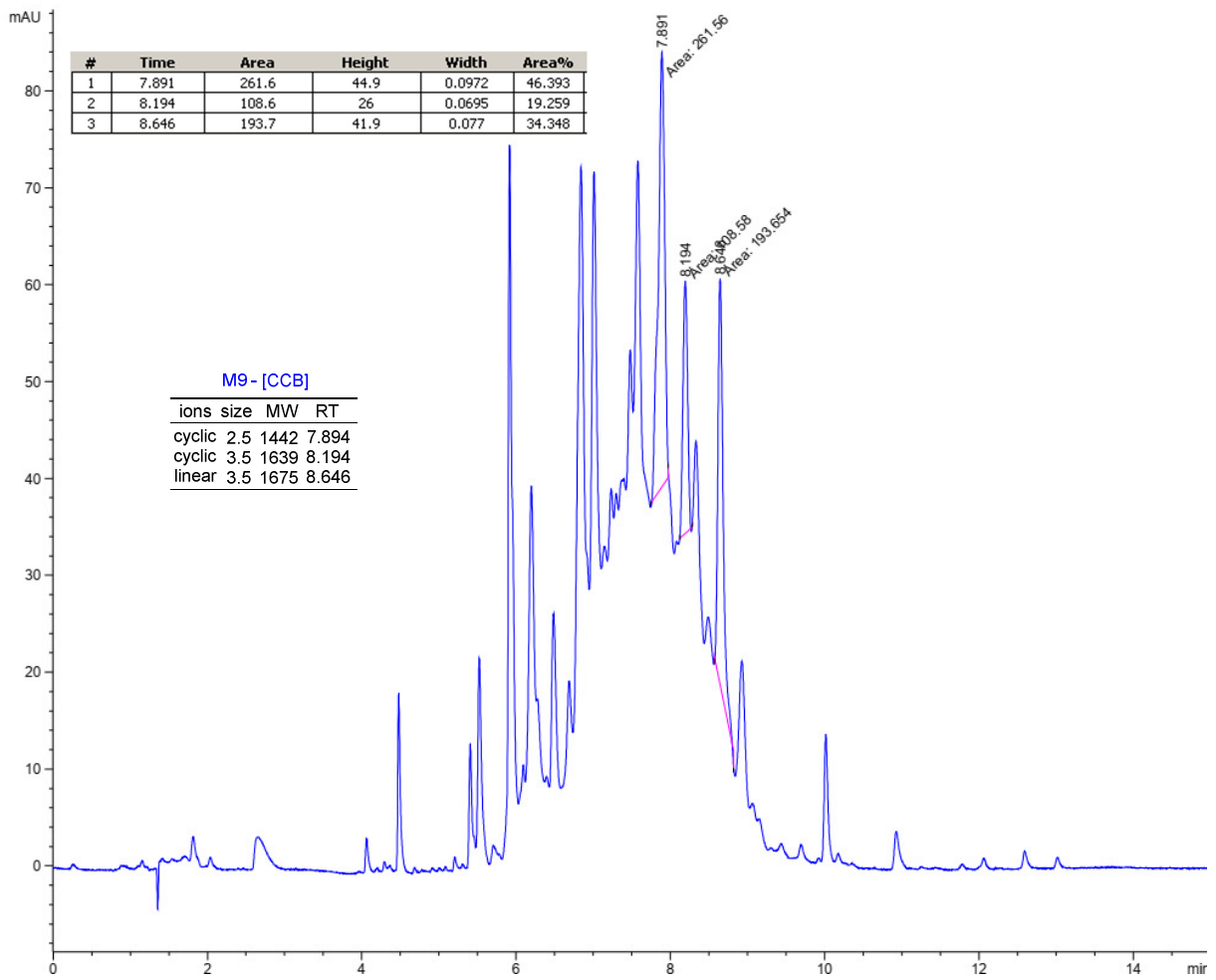
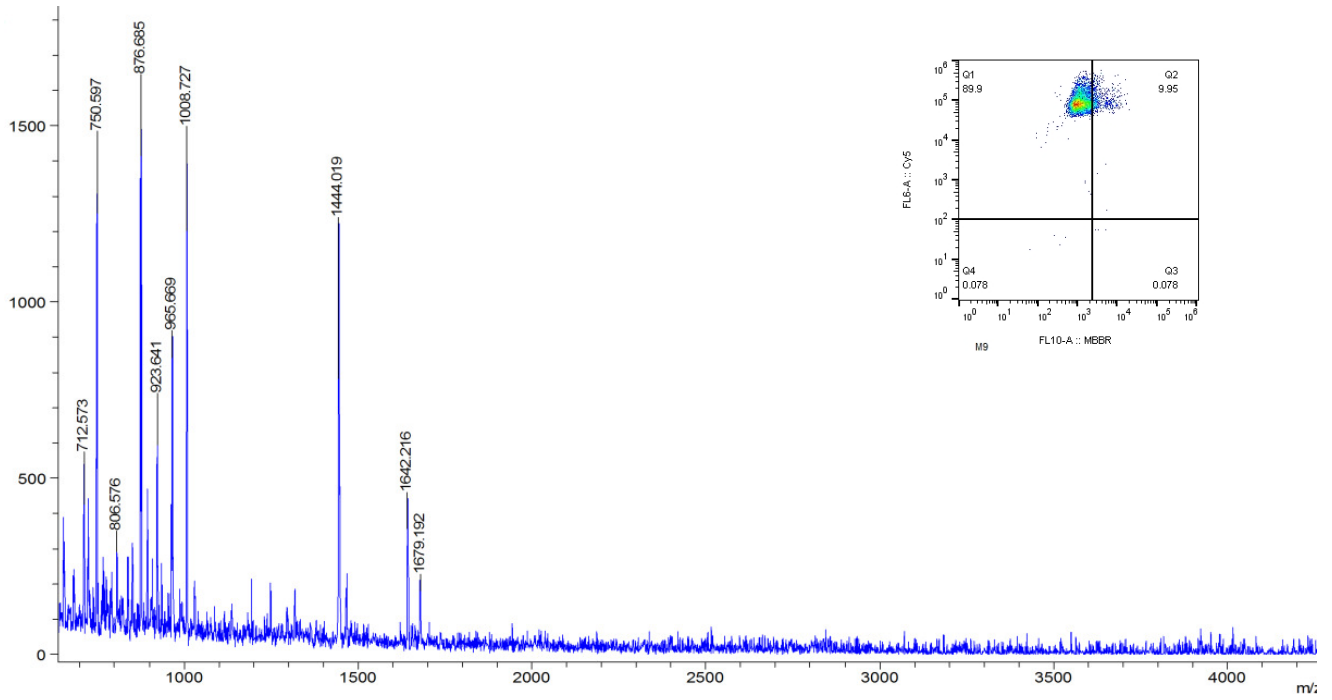


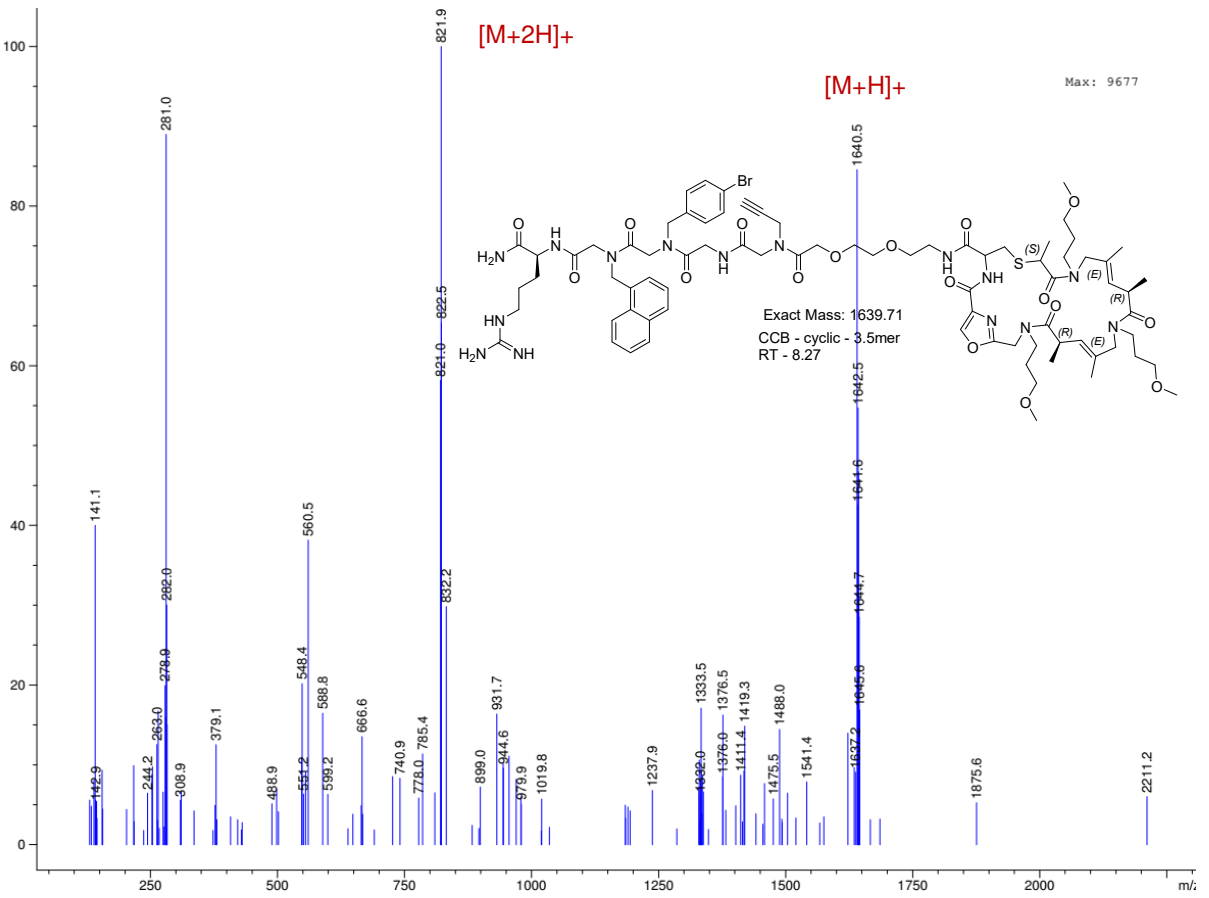
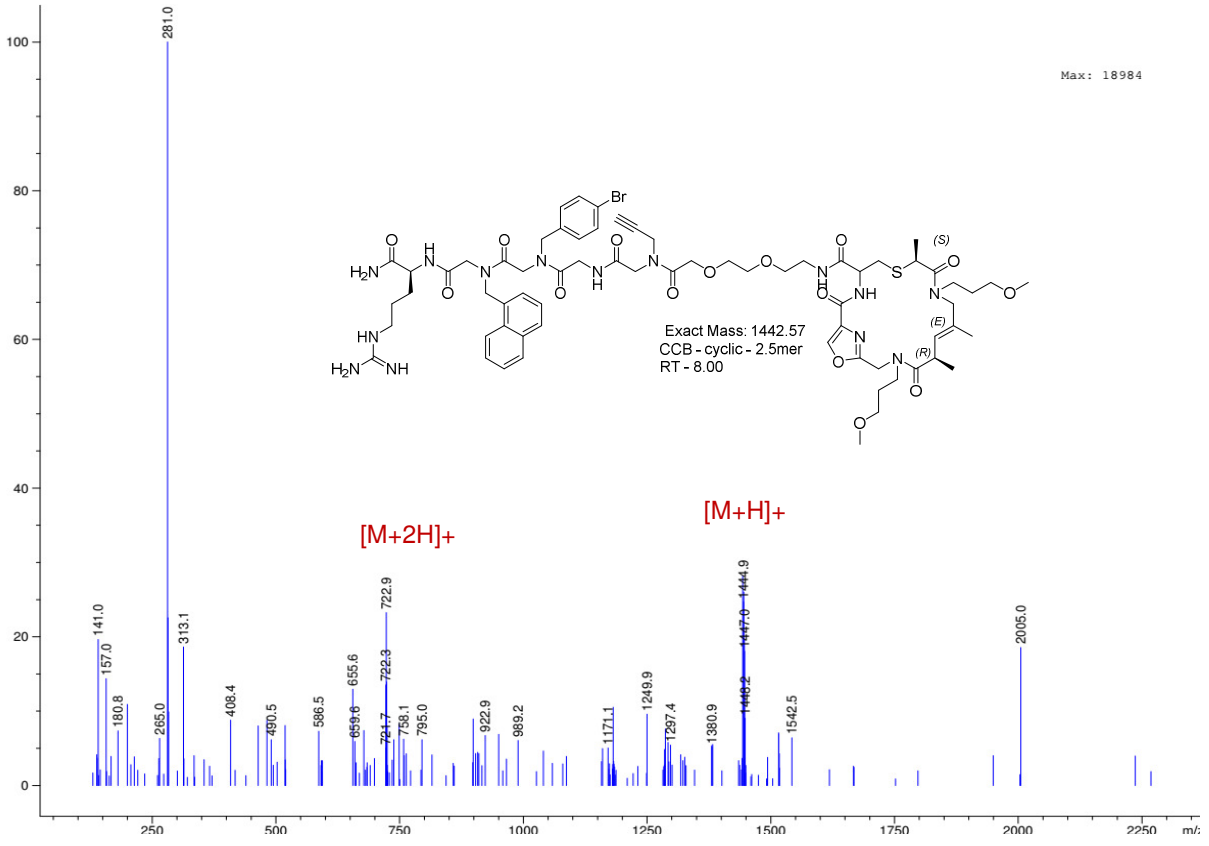


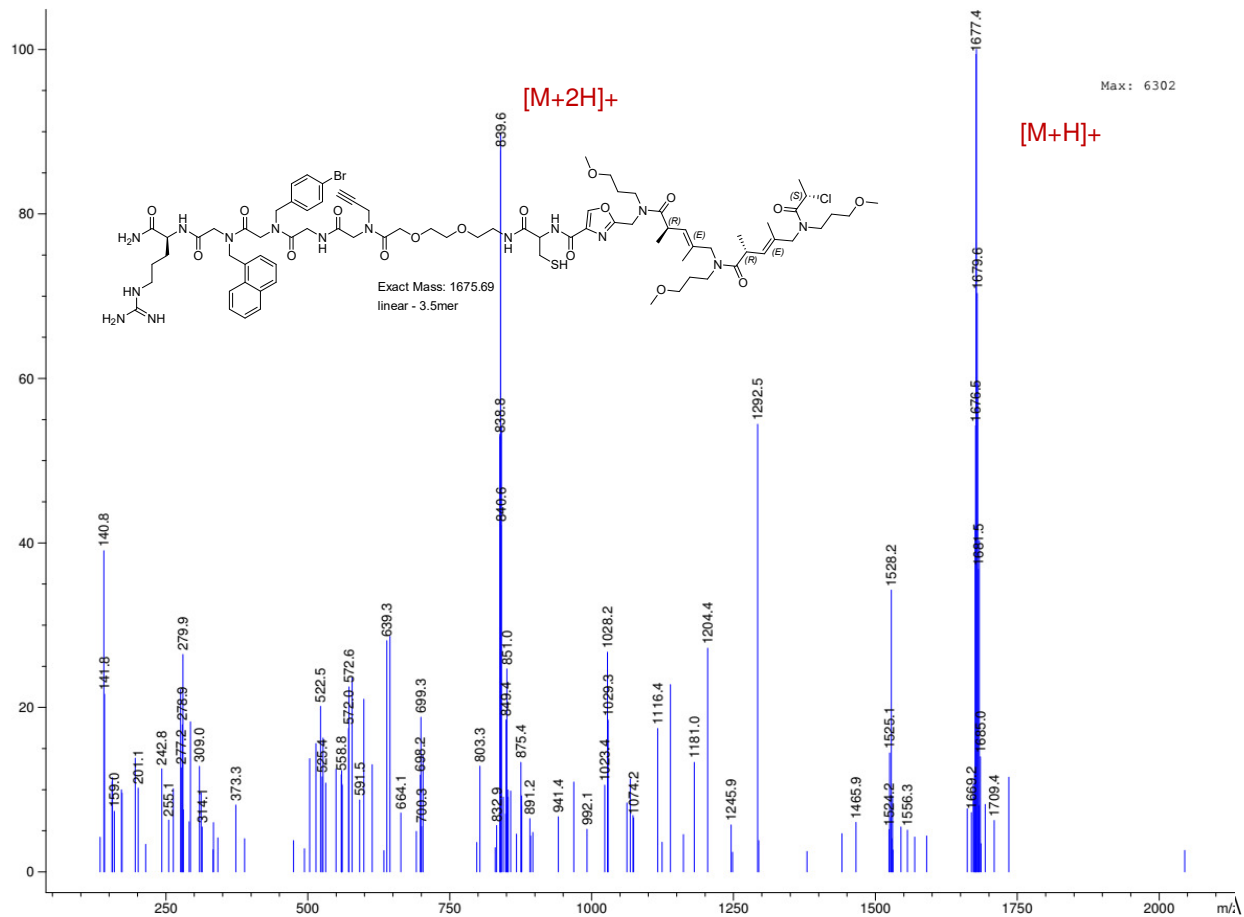


M9-[CCB]: Incomplete cyclization was observed on both 10 μm and 160 μm beads.

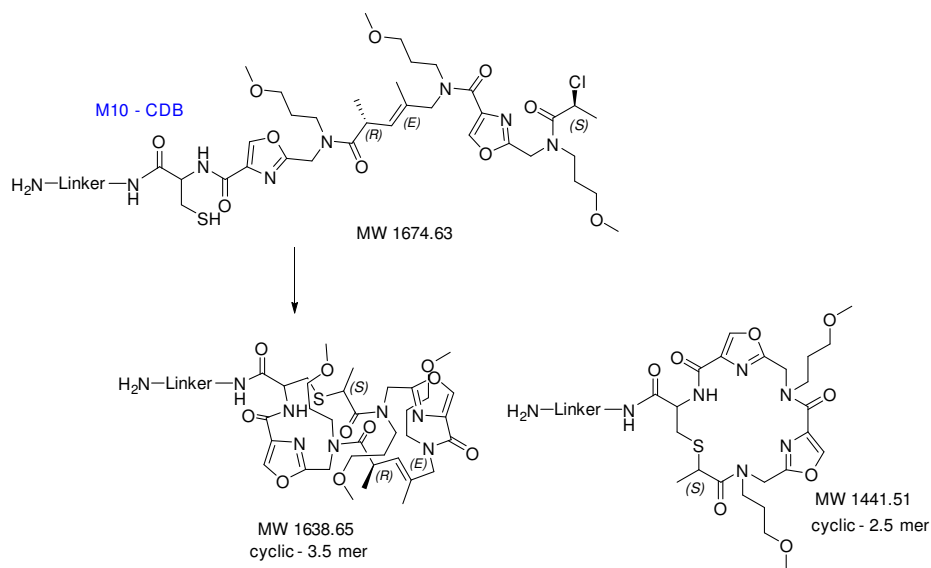


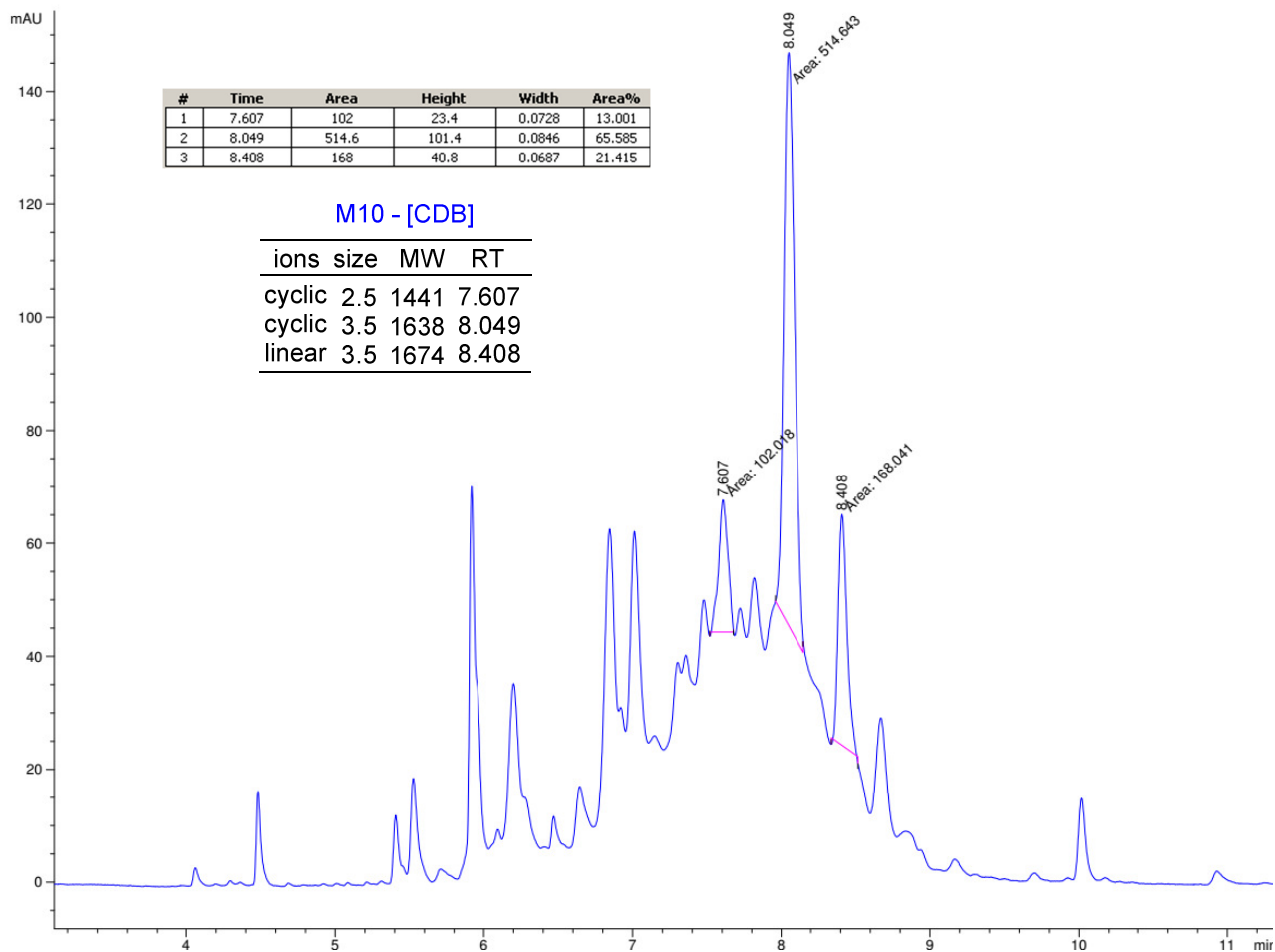
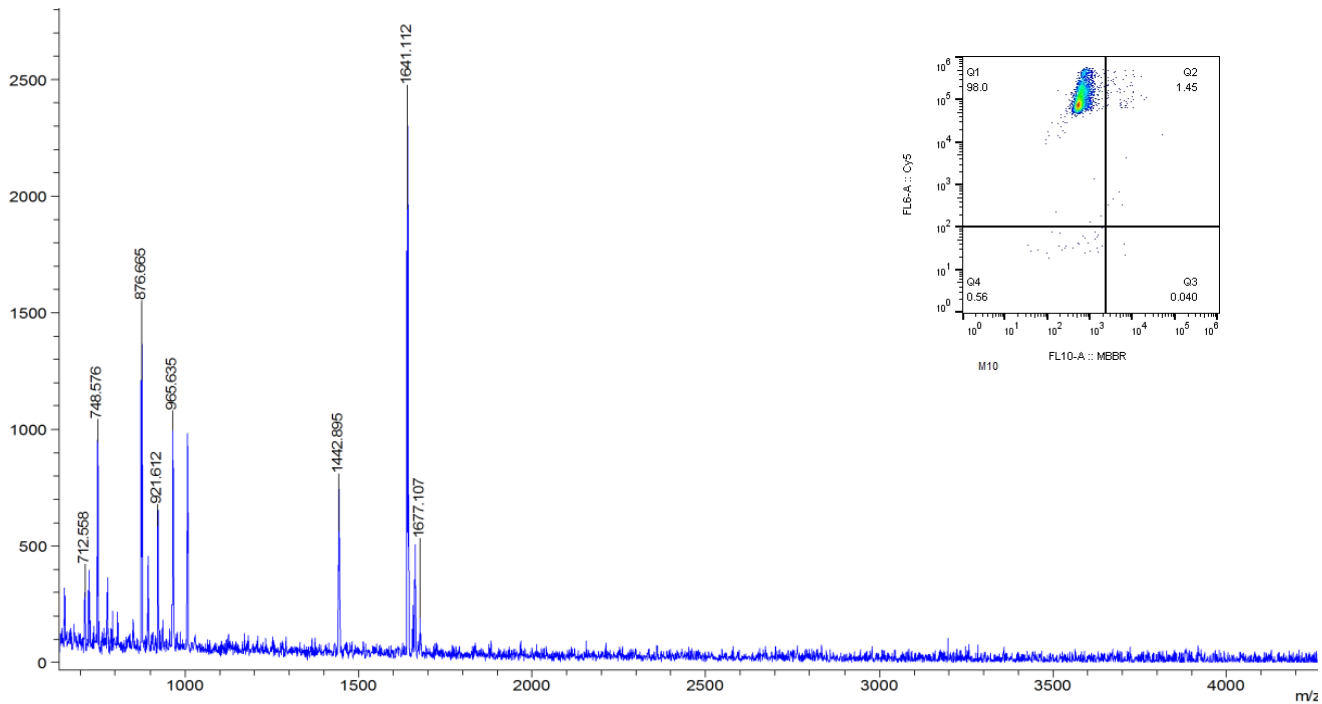


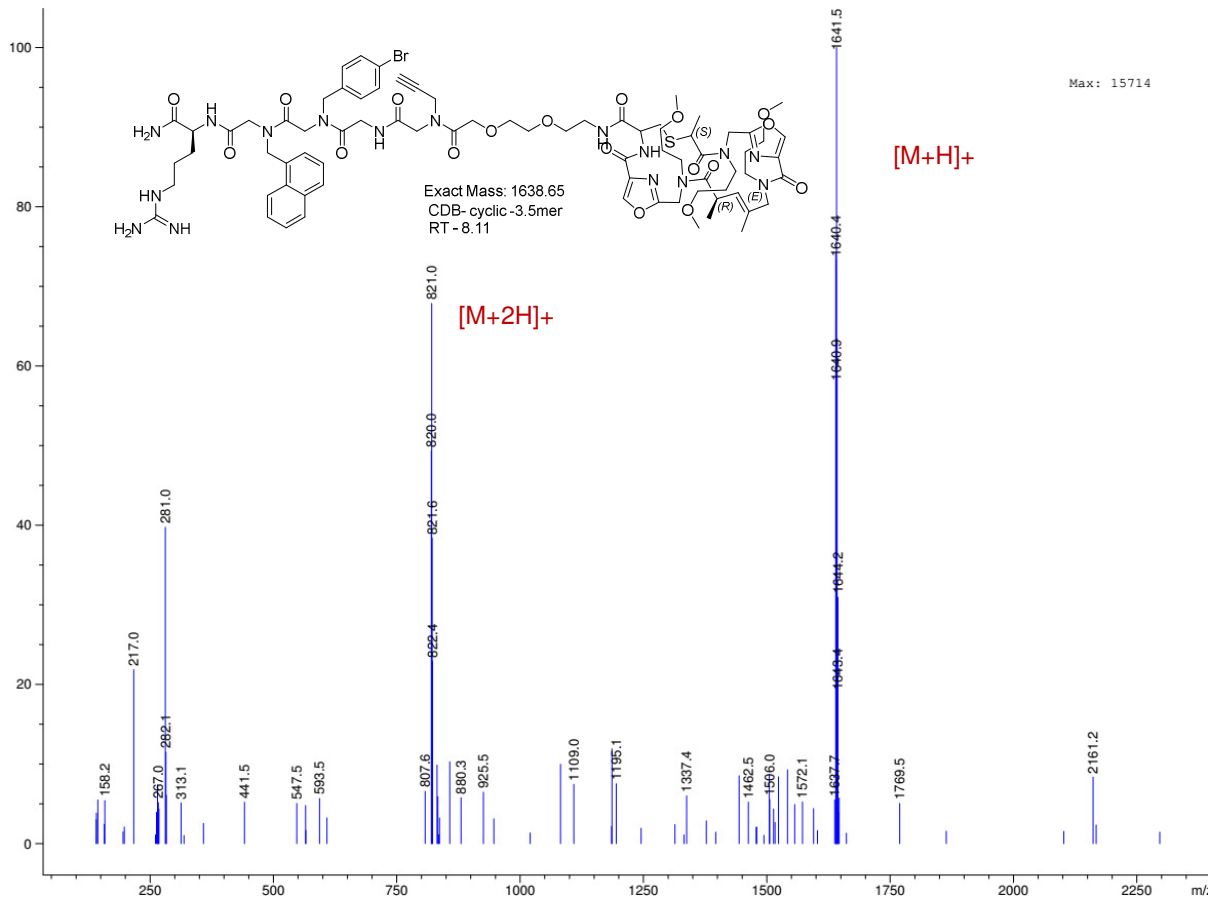
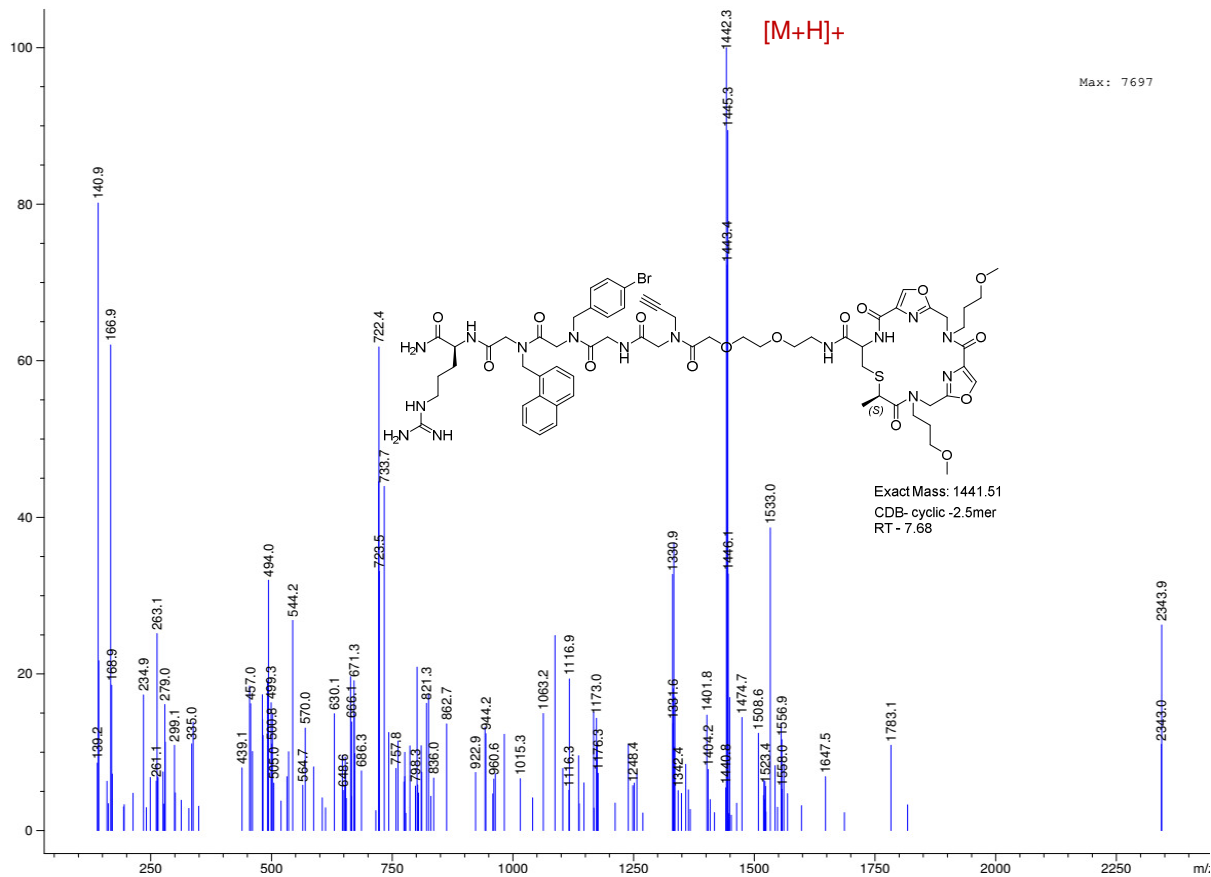


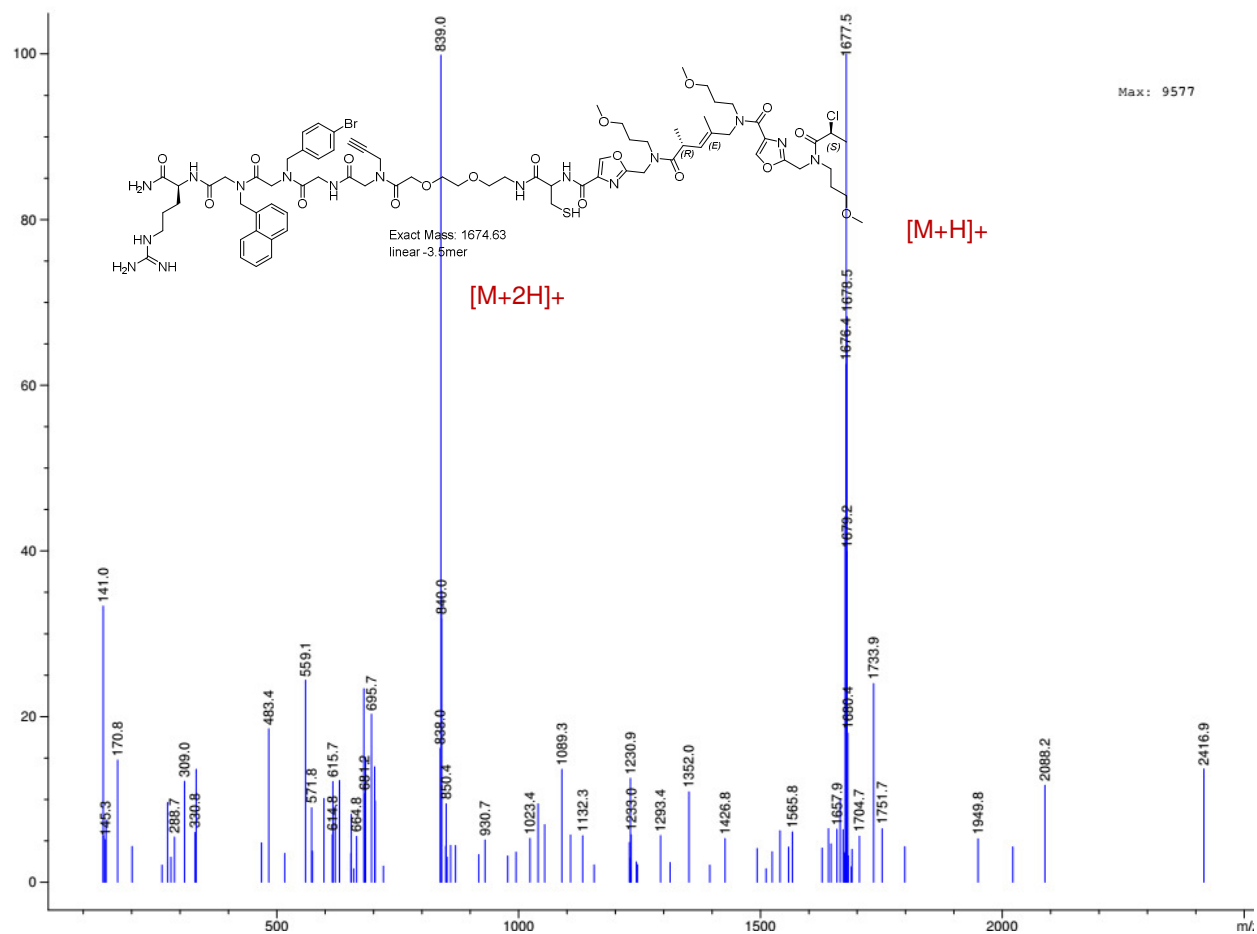


M10-[CDB]: Complete cyclization was observed on 10 μm but 160 μm beads had incomplete cyclization. Linear precursor was detected (MW 1674, RT- 8.40).

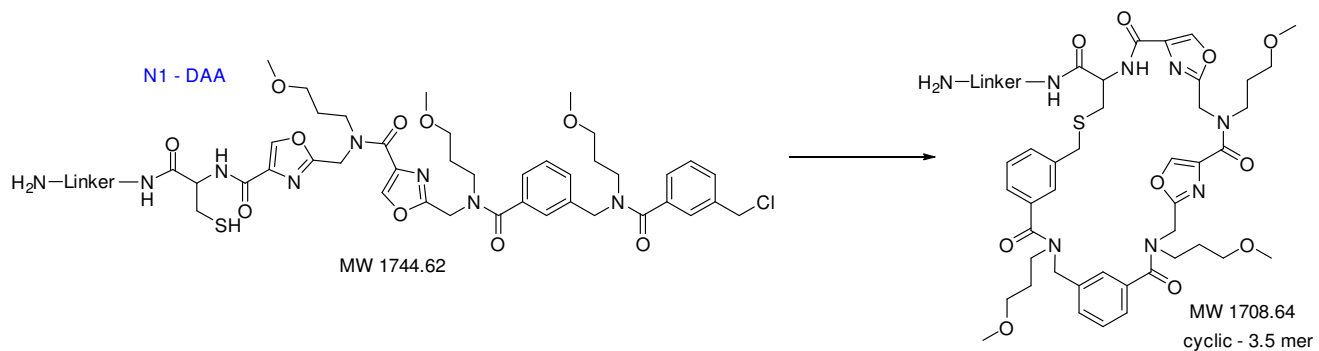


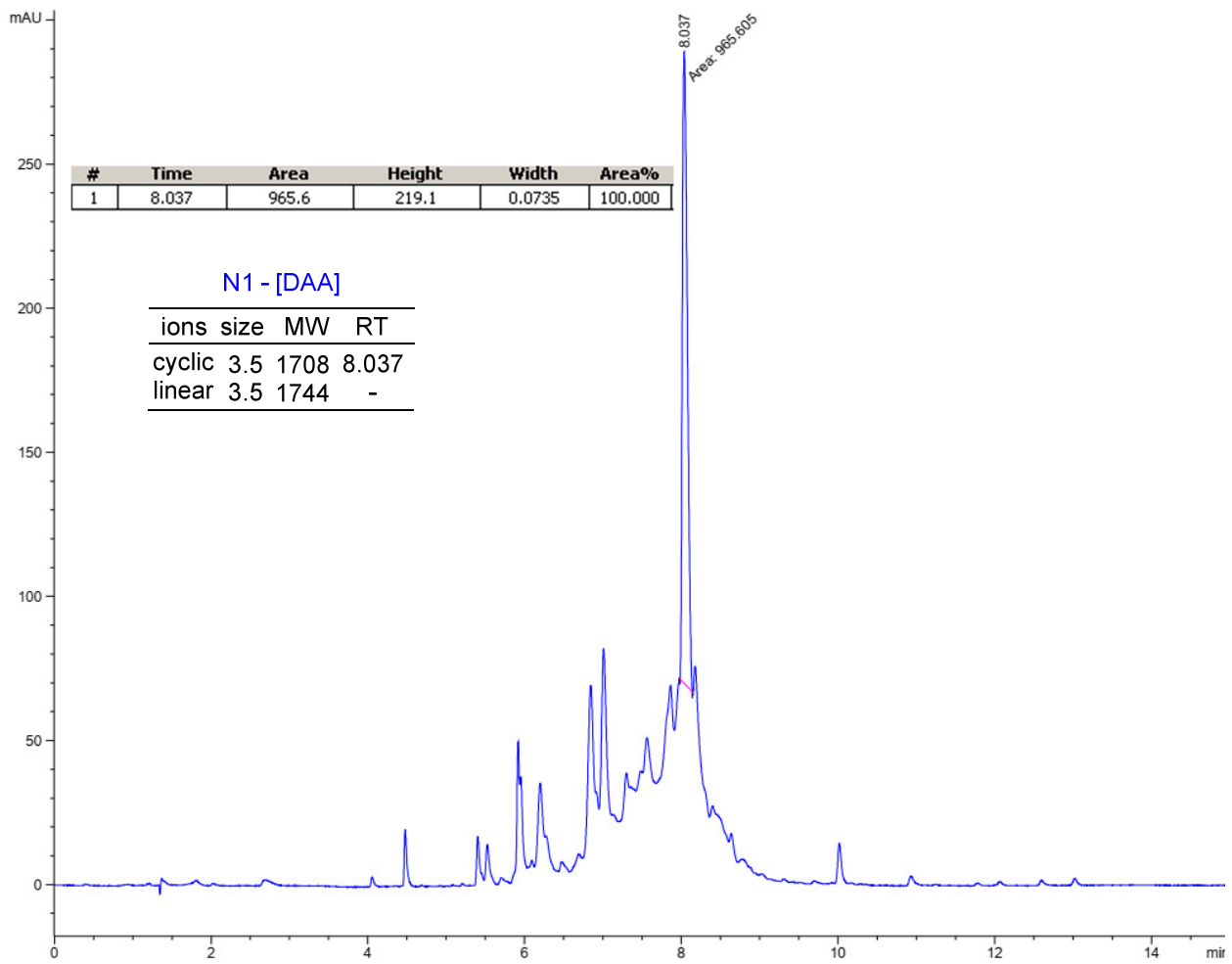
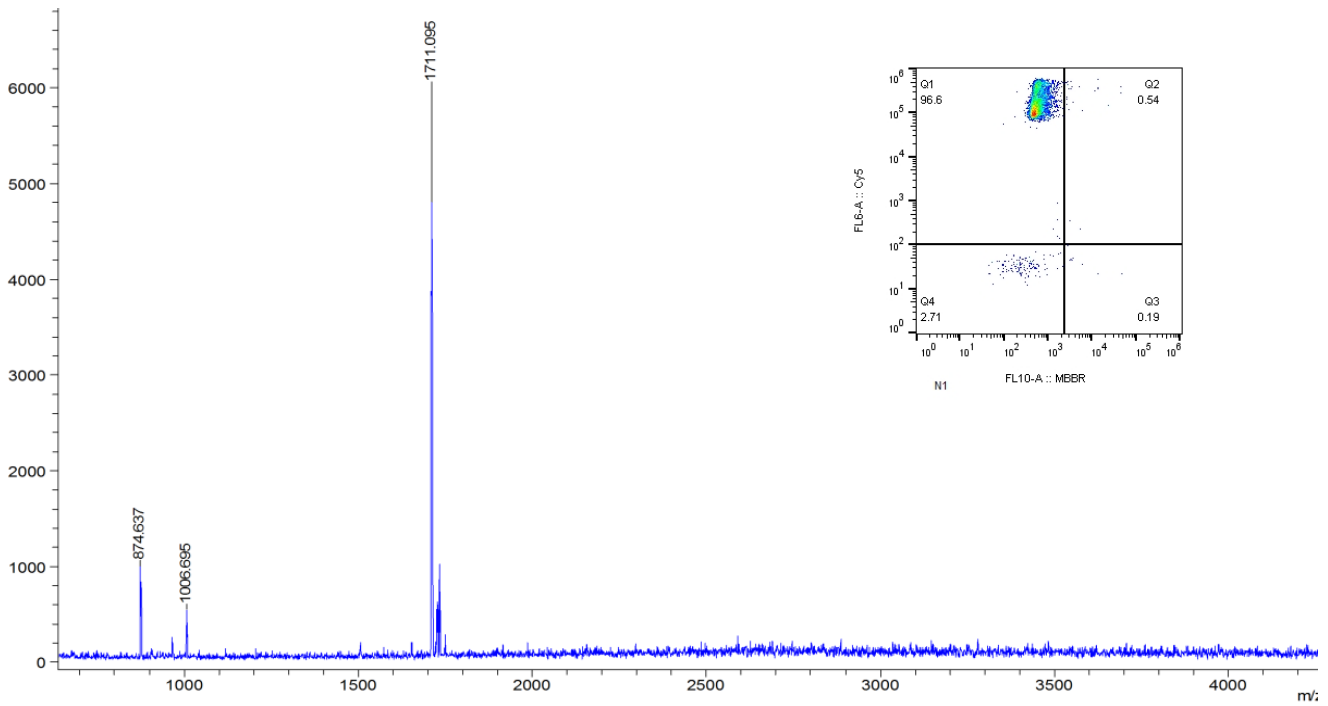


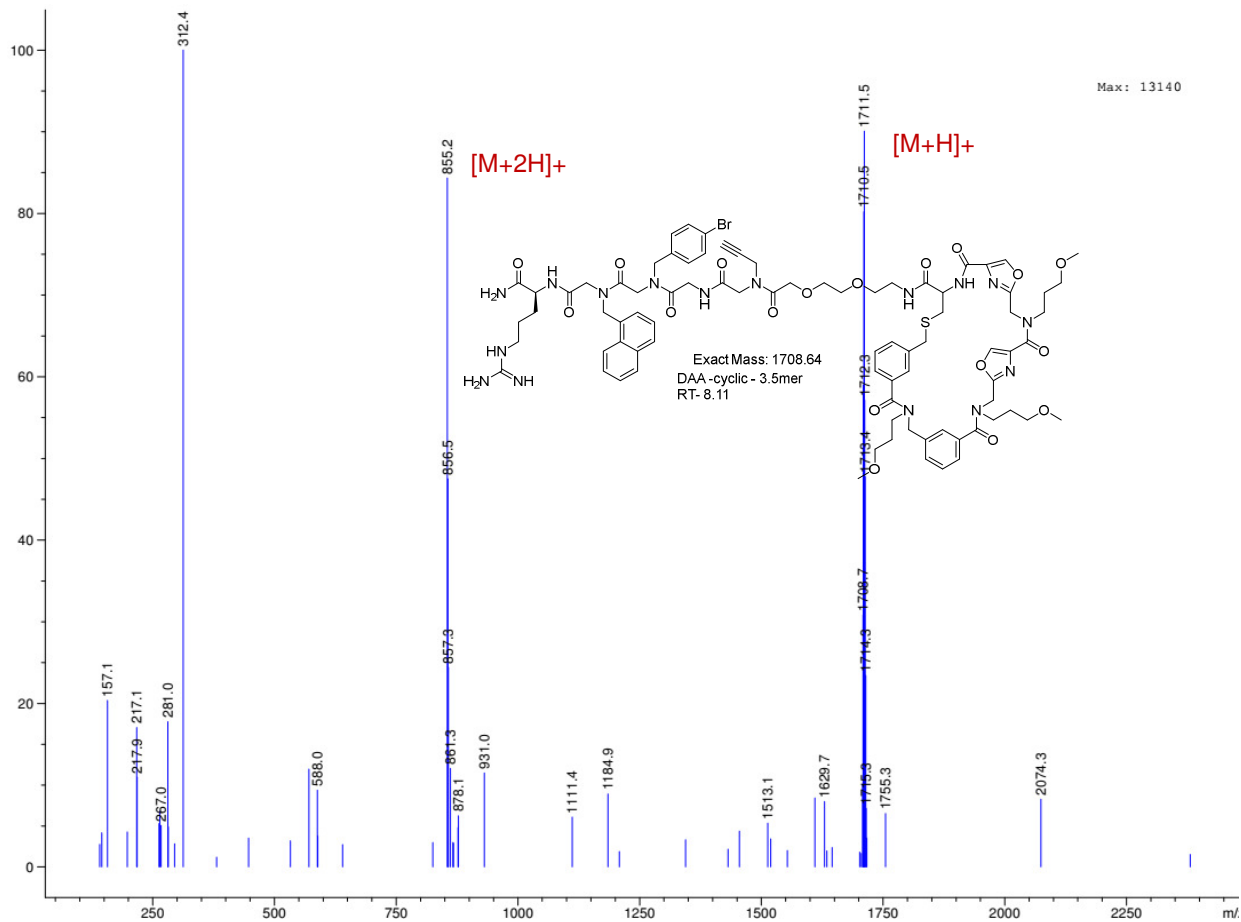




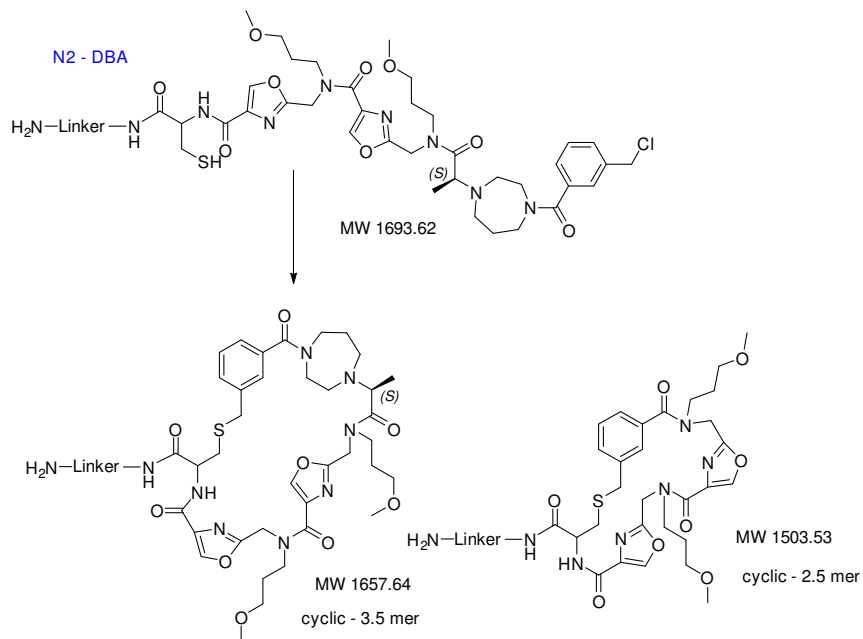
N1-[DAA]: Complete cyclization was observed on 10 μm & 160 μm beads.

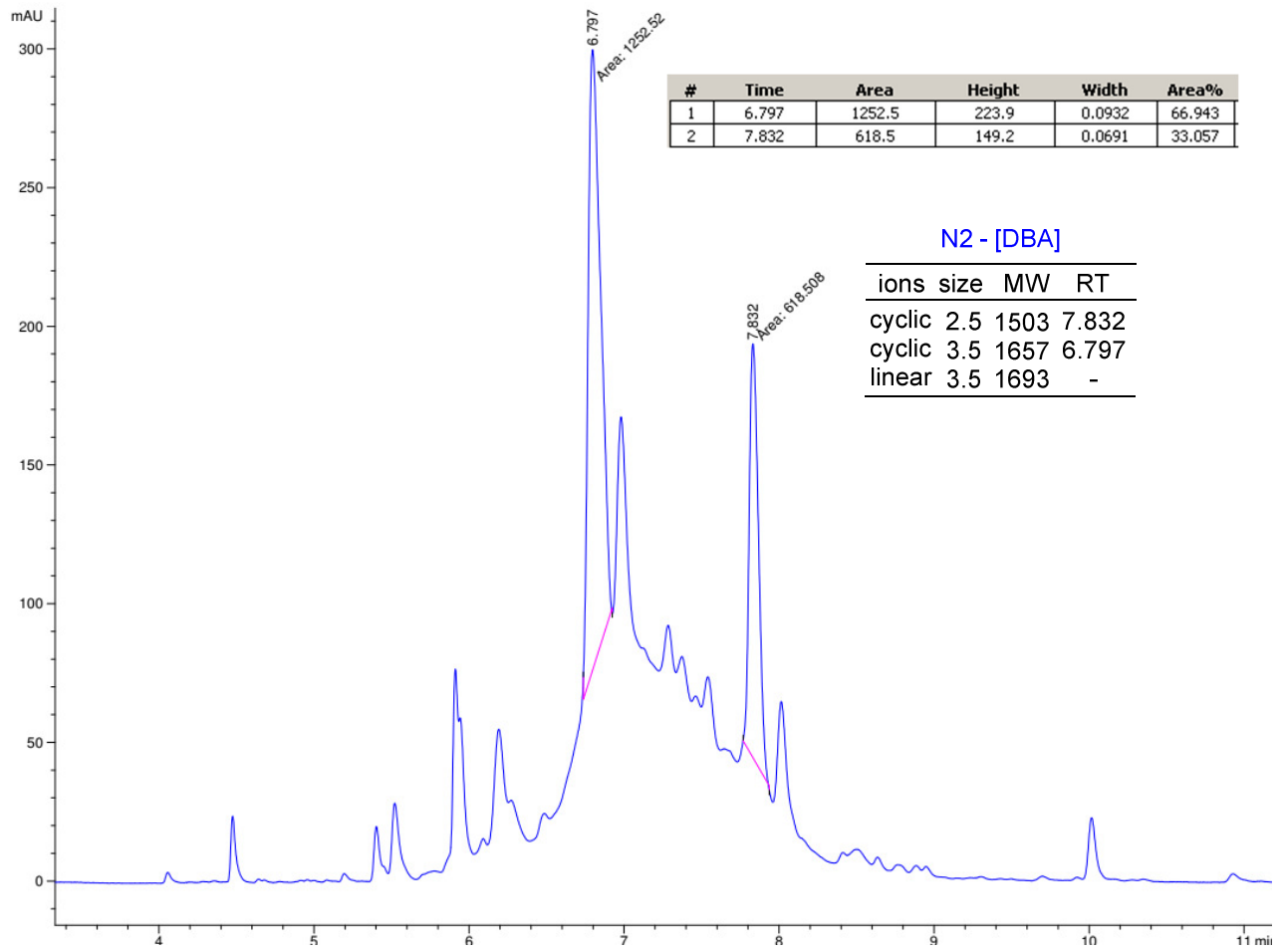
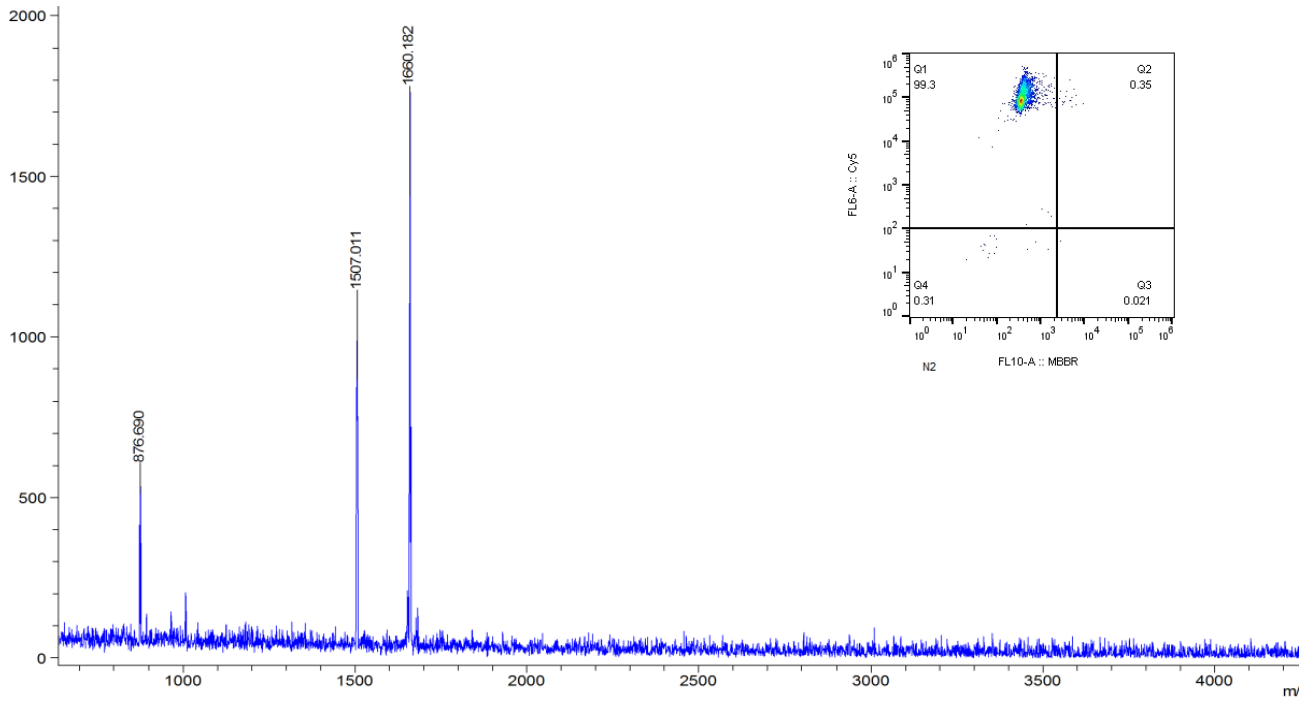


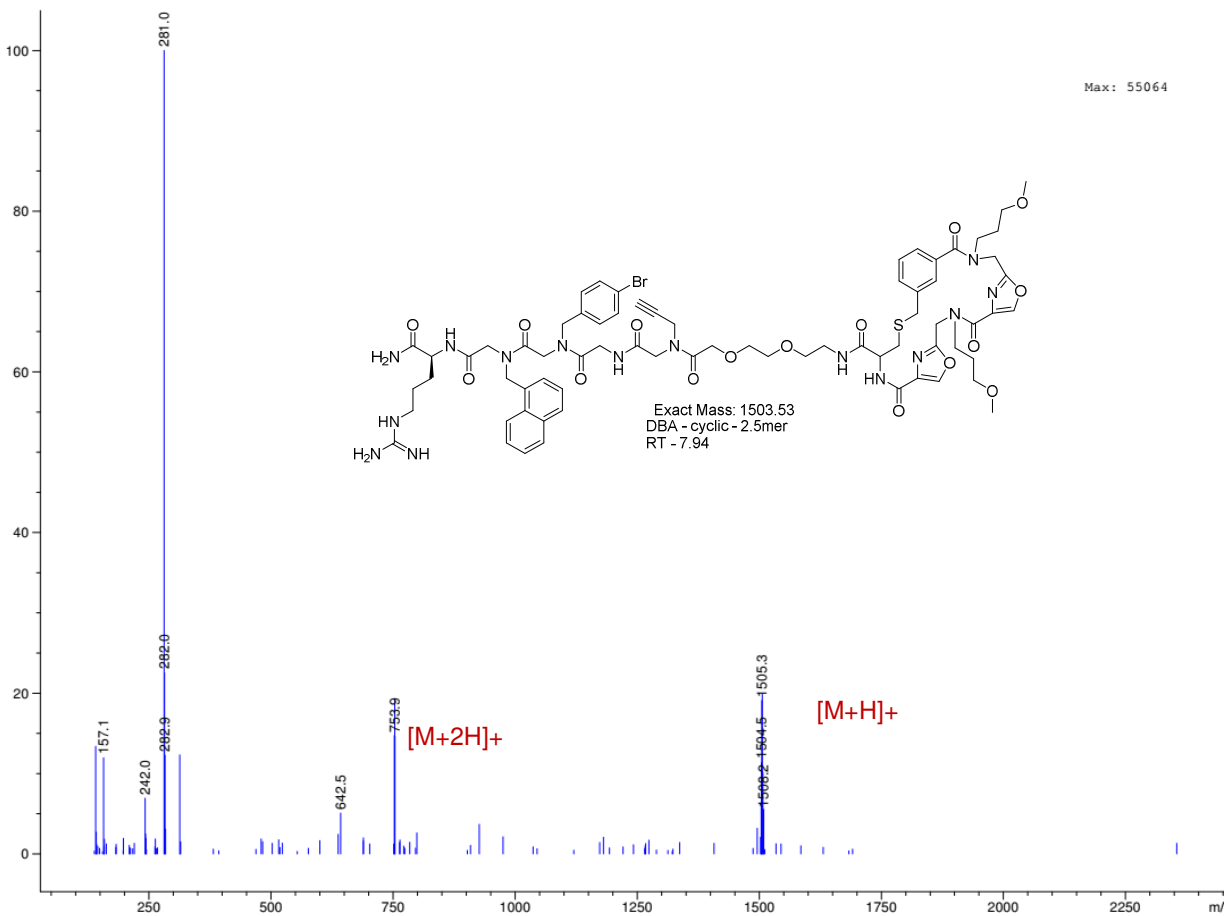
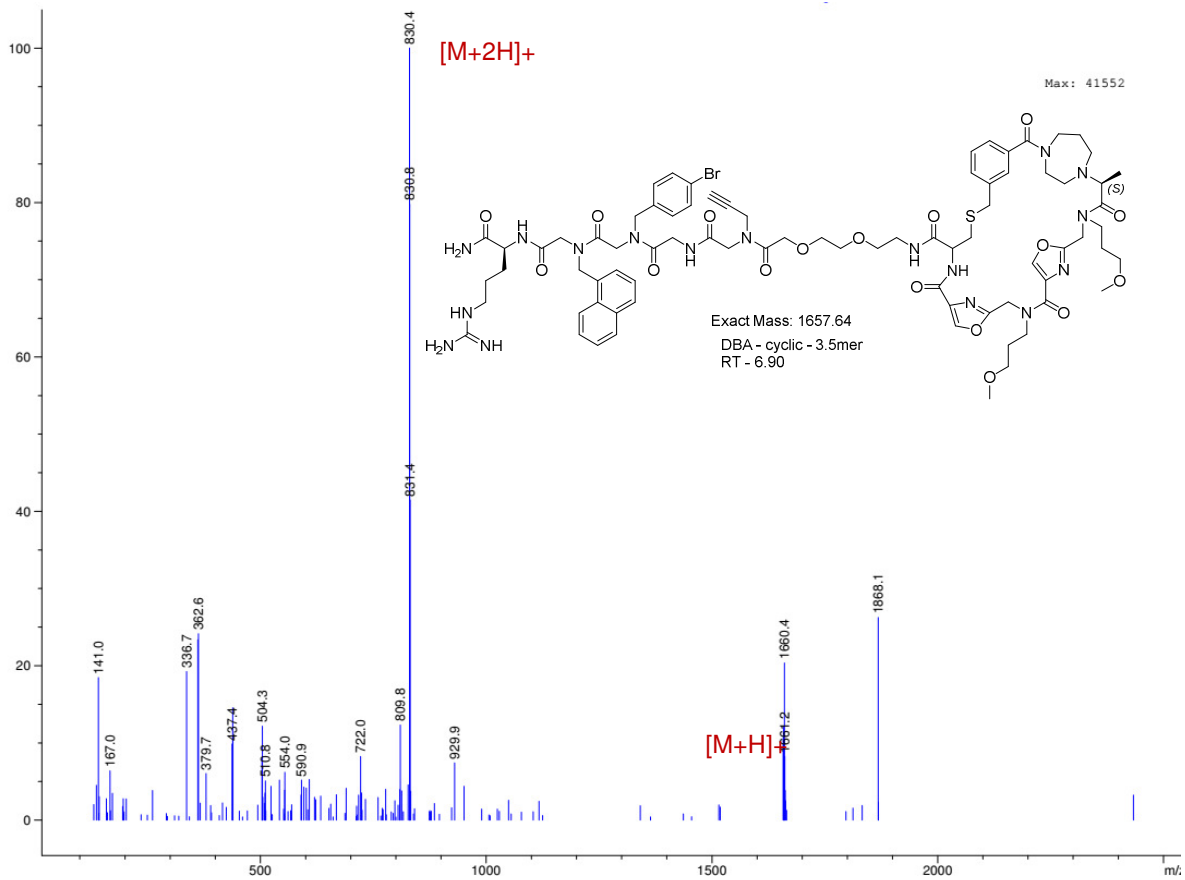




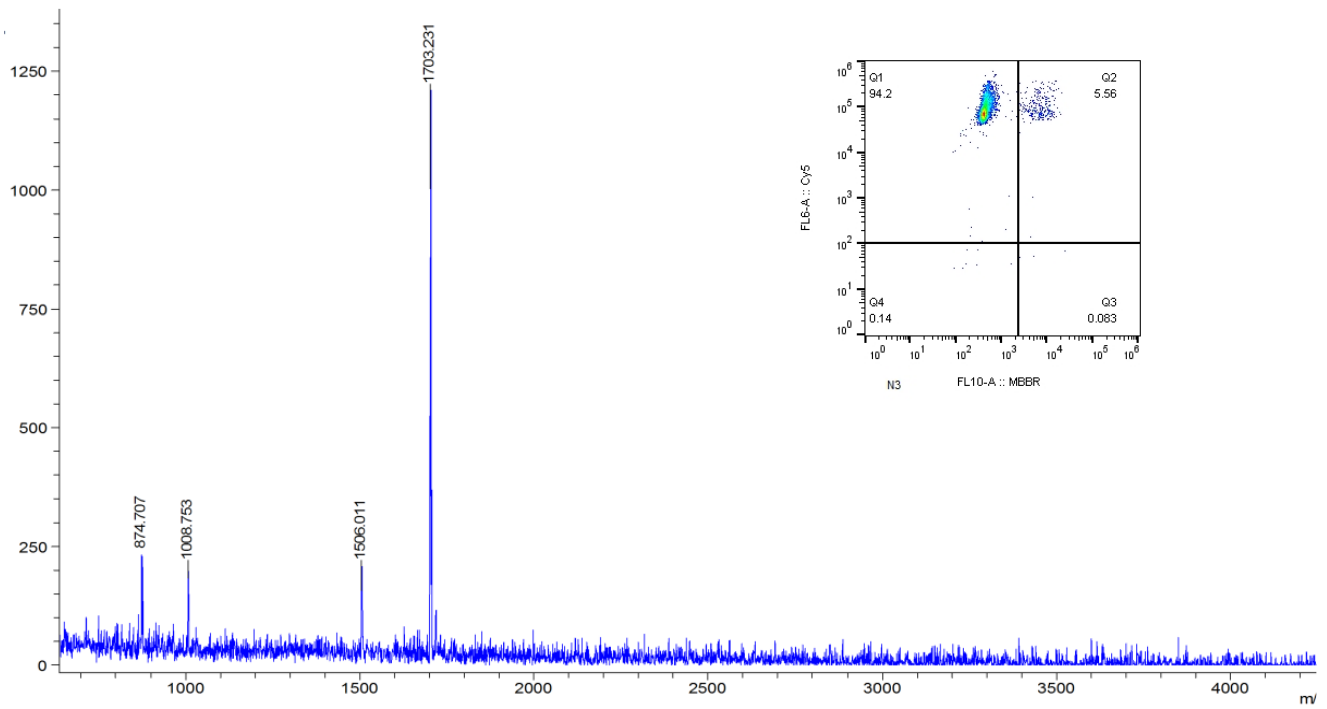
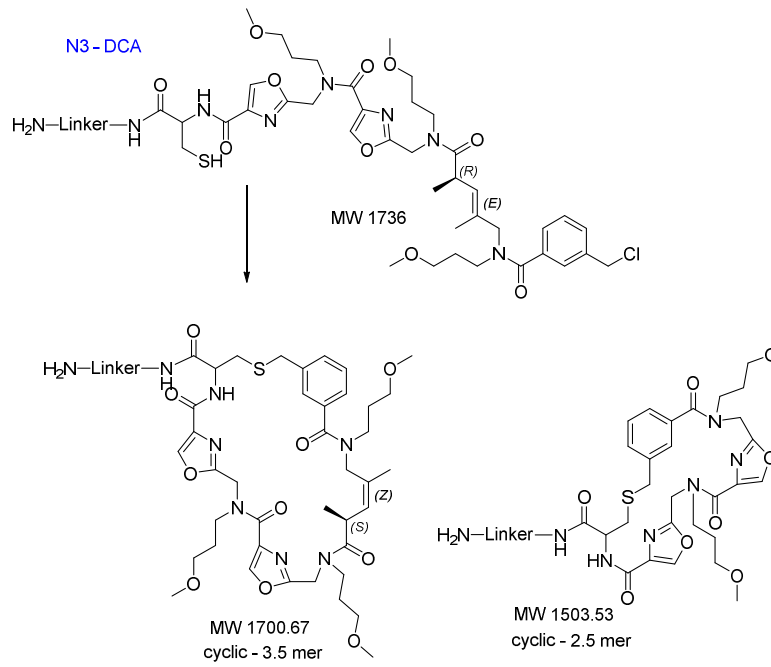
N2-[DBA]: Complete cyclization was observed on 10 μm & 160 μm beads.

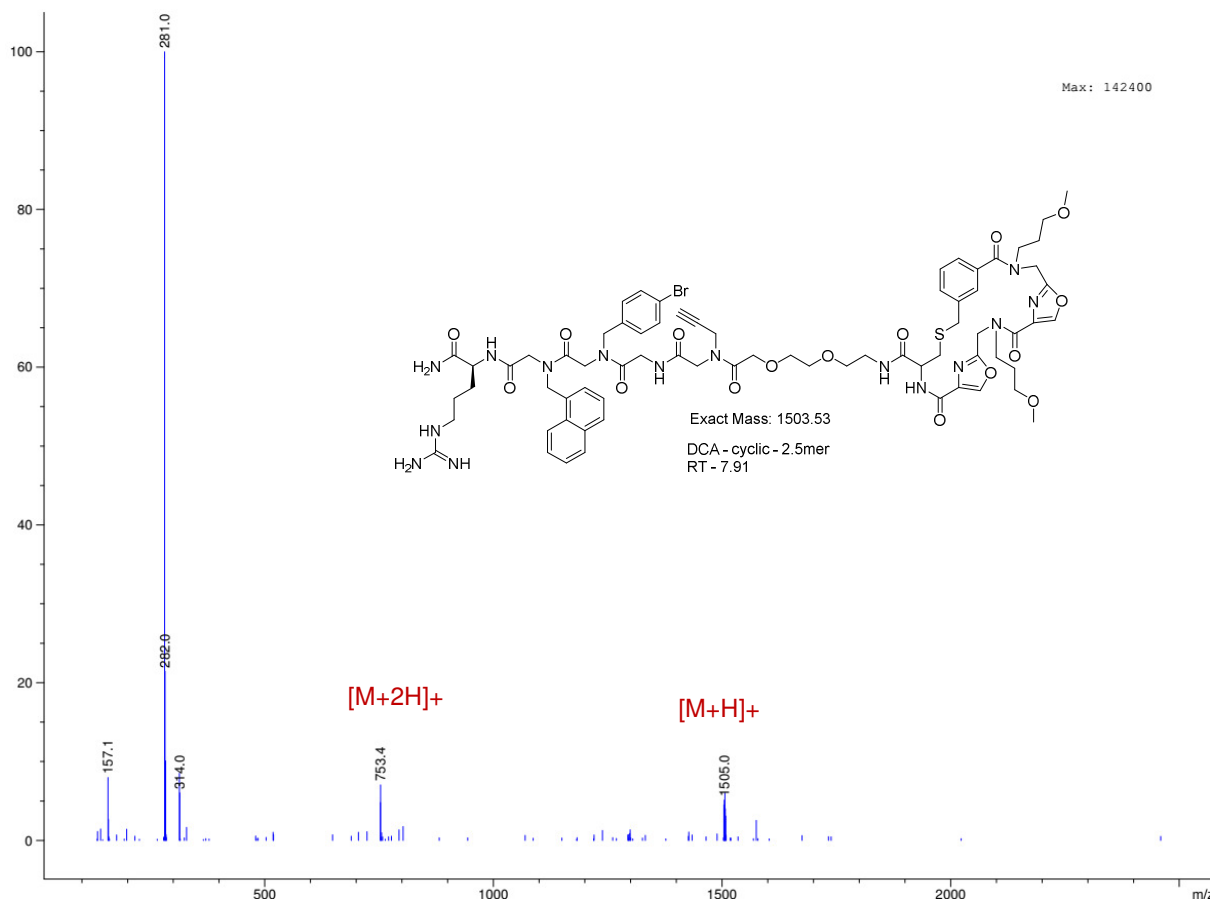
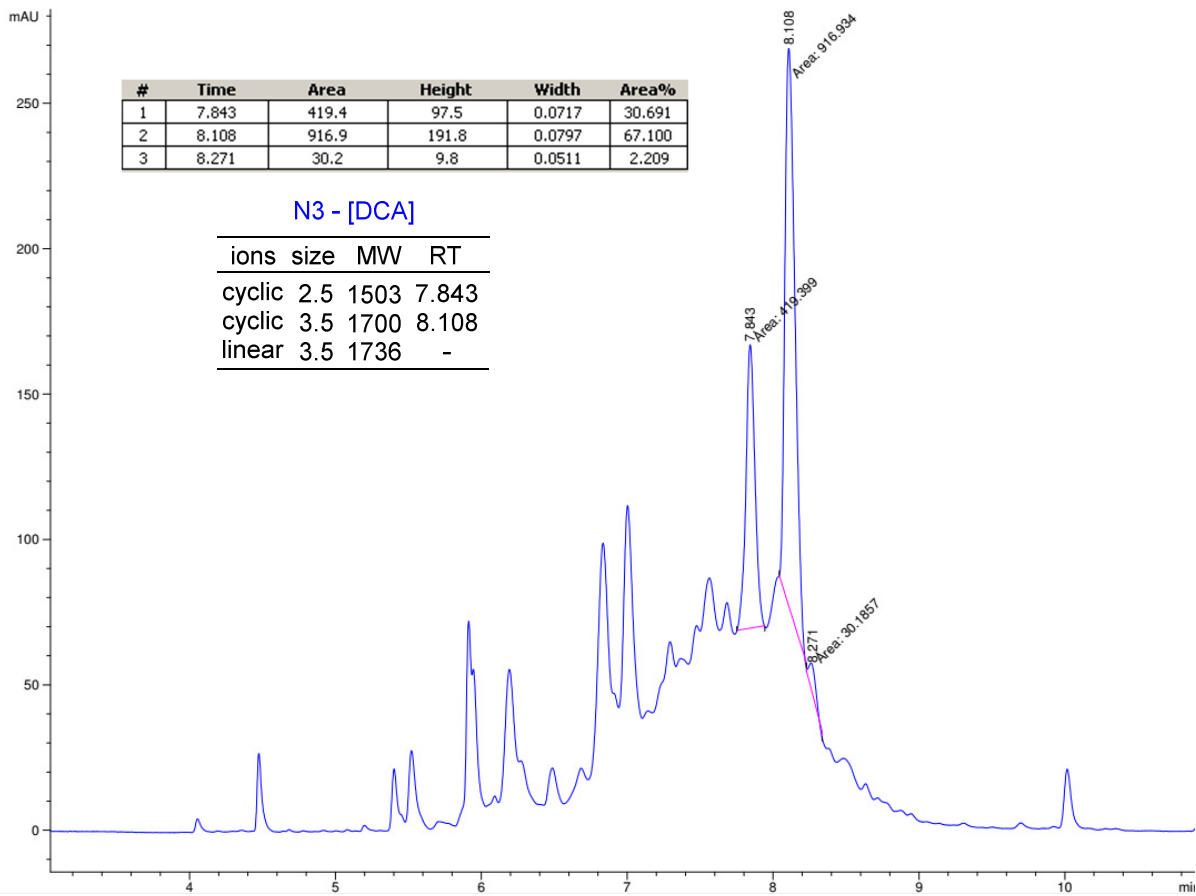


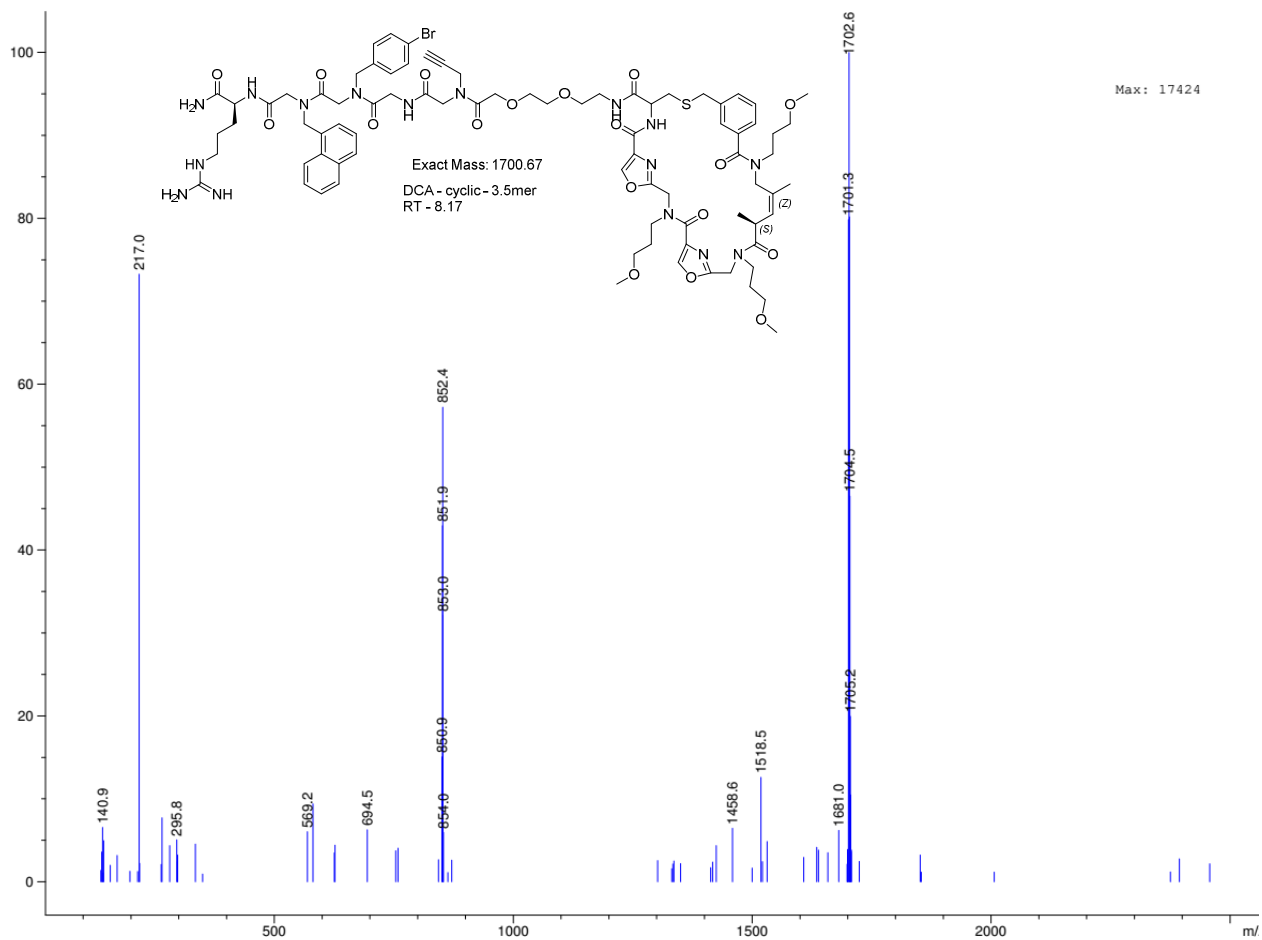




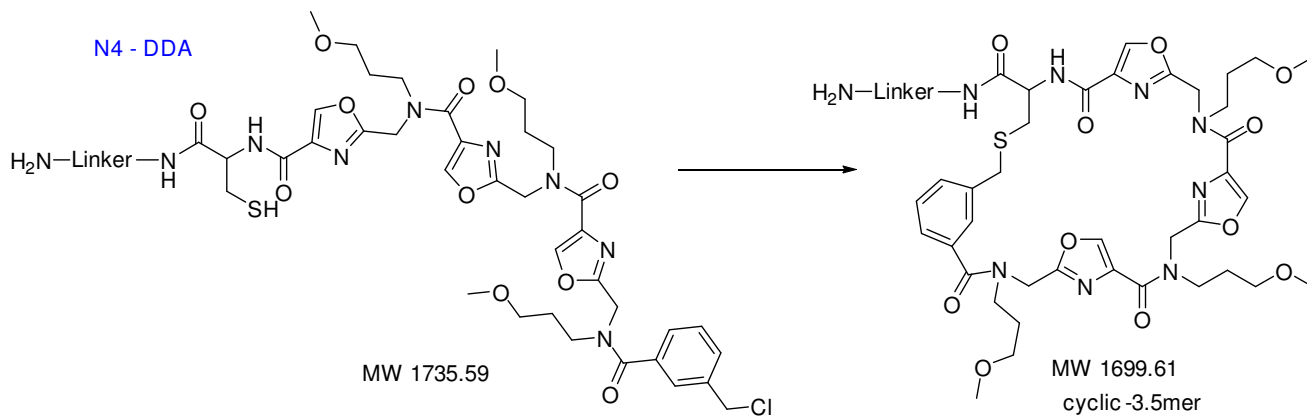
N3-[DCA]: Complete cyclization was observed on 10 μm & 160 μm beads.

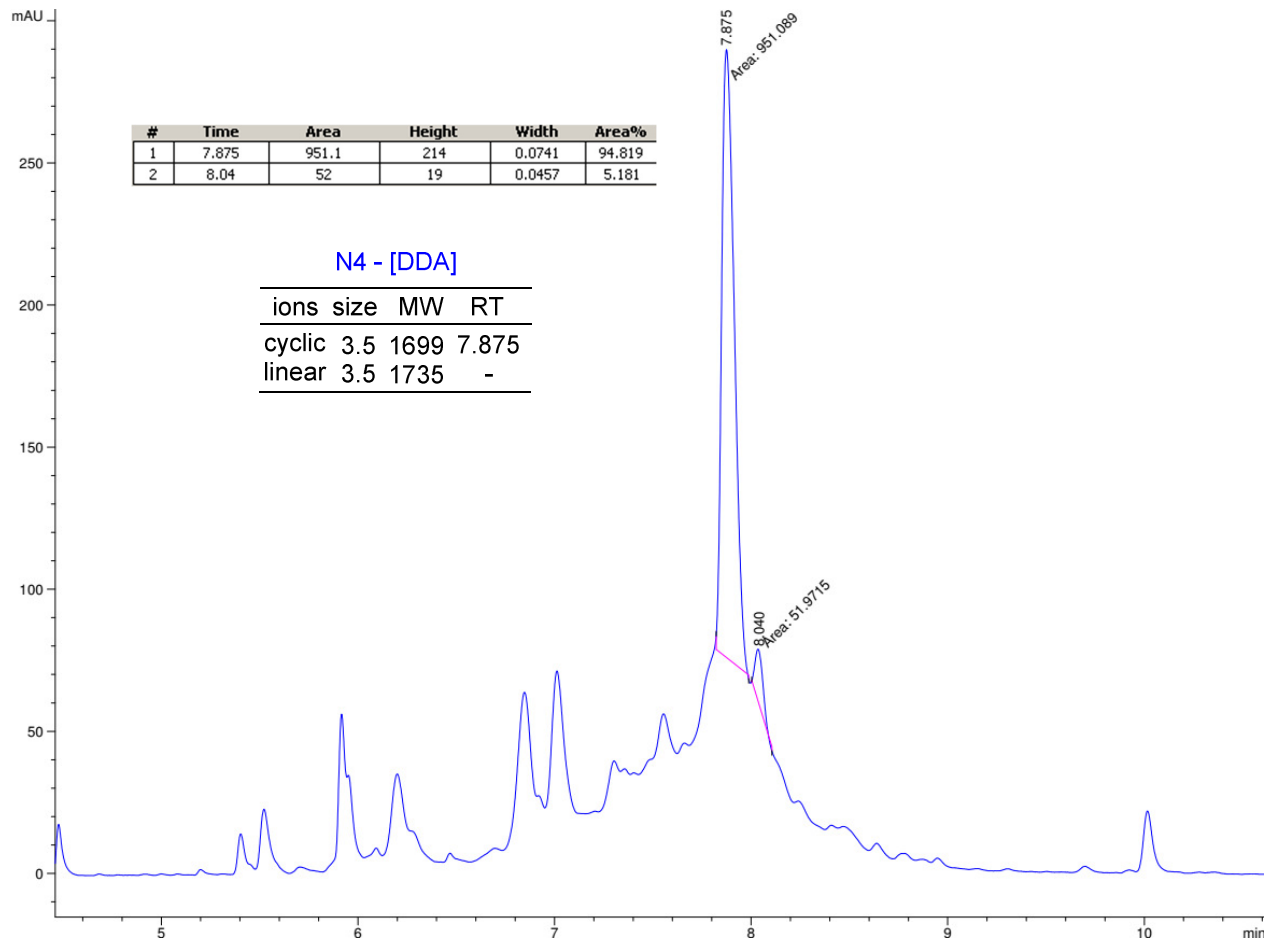
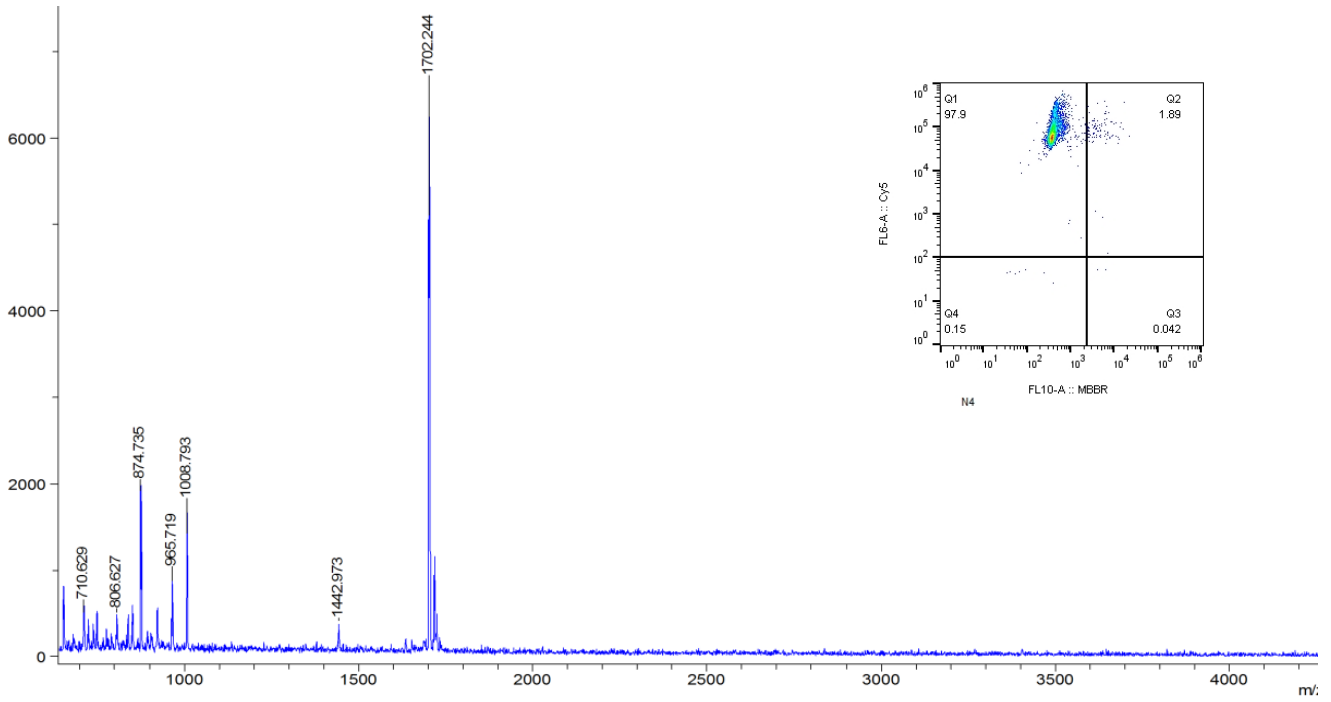


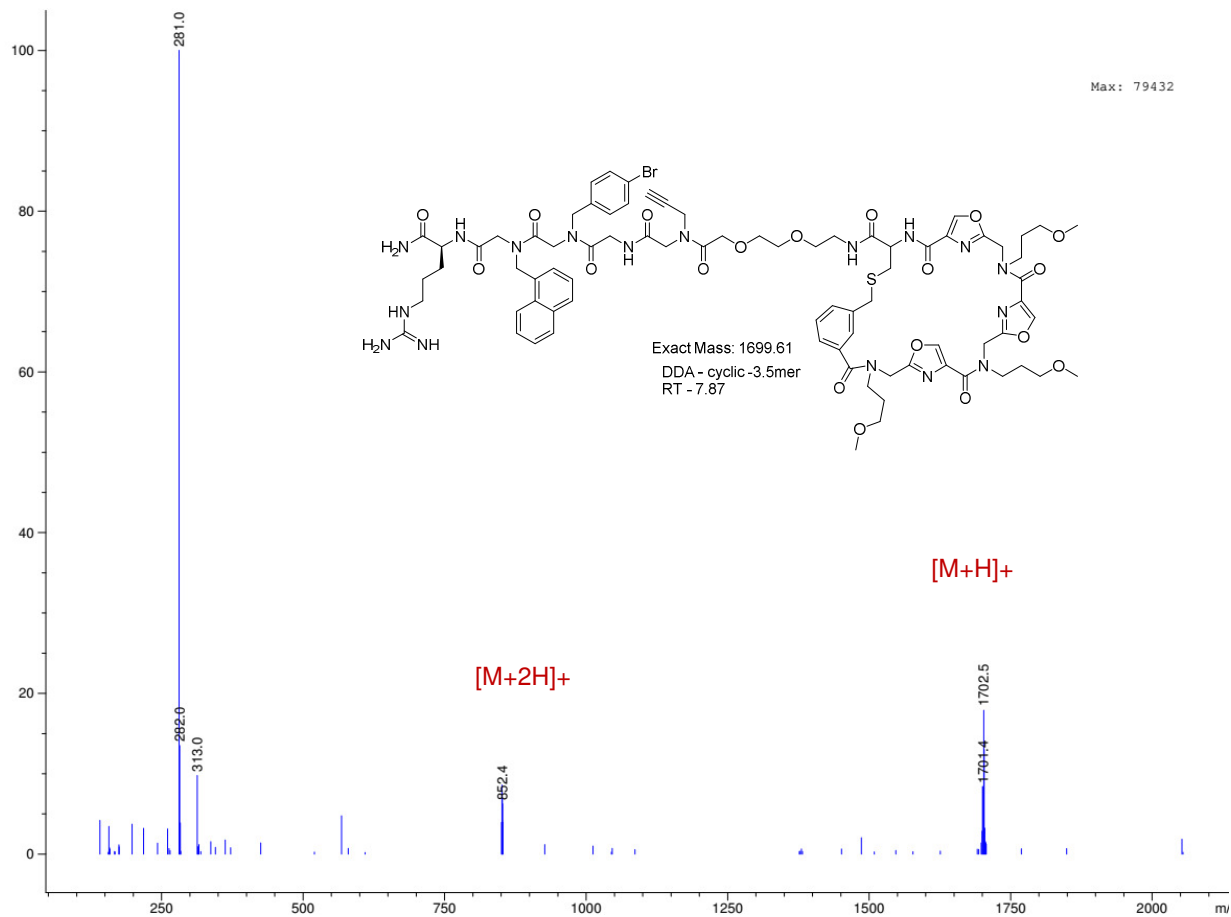




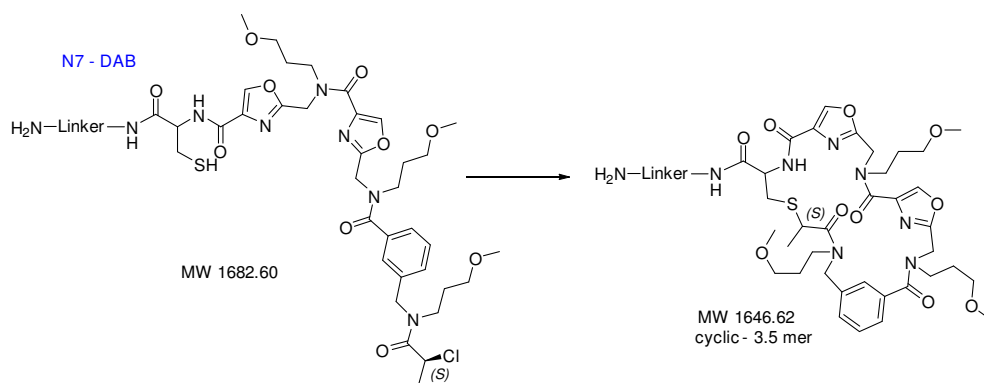
N4-[DDA]: Complete cyclization was observed on 10 μm & 160 μm beads.

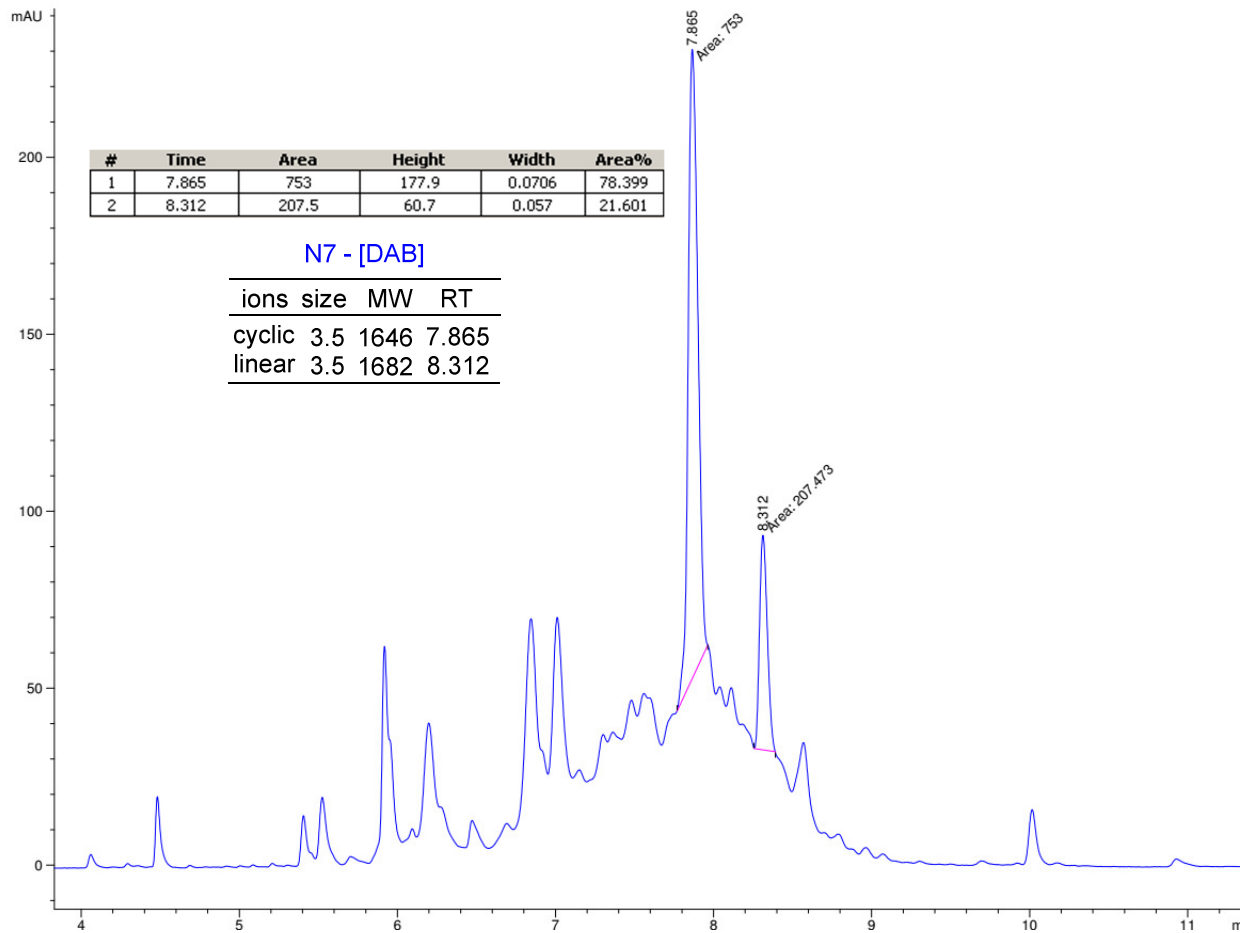
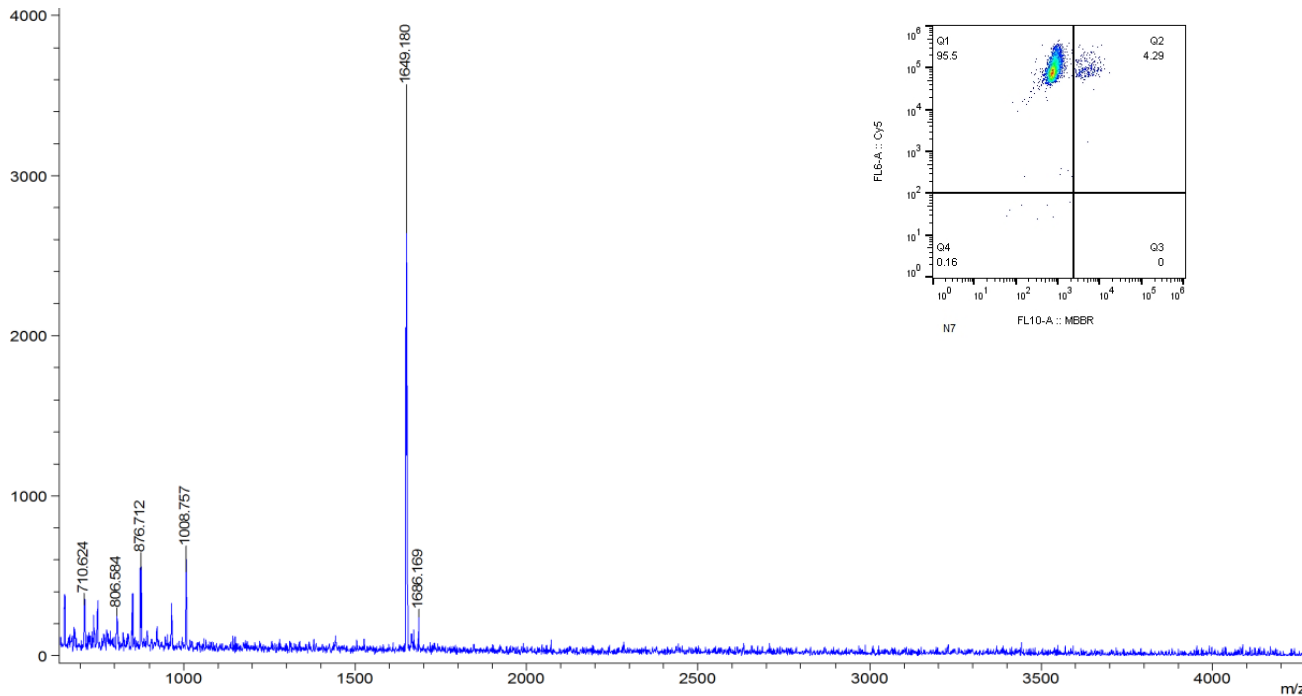


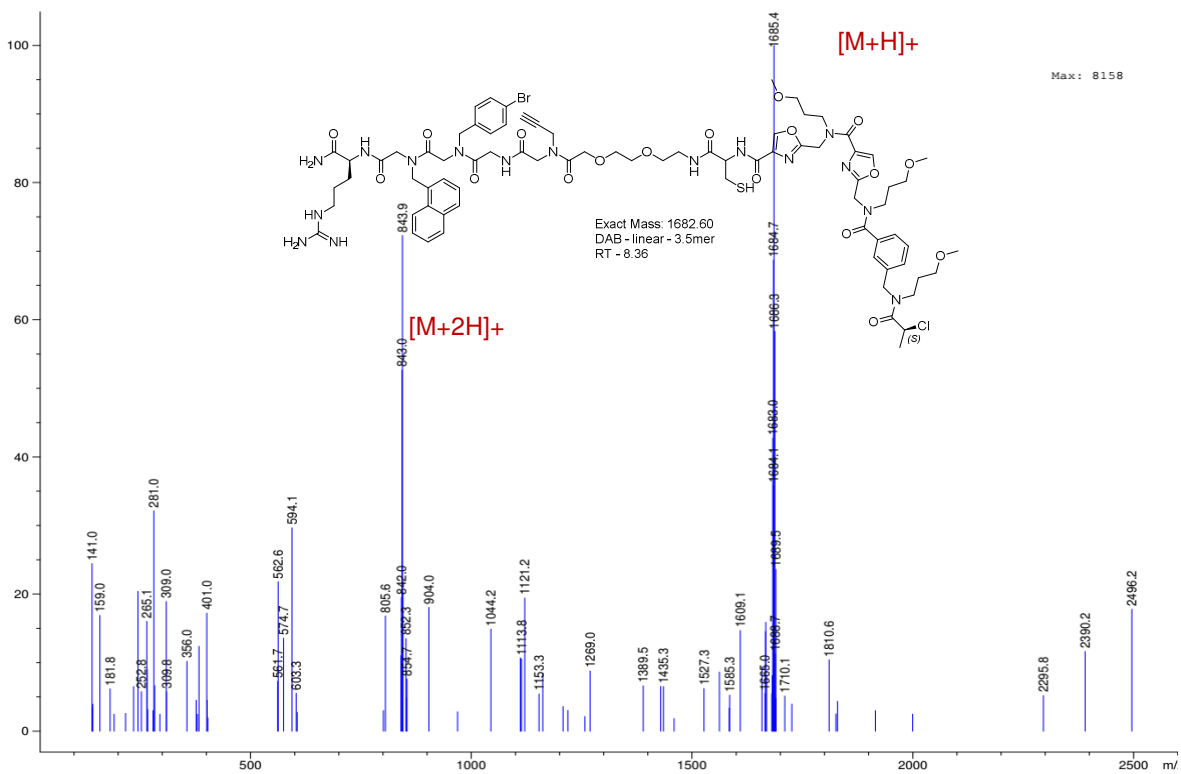
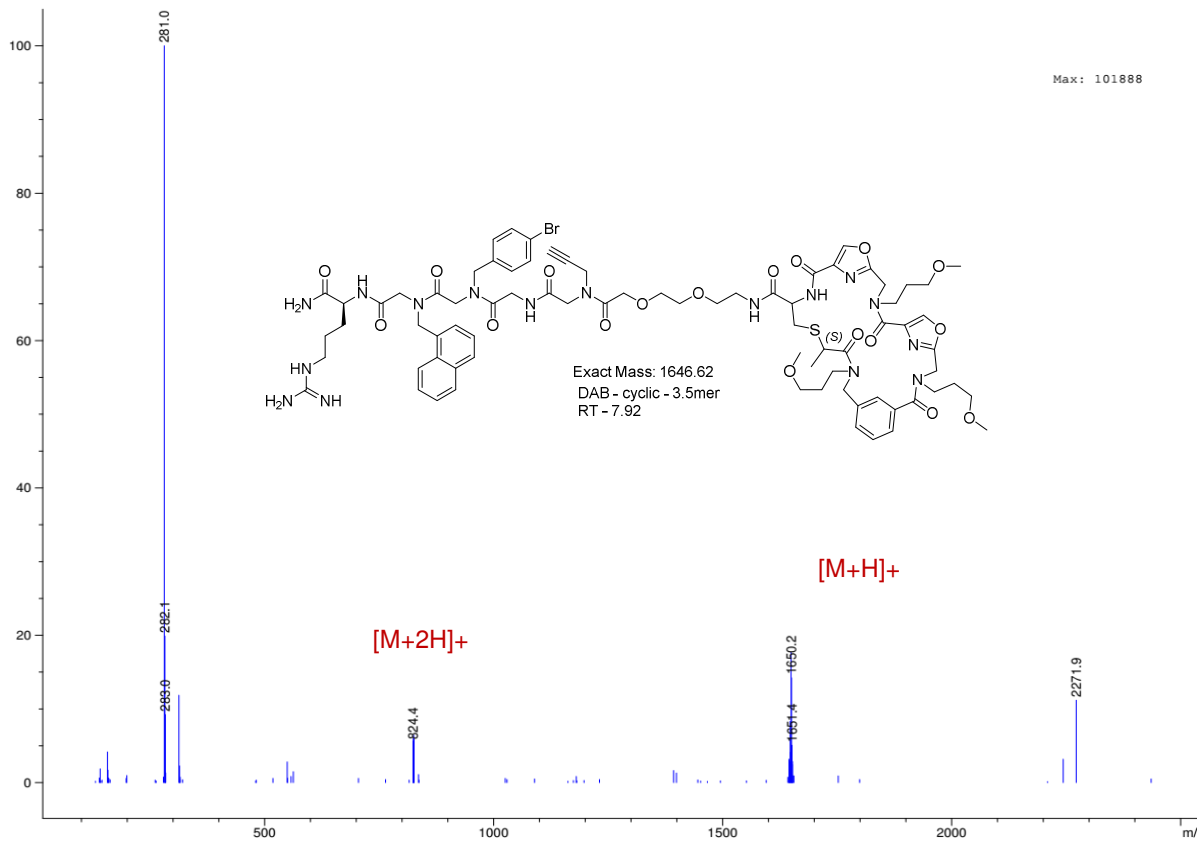




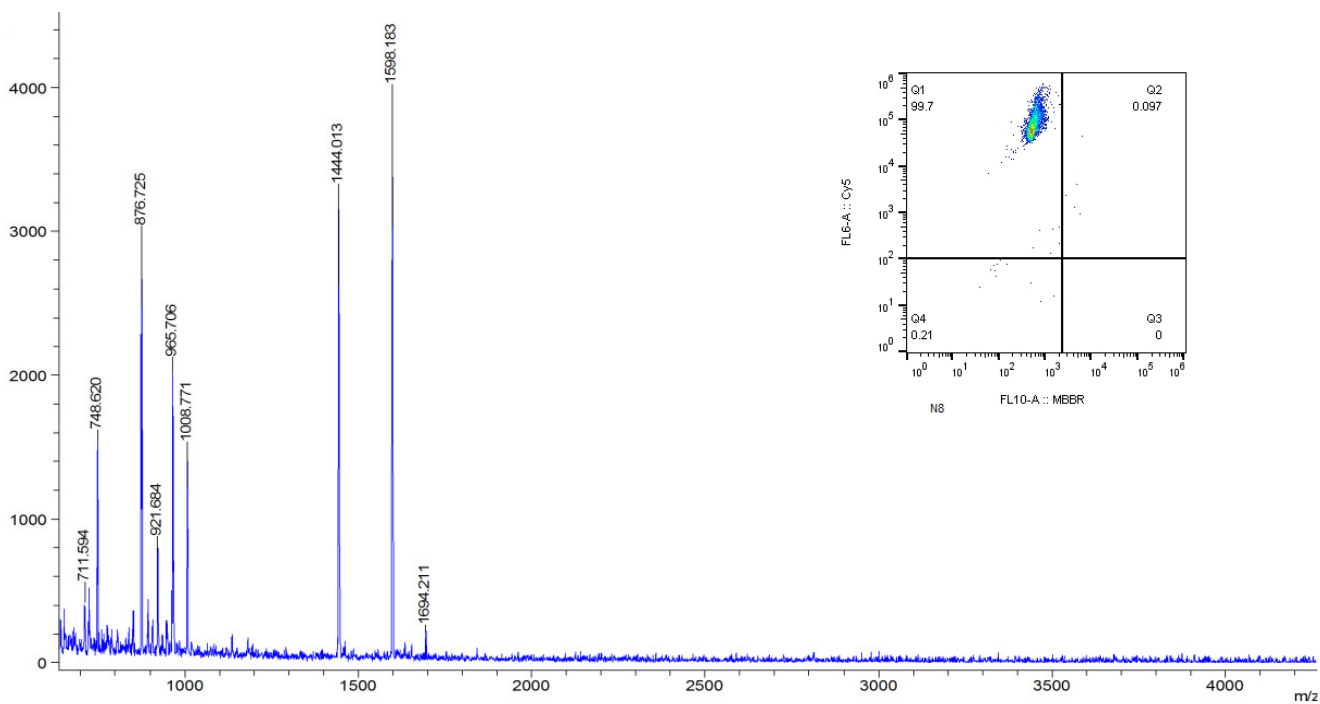
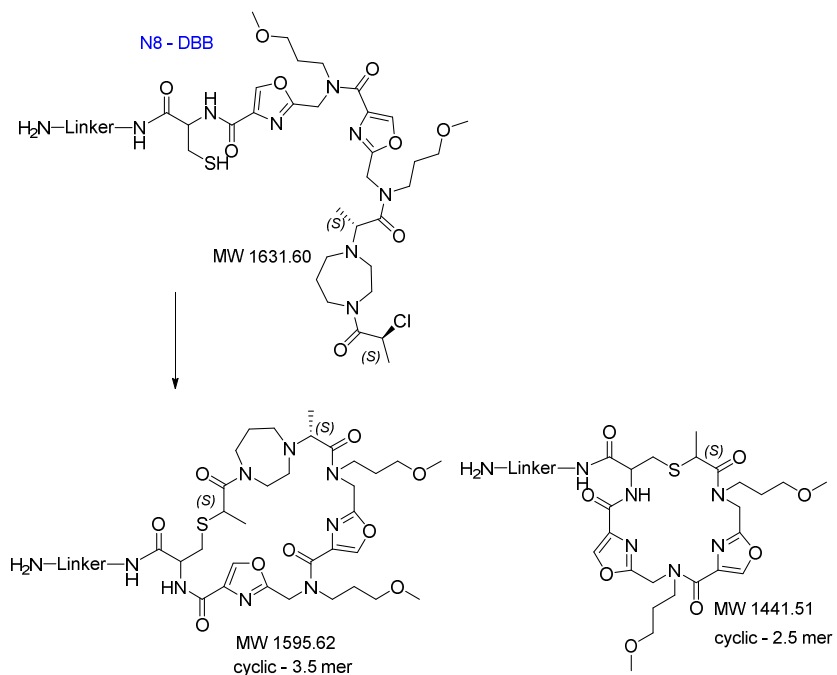
N7-[DAB]: Complete cyclization was detected on 10 μm but was incomplete on 160 μm beads.

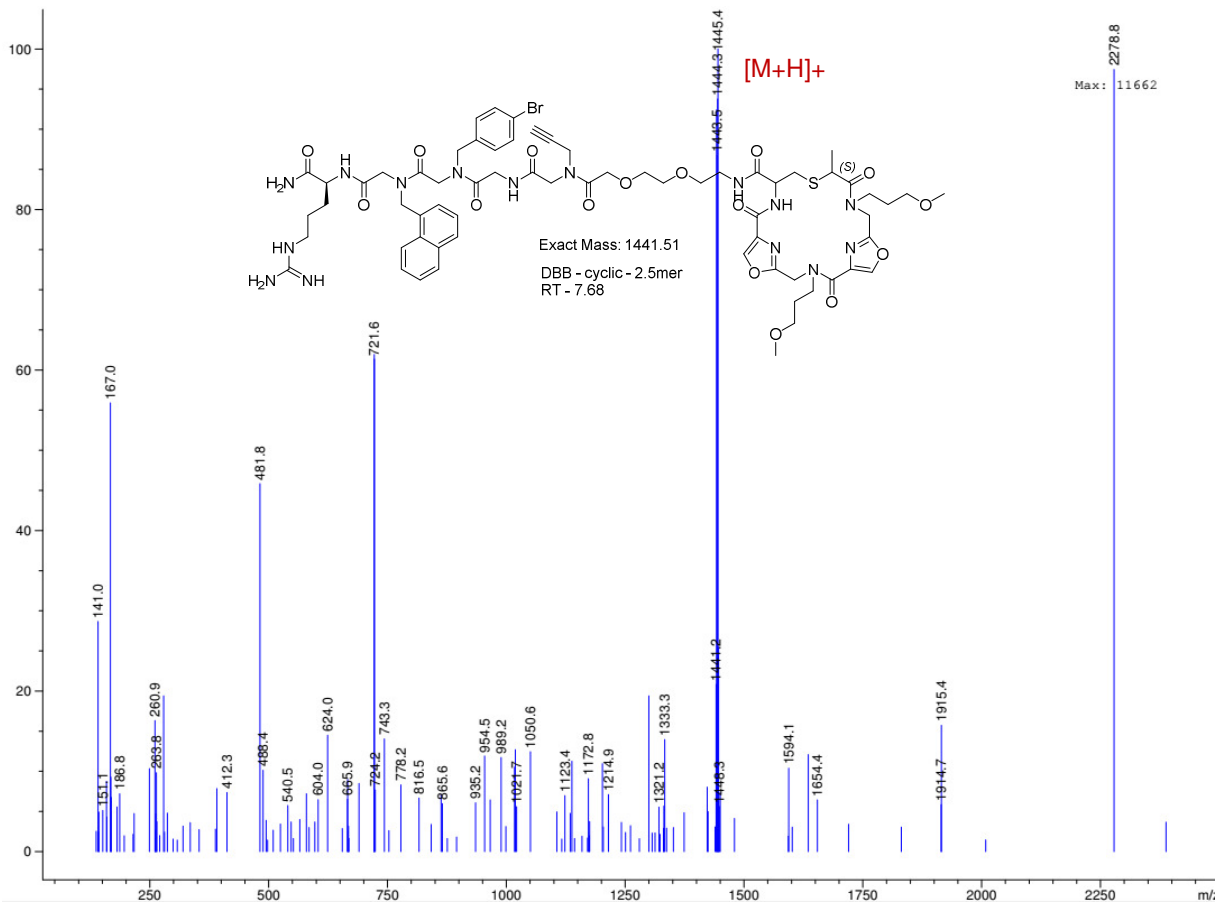
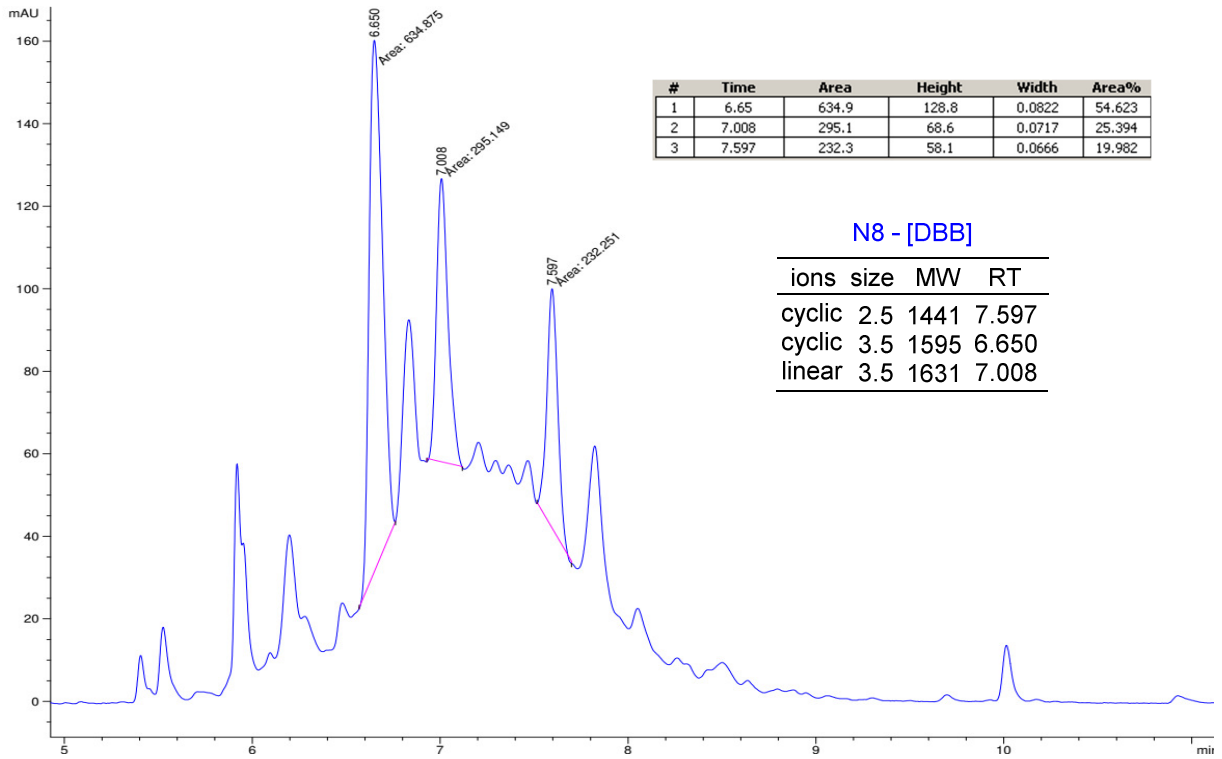


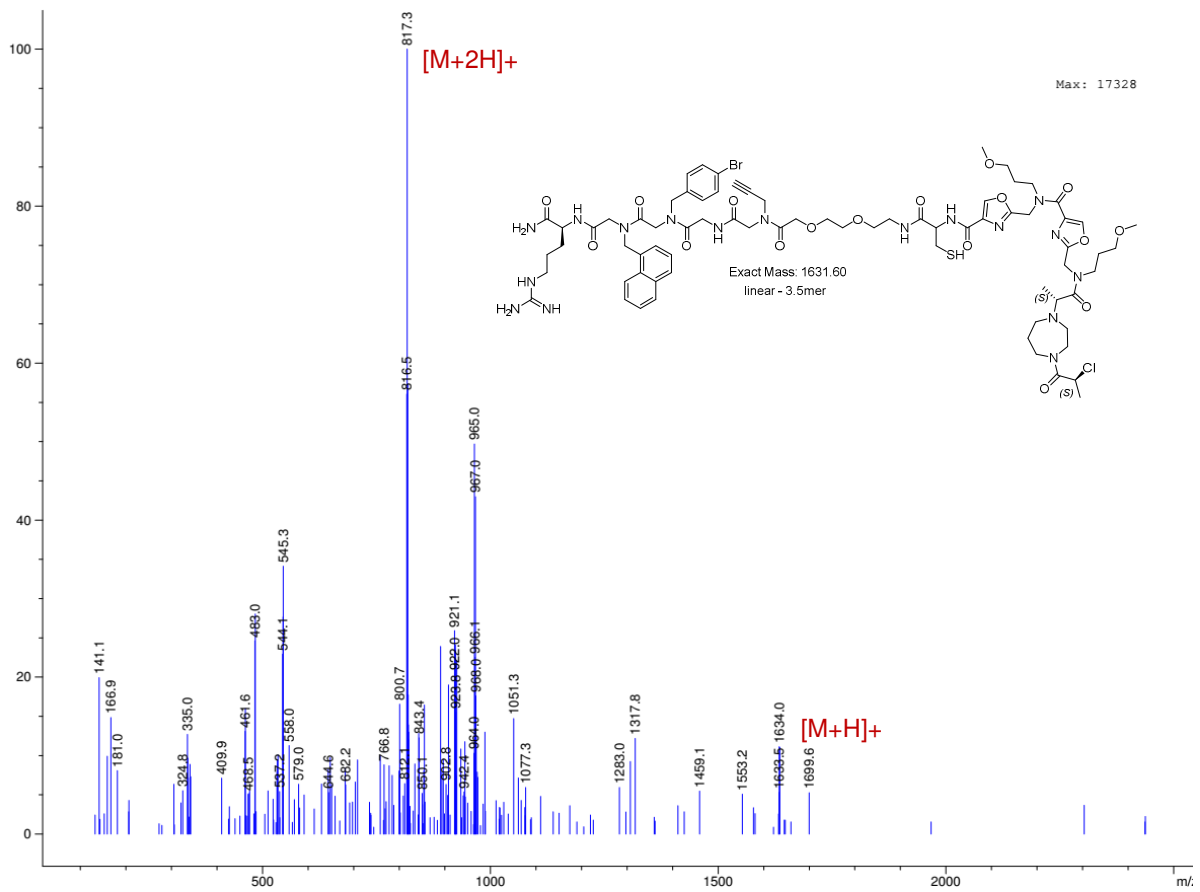
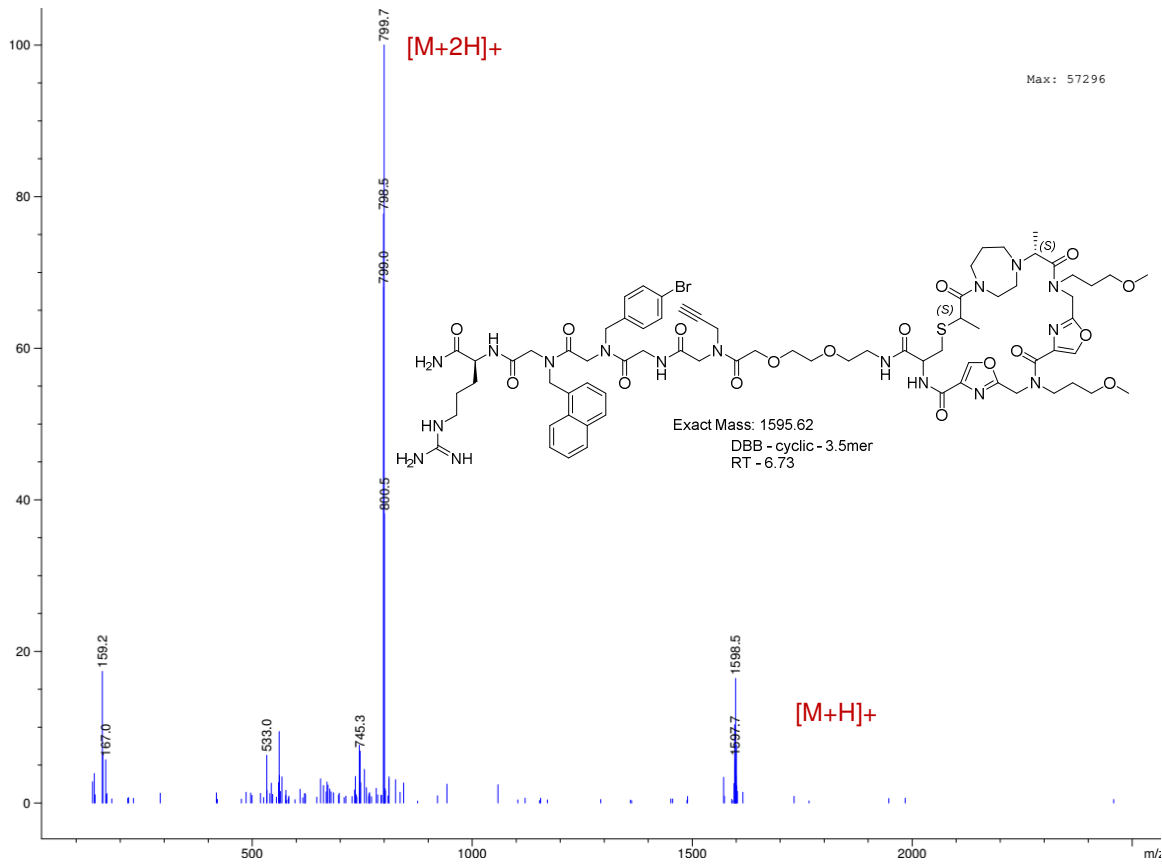




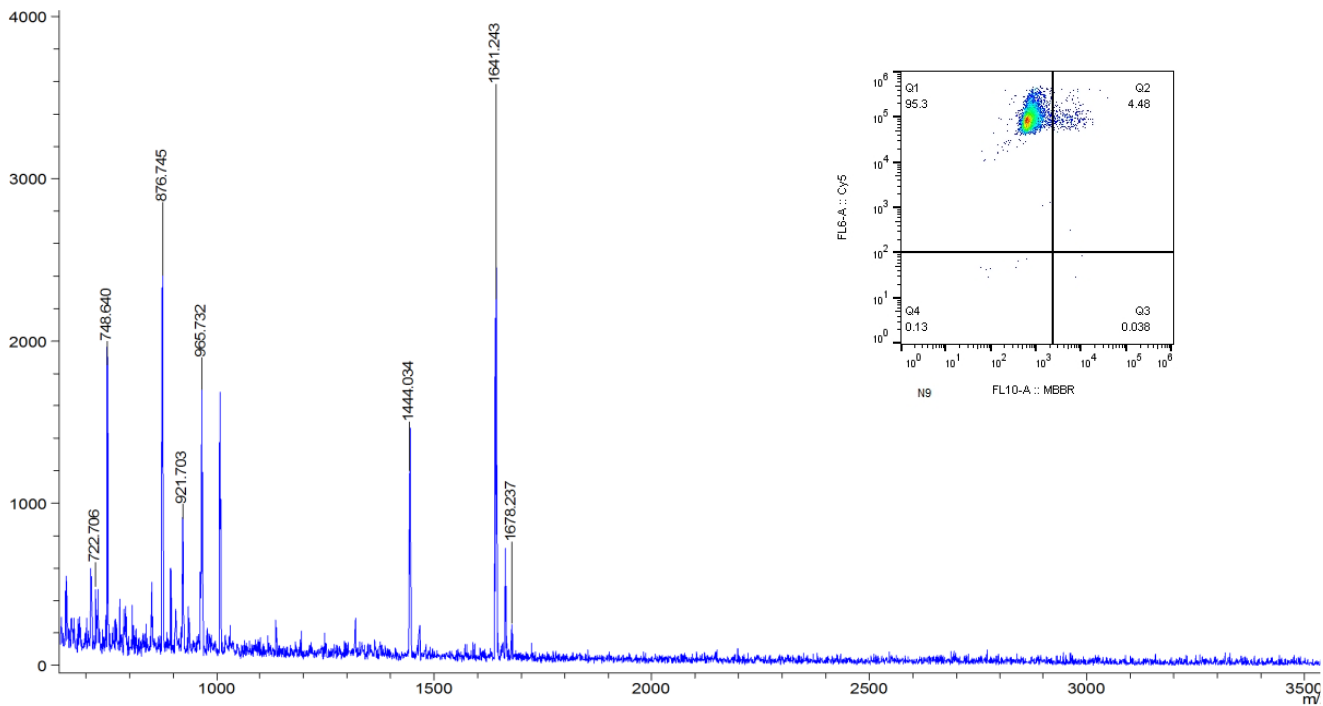
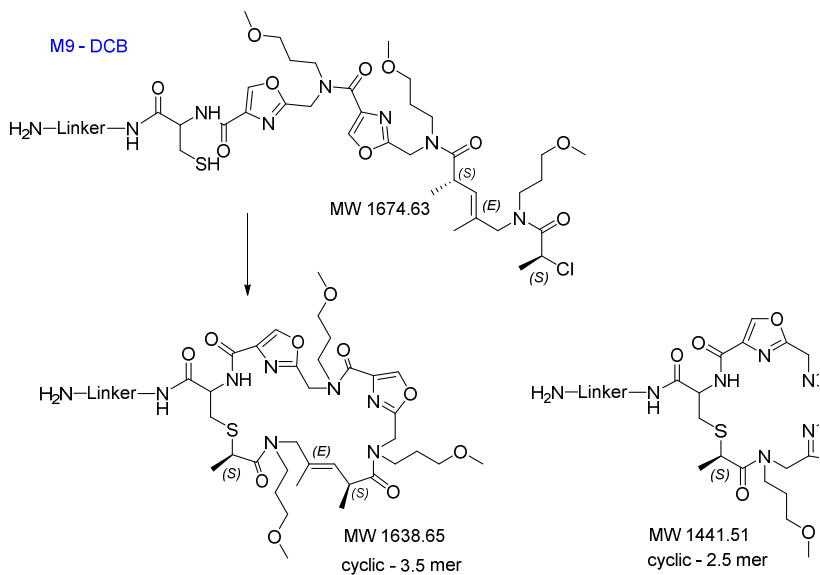
N8-[DBB]: Complete cyclization was detected on 10 μm but was incomplete on 160 μm beads.

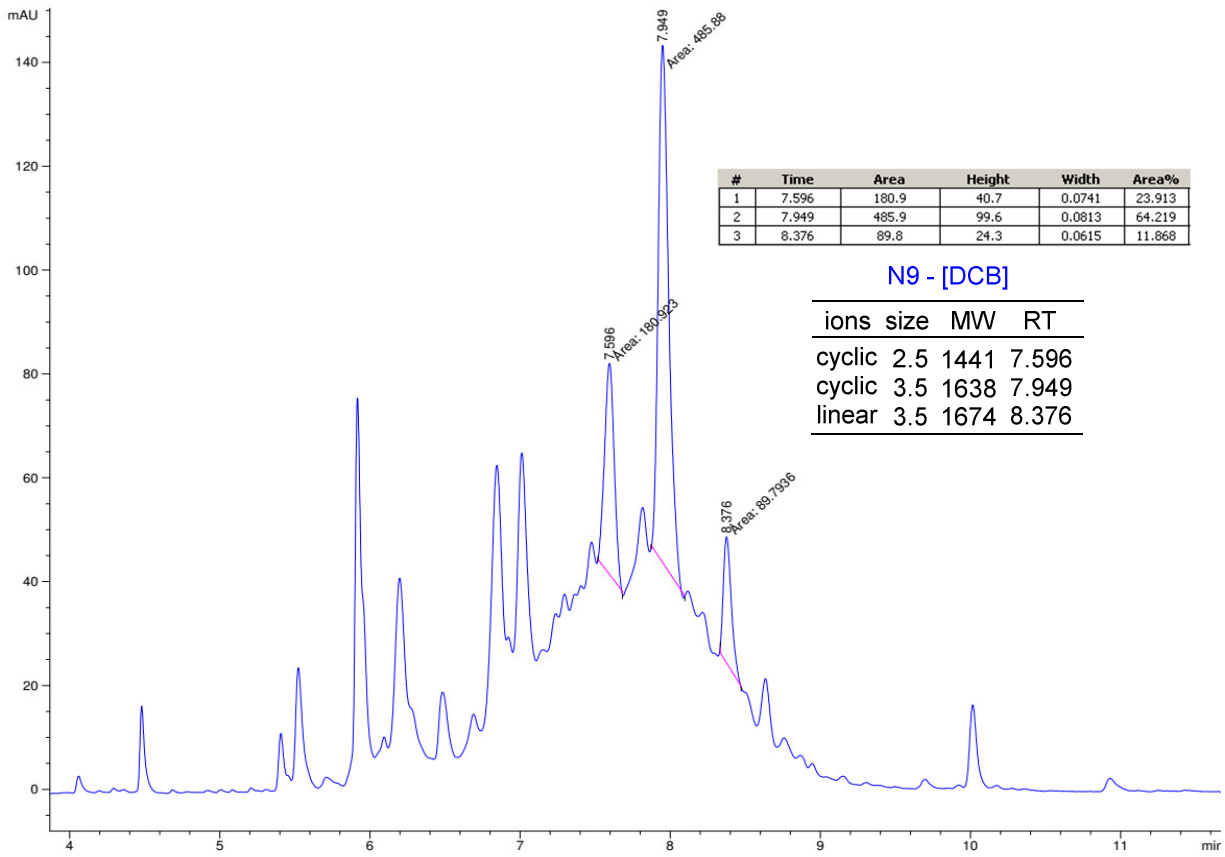






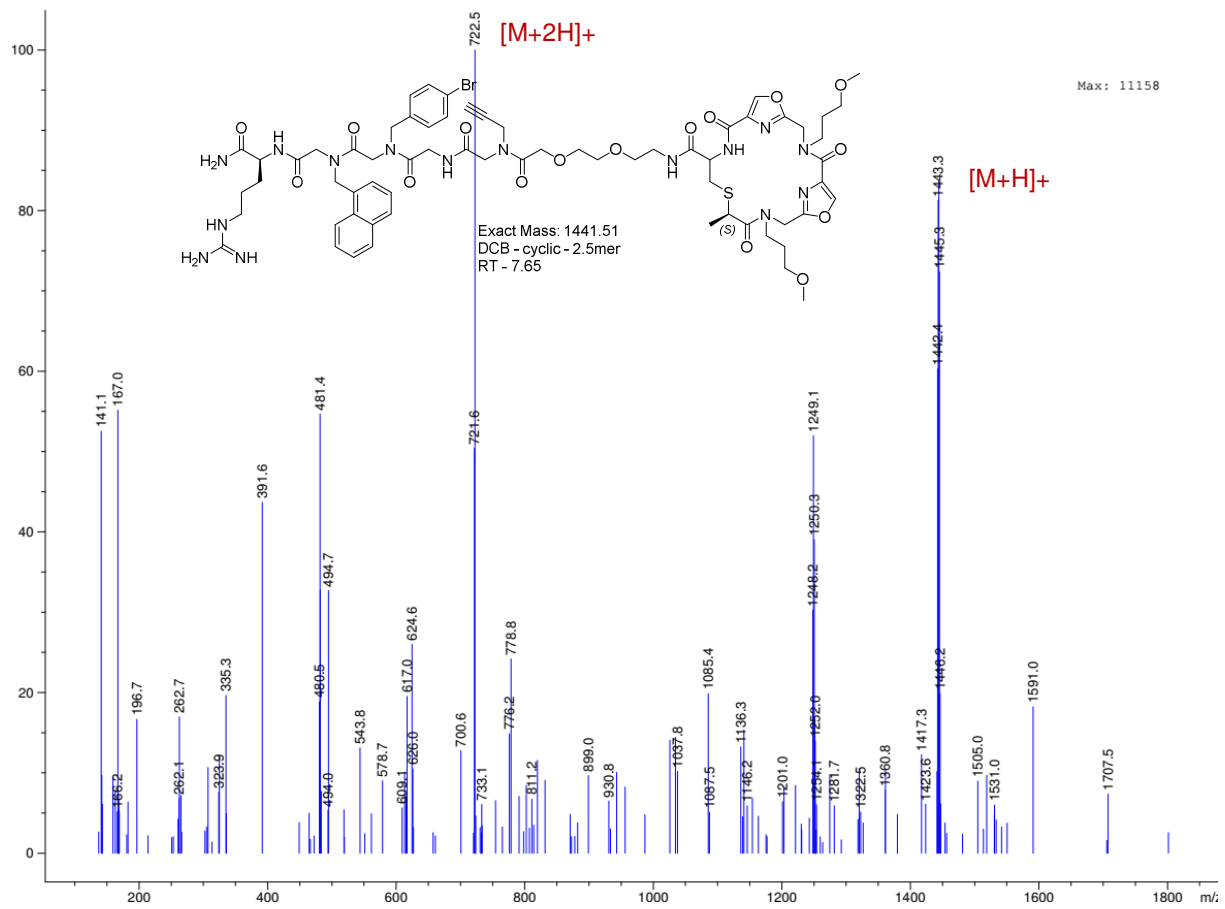
N9-[DCB]: Incomplete cyclization on both 10 μm and 160 μm beads, linear starting material was identified in small quantity (MW 1674, RT 8.376).



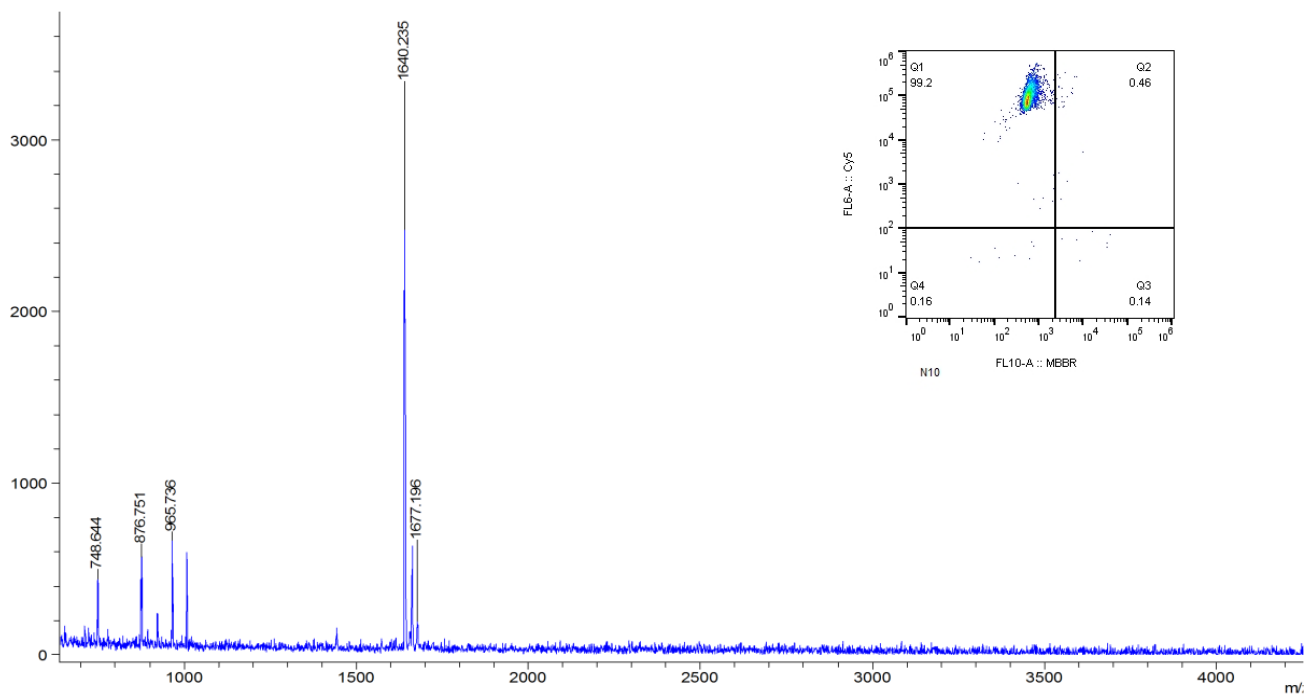
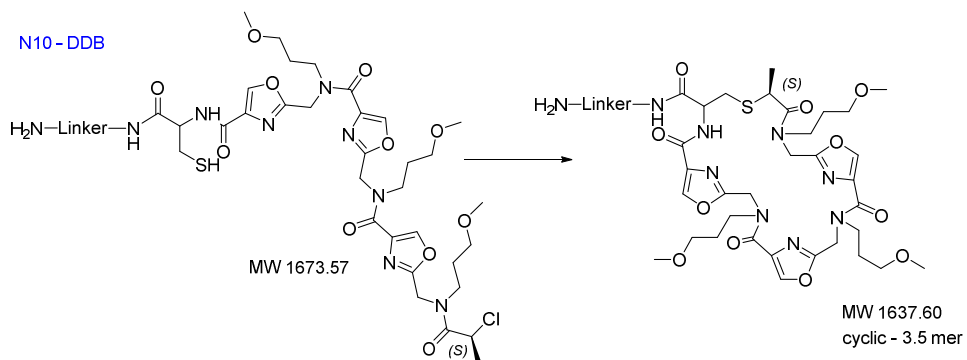


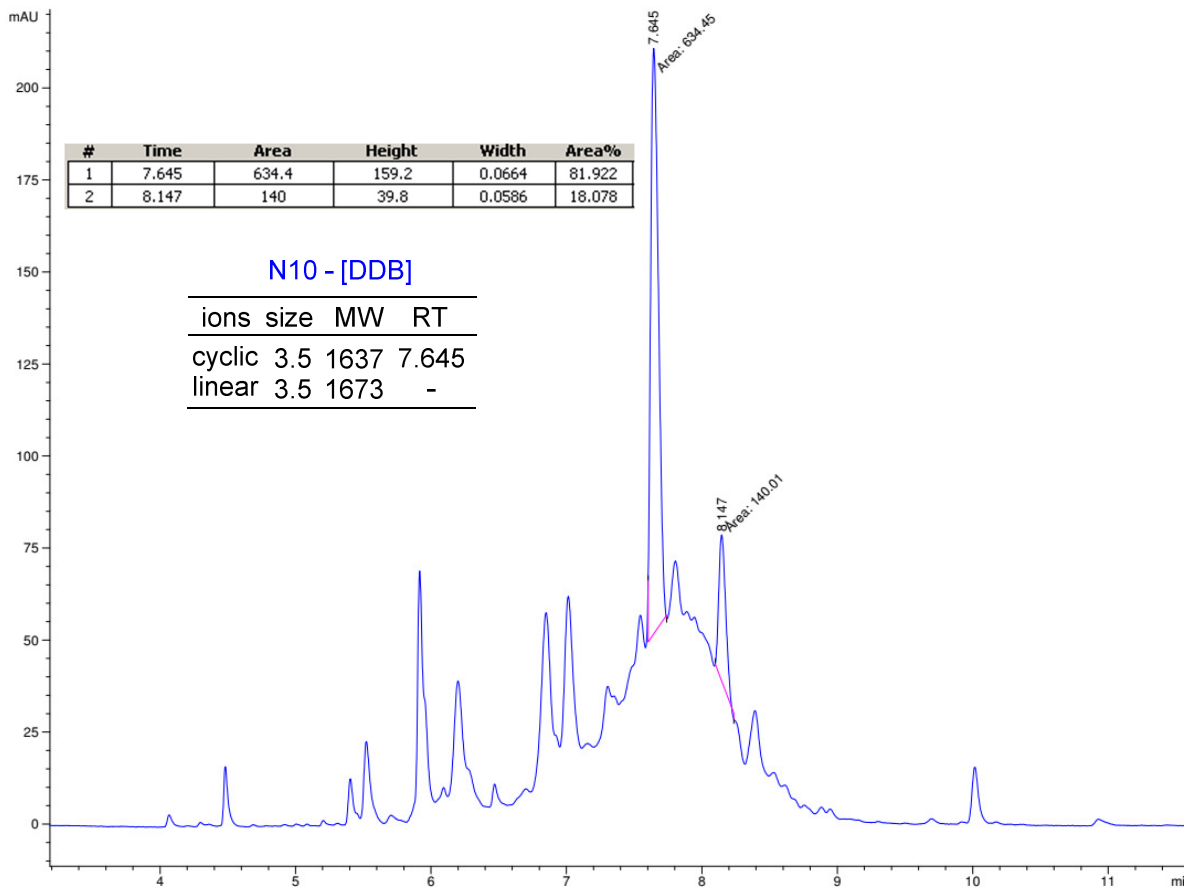
N9 - [DCB]

ions size	MW	RT
cyclic 2.5	1441	7.596
cyclic 3.5	1638	7.949
linear 3.5	1674	8.376



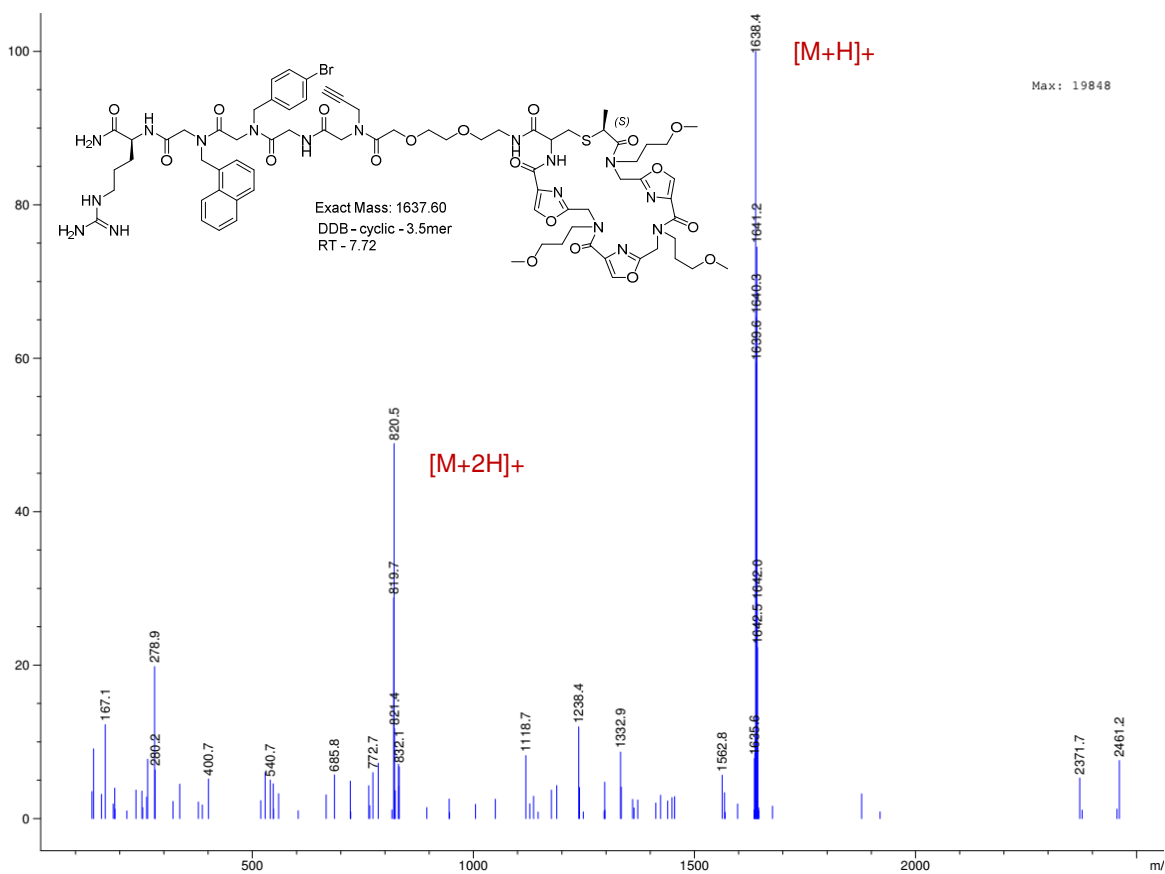
N10-[DDB]: Cyclization was complete on both 10 μm & 160 μm beads.



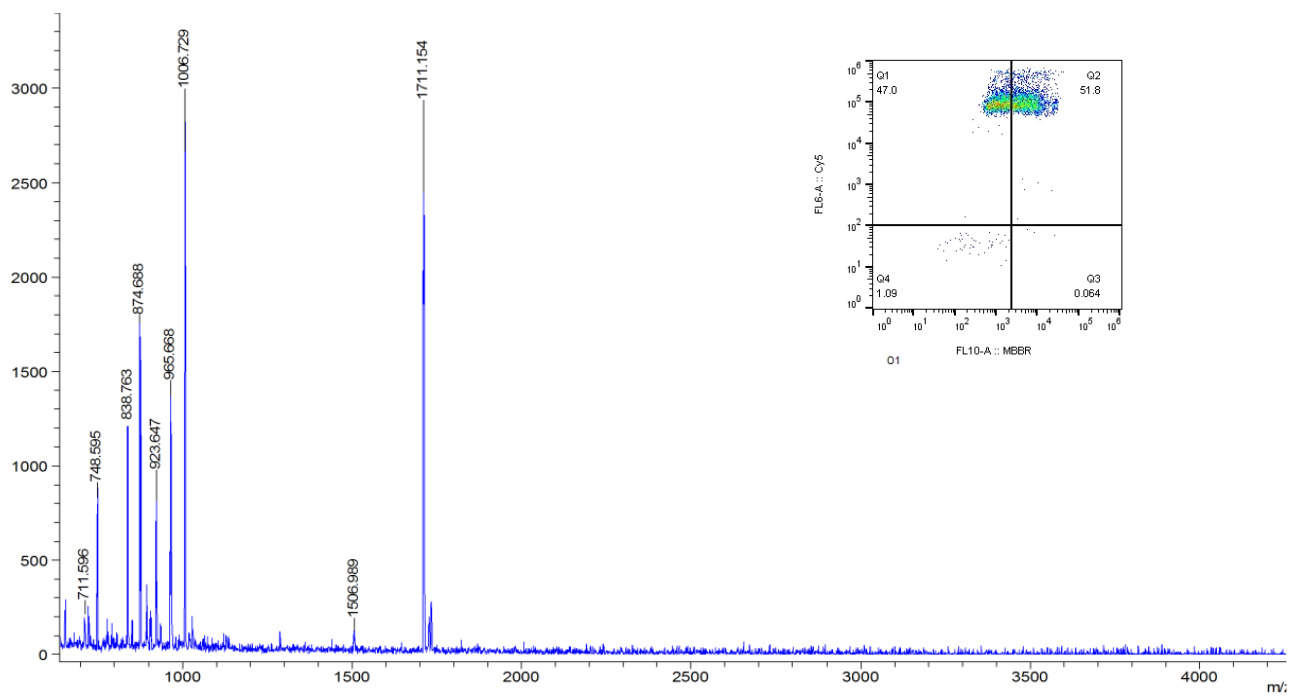
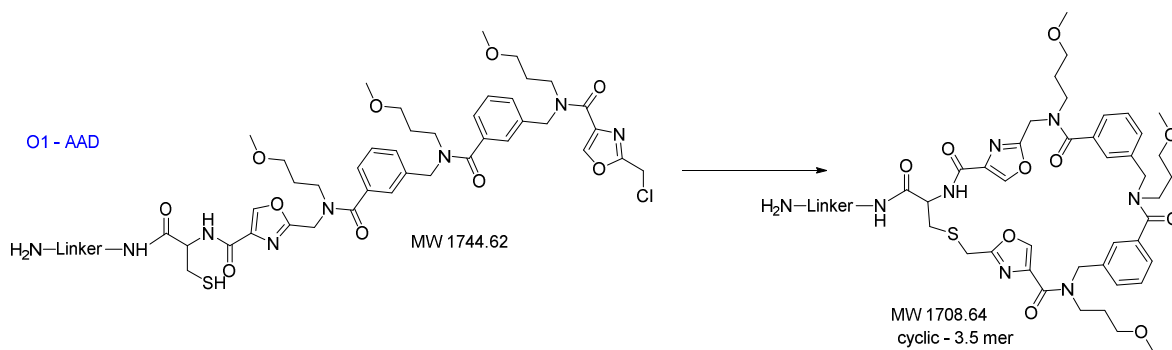


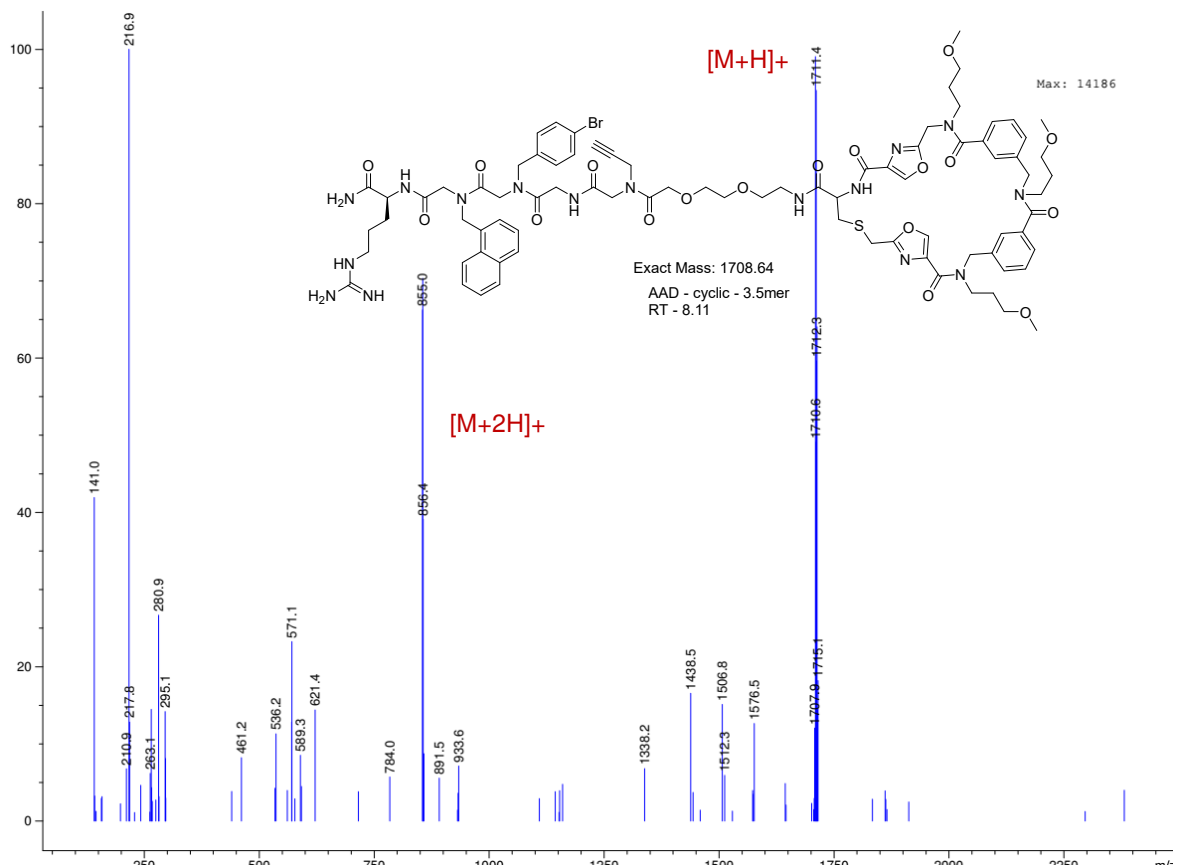
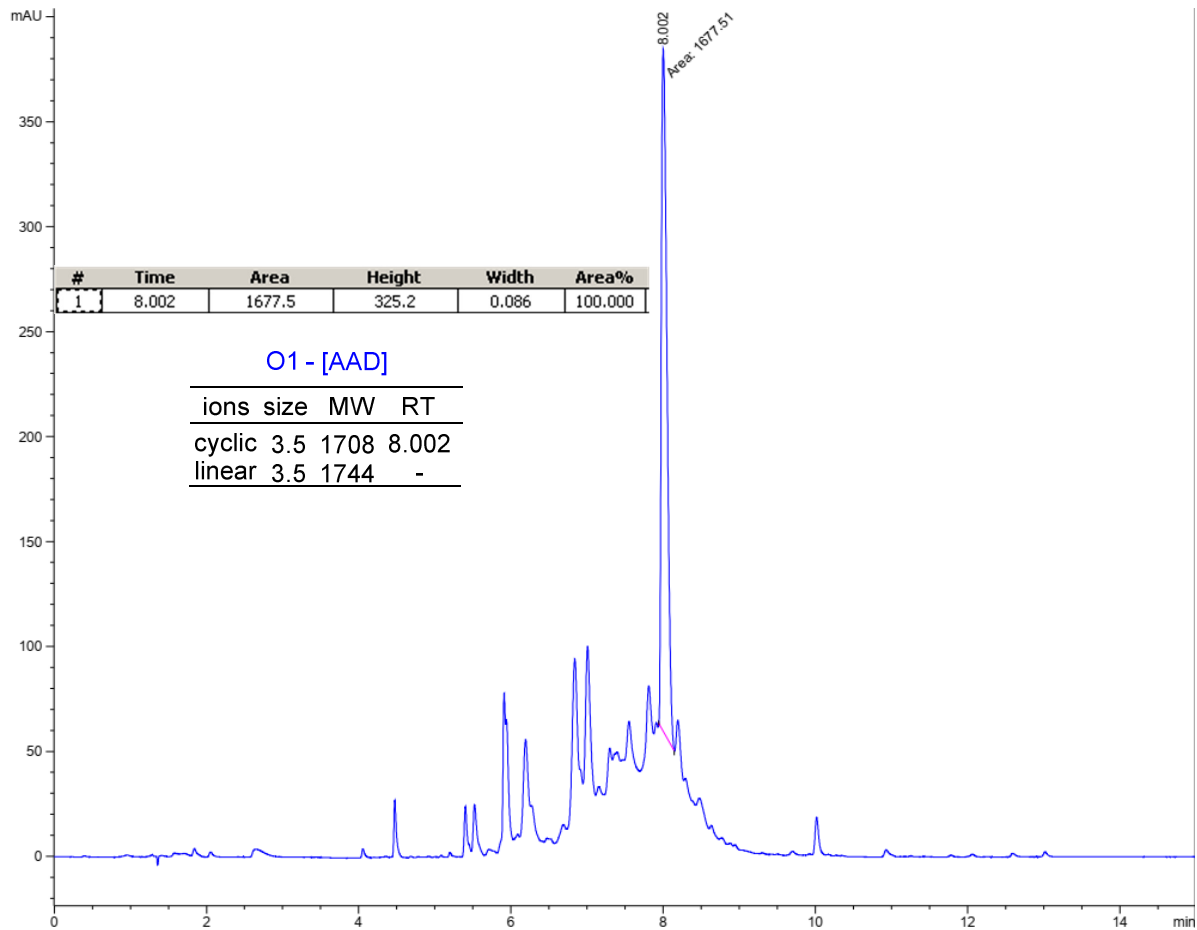
N10 - [DDB]

	ions size	MW	RT
cyclic	3.5	1637	7.645
linear	3.5	1673	-

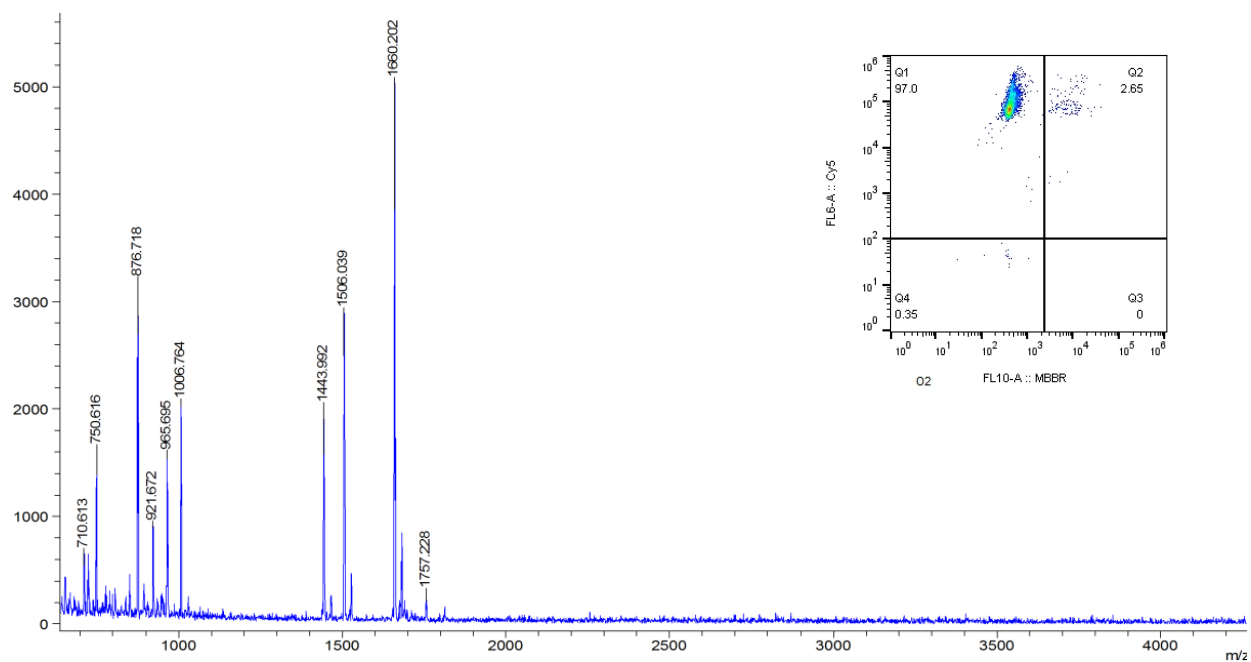
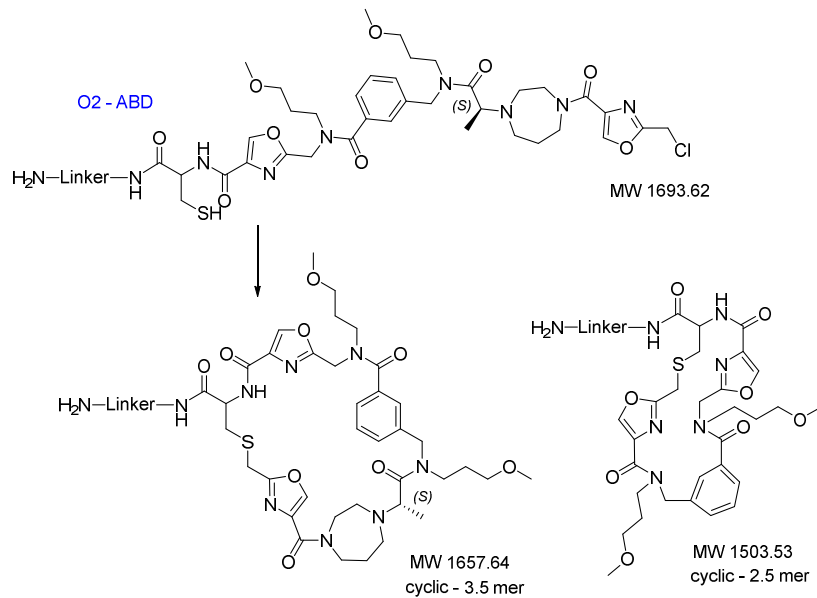


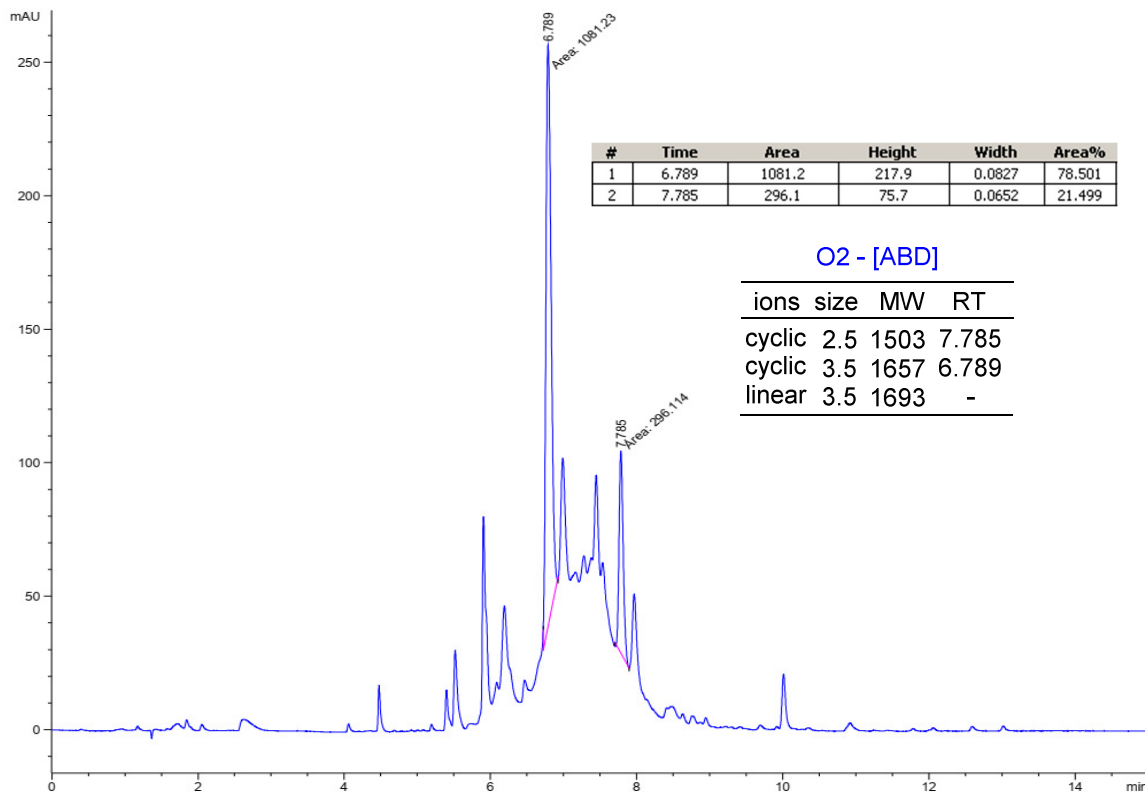
O1-[AAD]: Incomplete cyclization was detected on 10 μm but was complete on 160 μm beads.





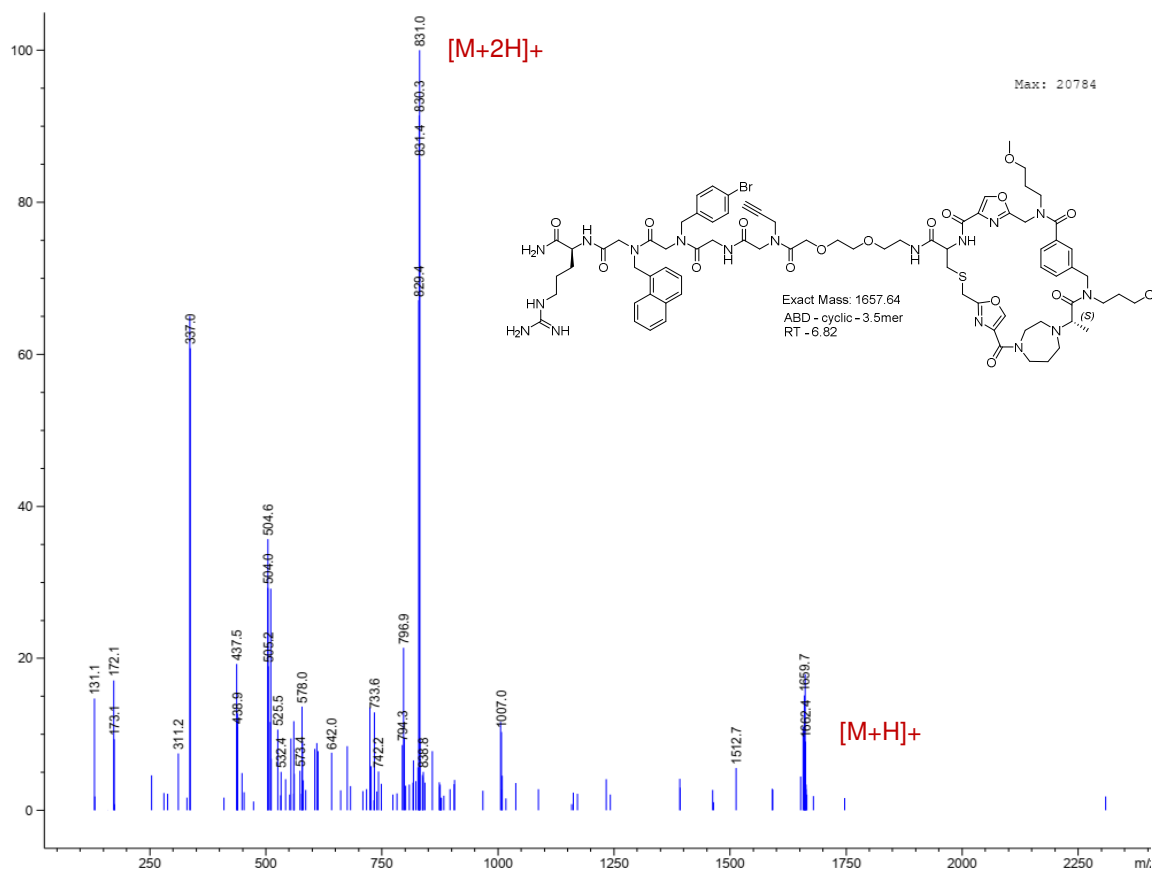
O2-[ABD]: Cyclization was complete on both 10 μ m & 160 μ m.

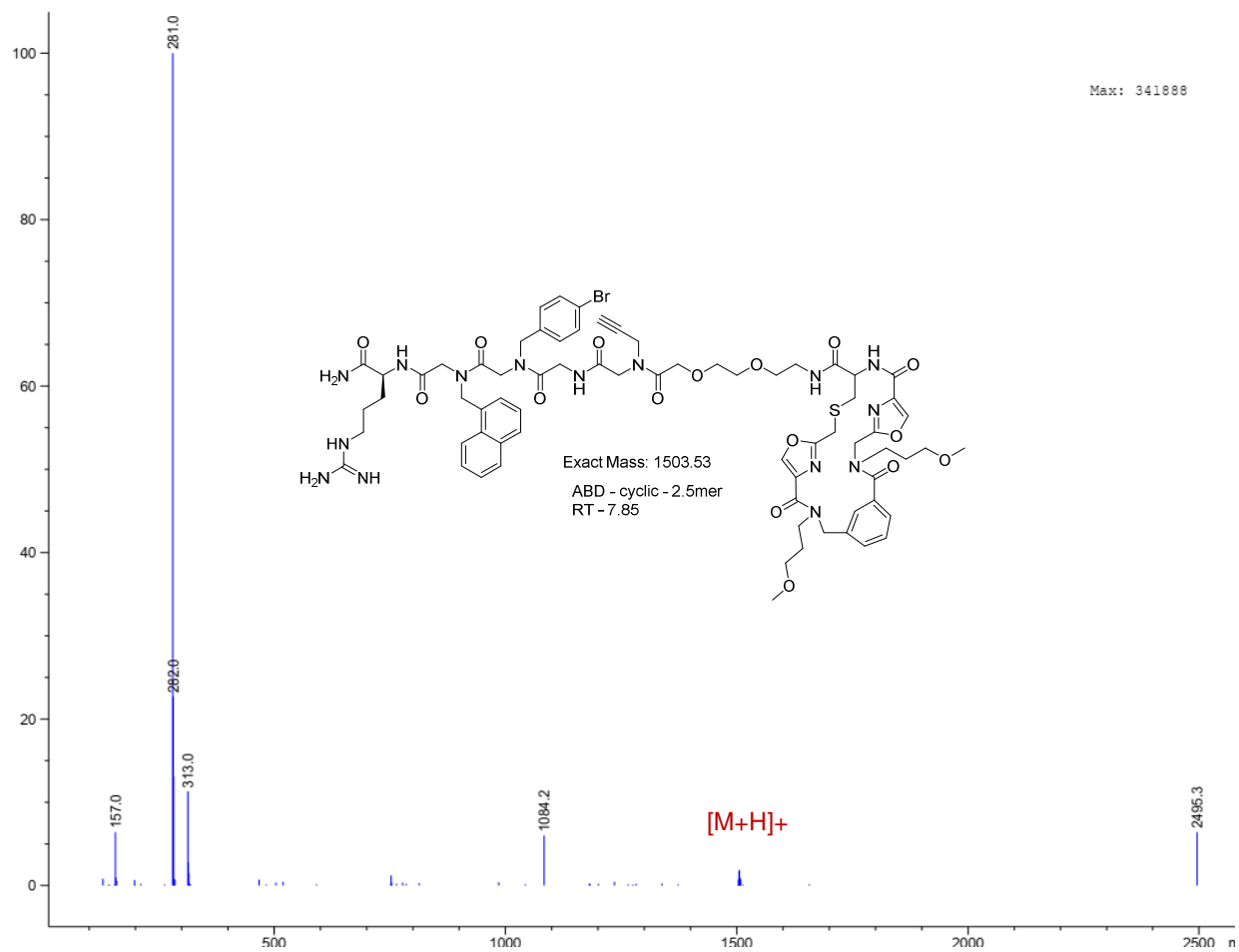




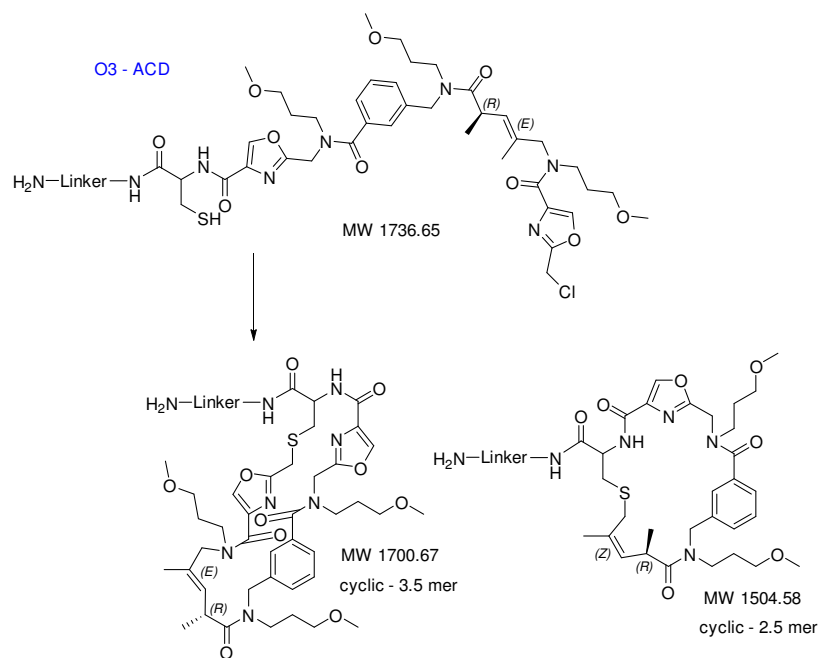
O2 - [ABD]

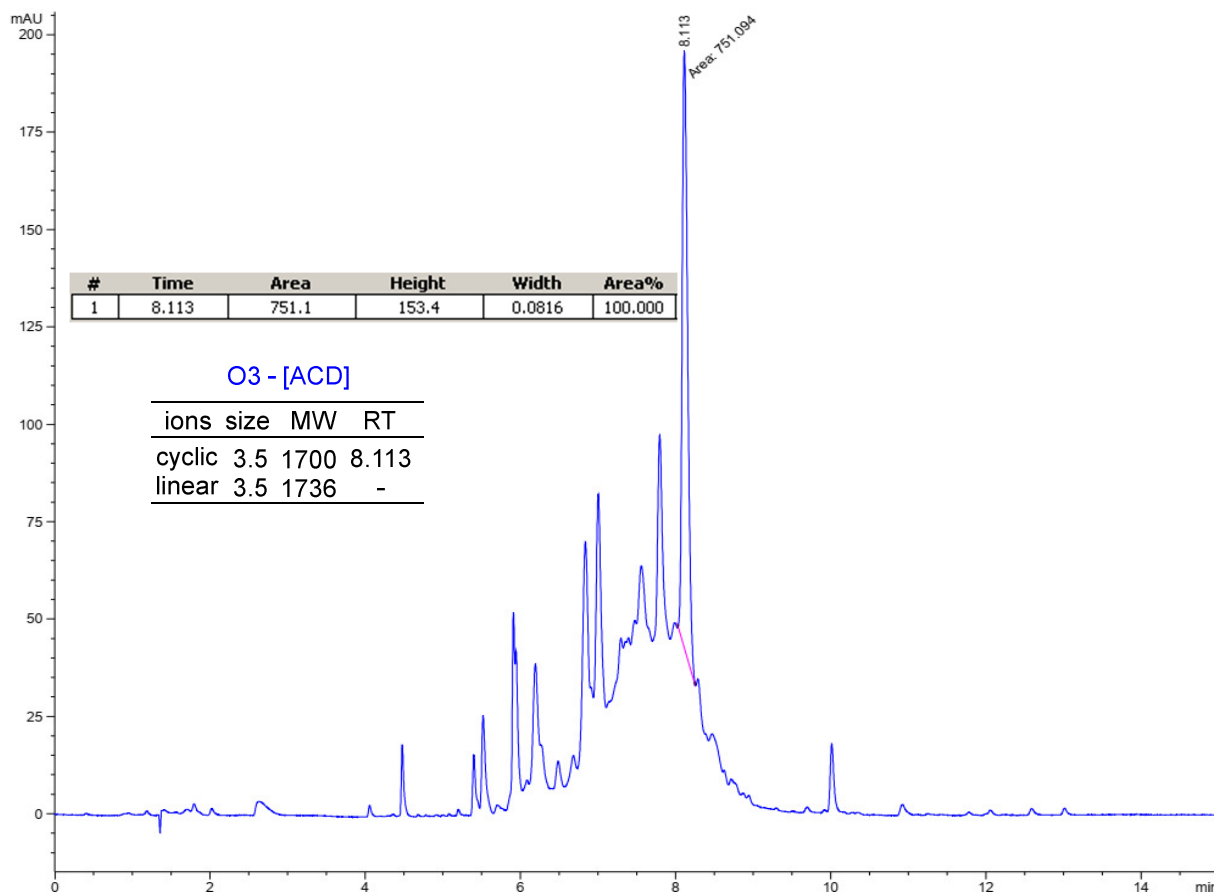
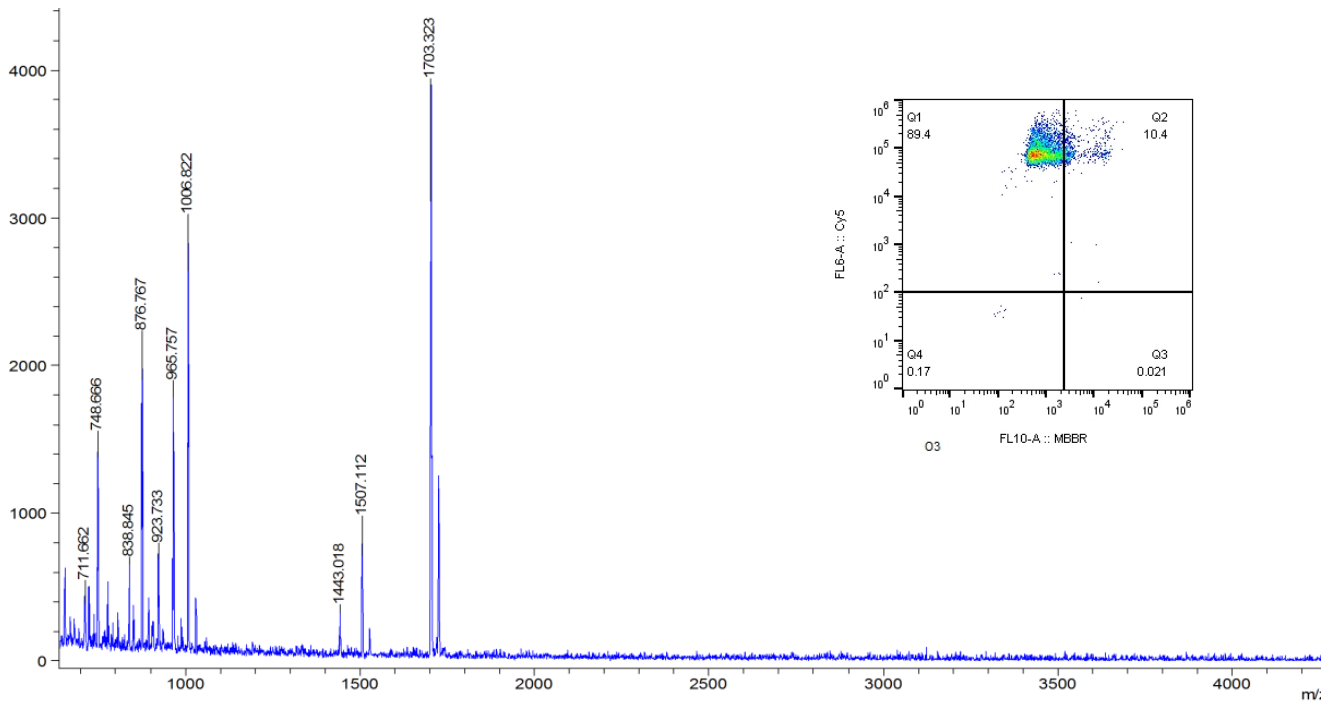
	ions size	MW	RT
cyclic	2.5	1503	7.785
cyclic	3.5	1657	6.789
linear	3.5	1693	-

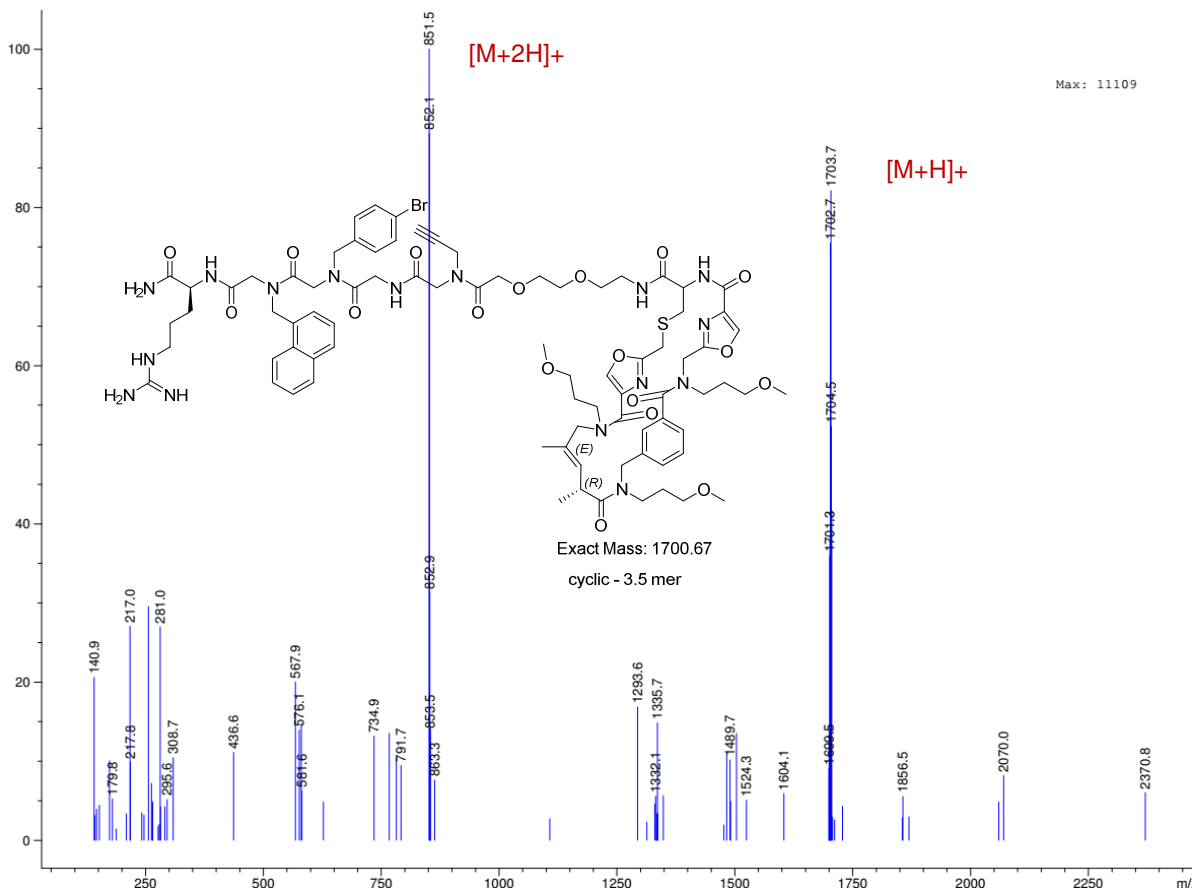




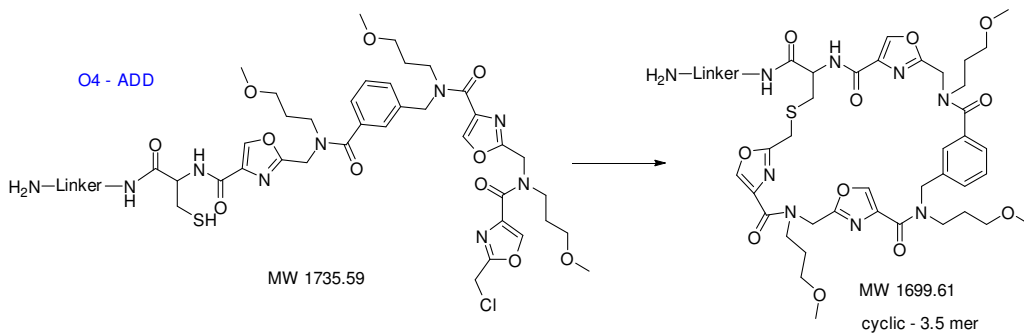
O3-[ACD]: Incomplete cyclization was detected on 10 μm but was complete on 160 μm beads.

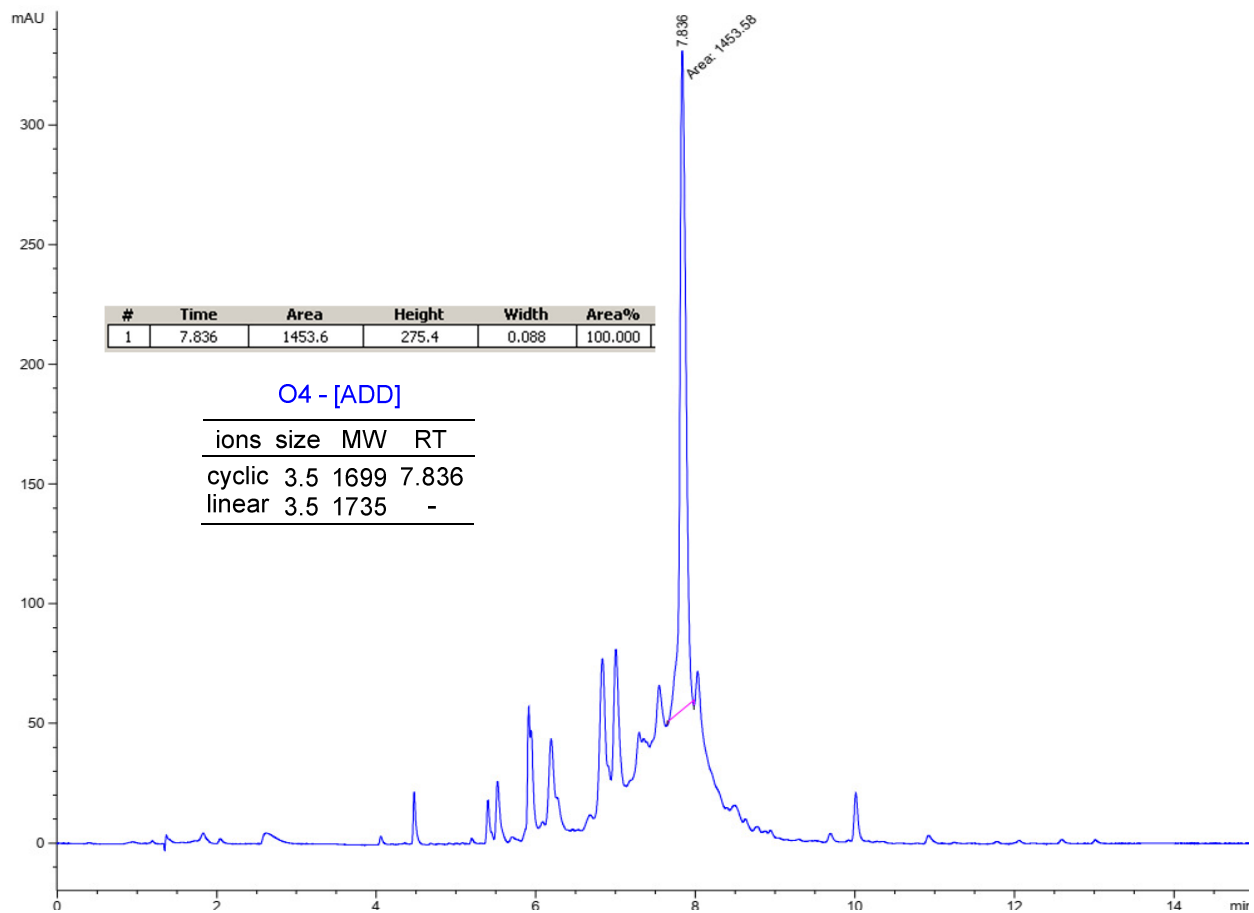
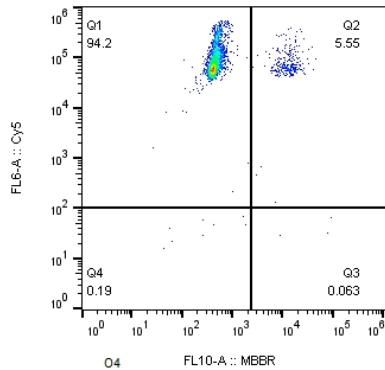
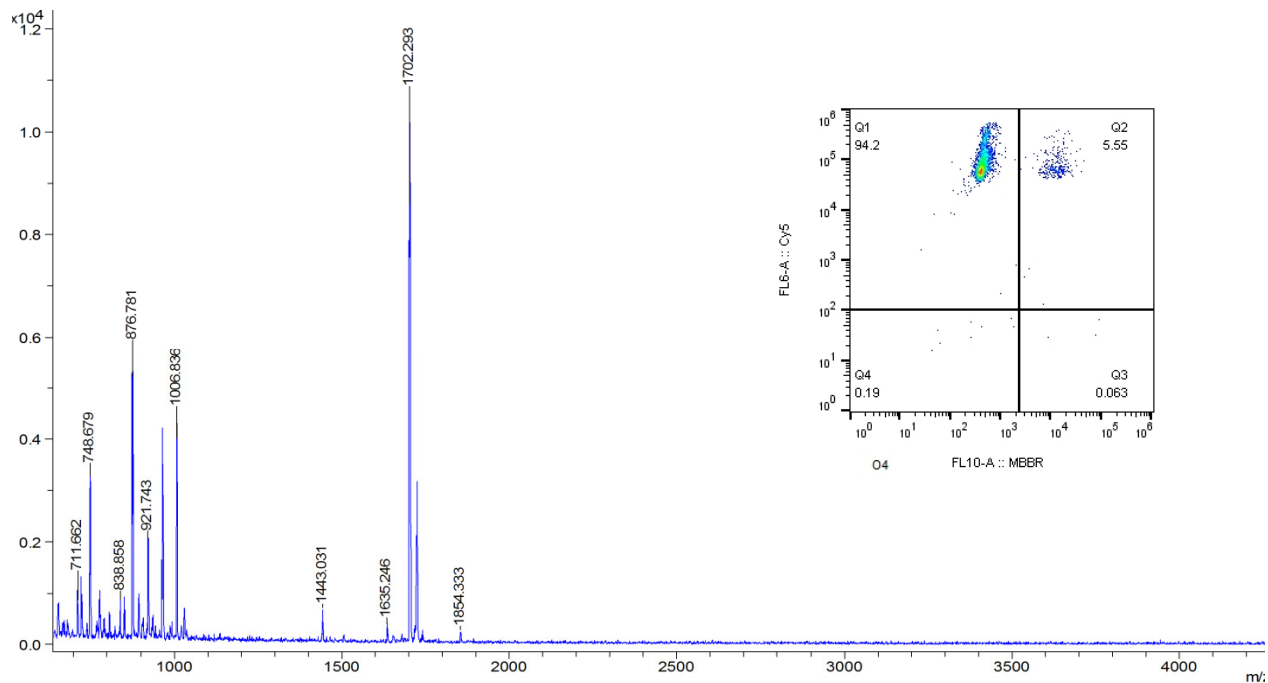


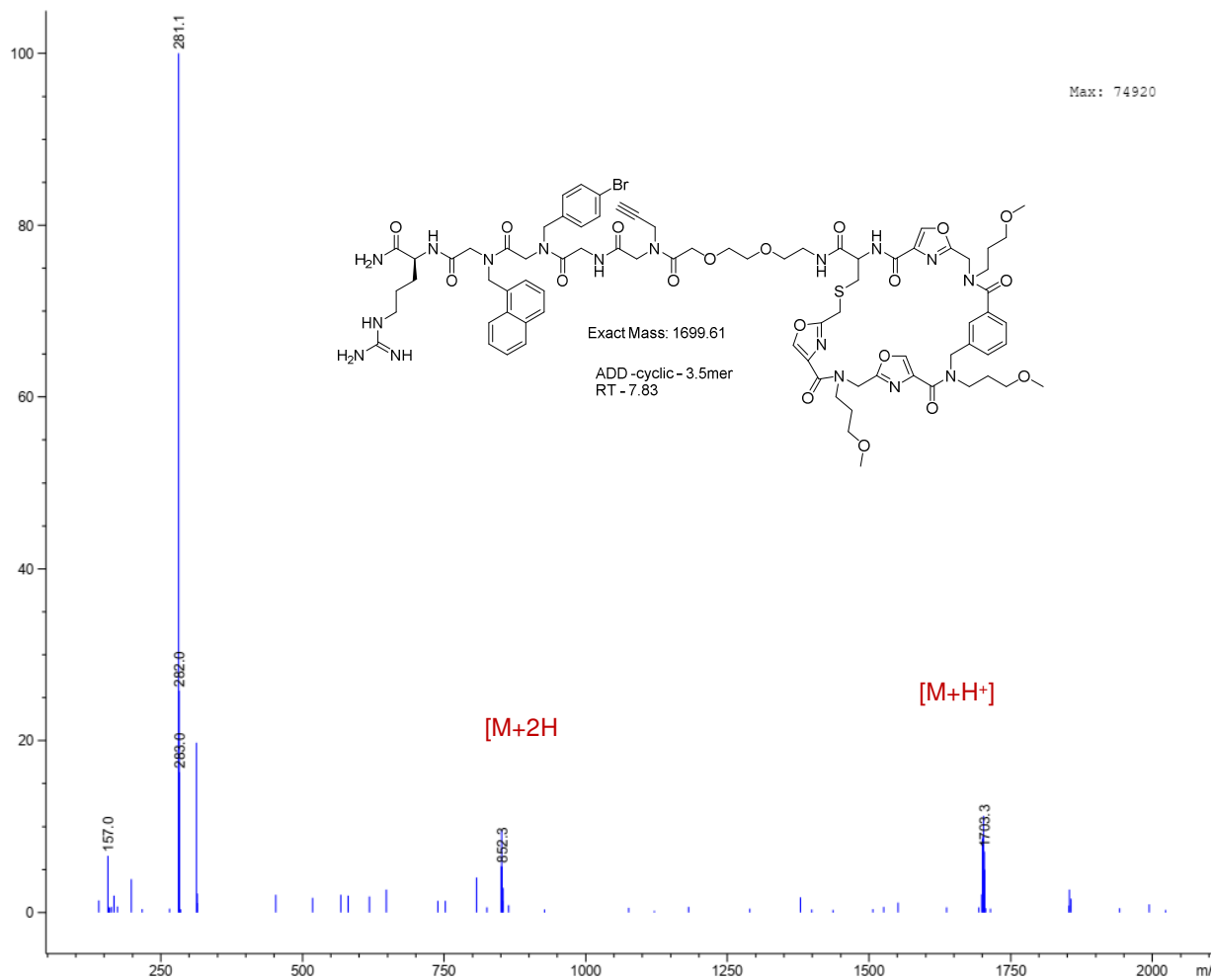




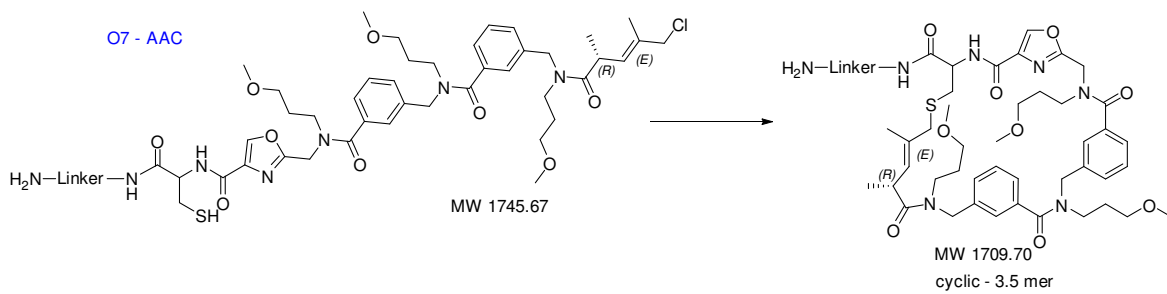
O4-[ADD]: Cyclization was complete on both 10 μm & 160 μm beads.

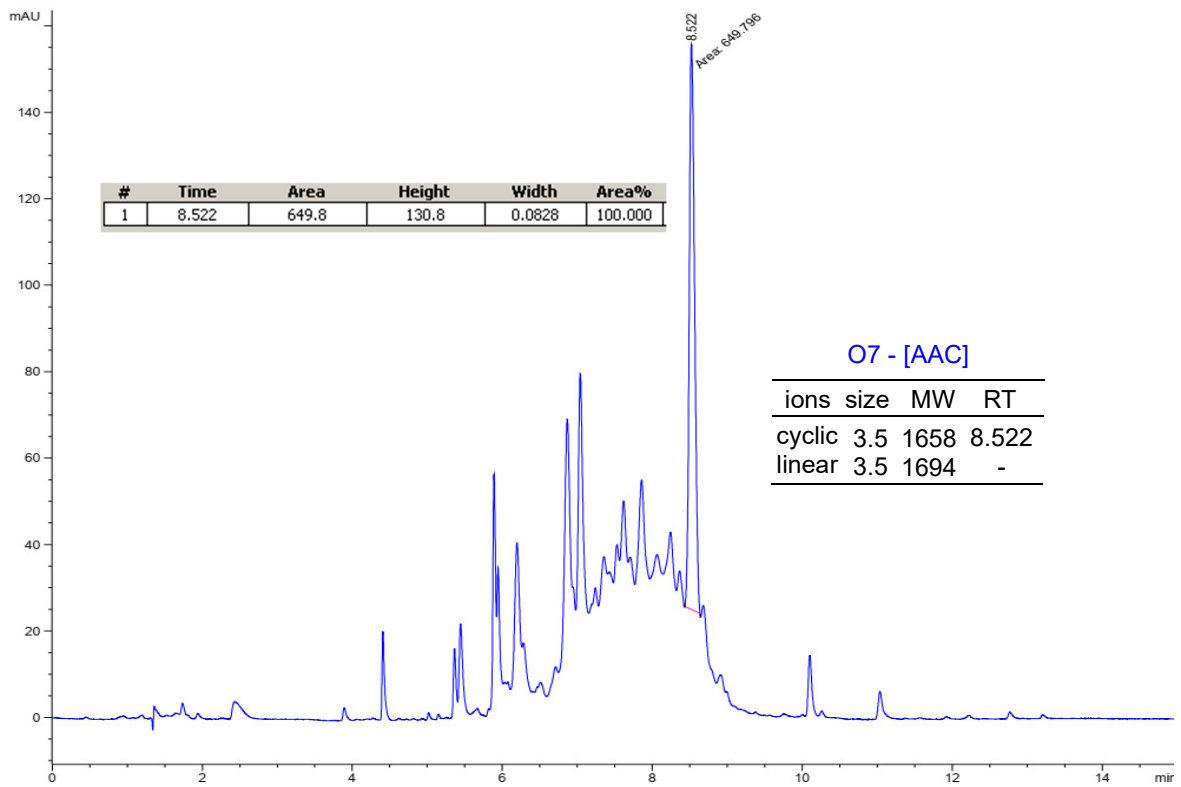
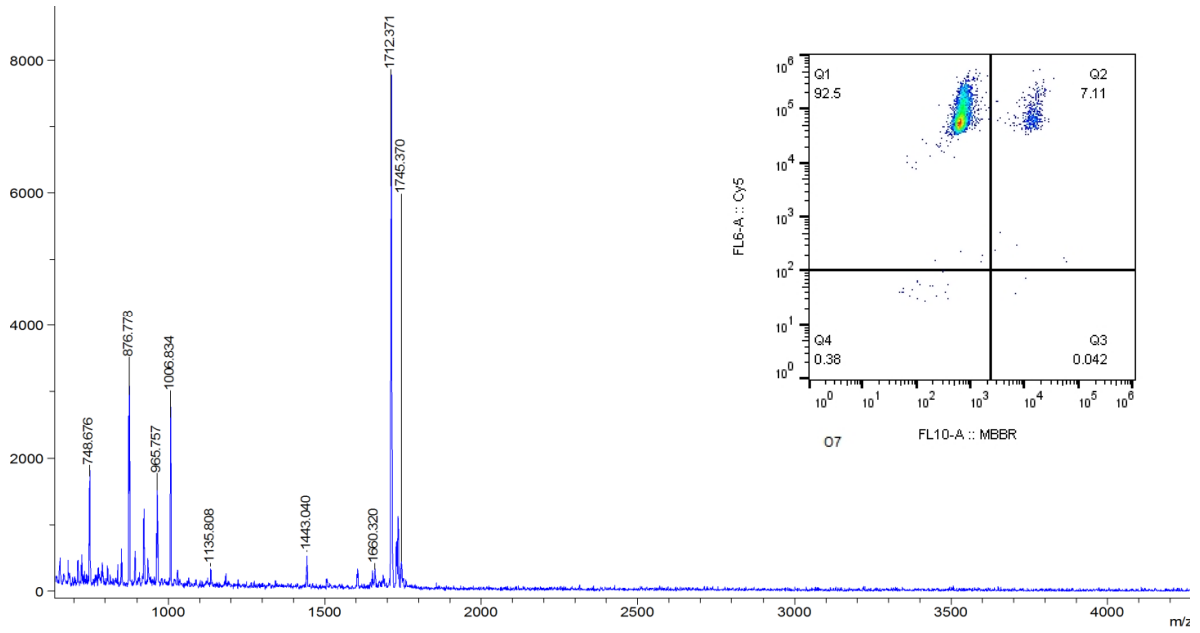


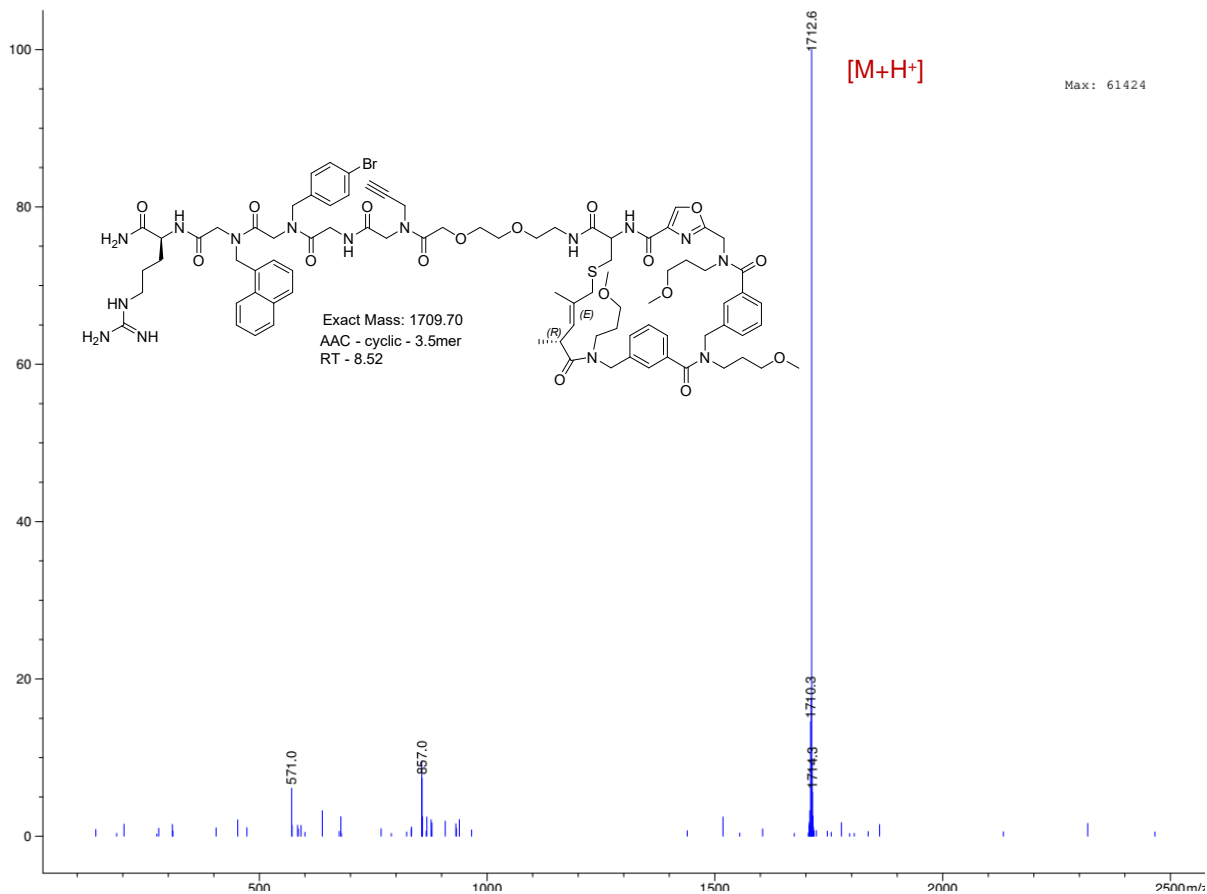




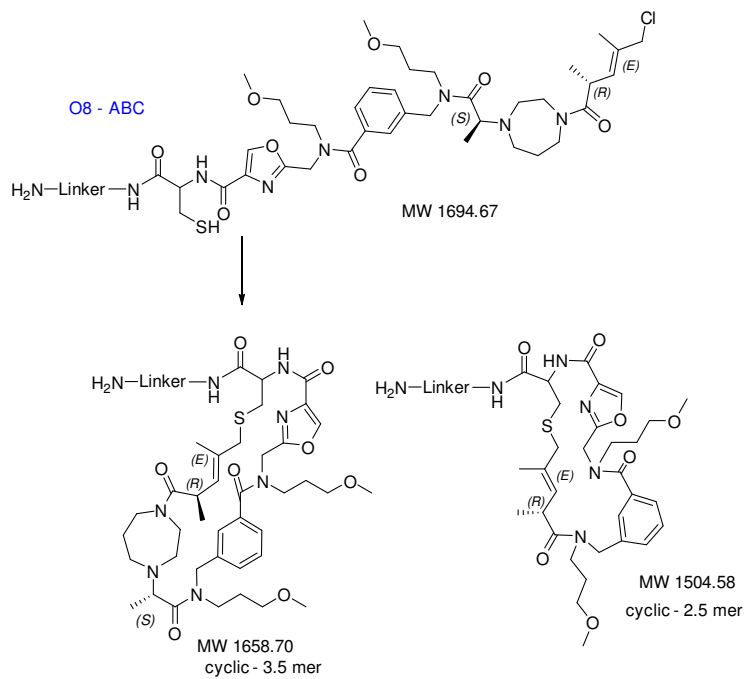
O7-[AAC]: Cyclization was complete on both 10 μm & 160 μm beads.

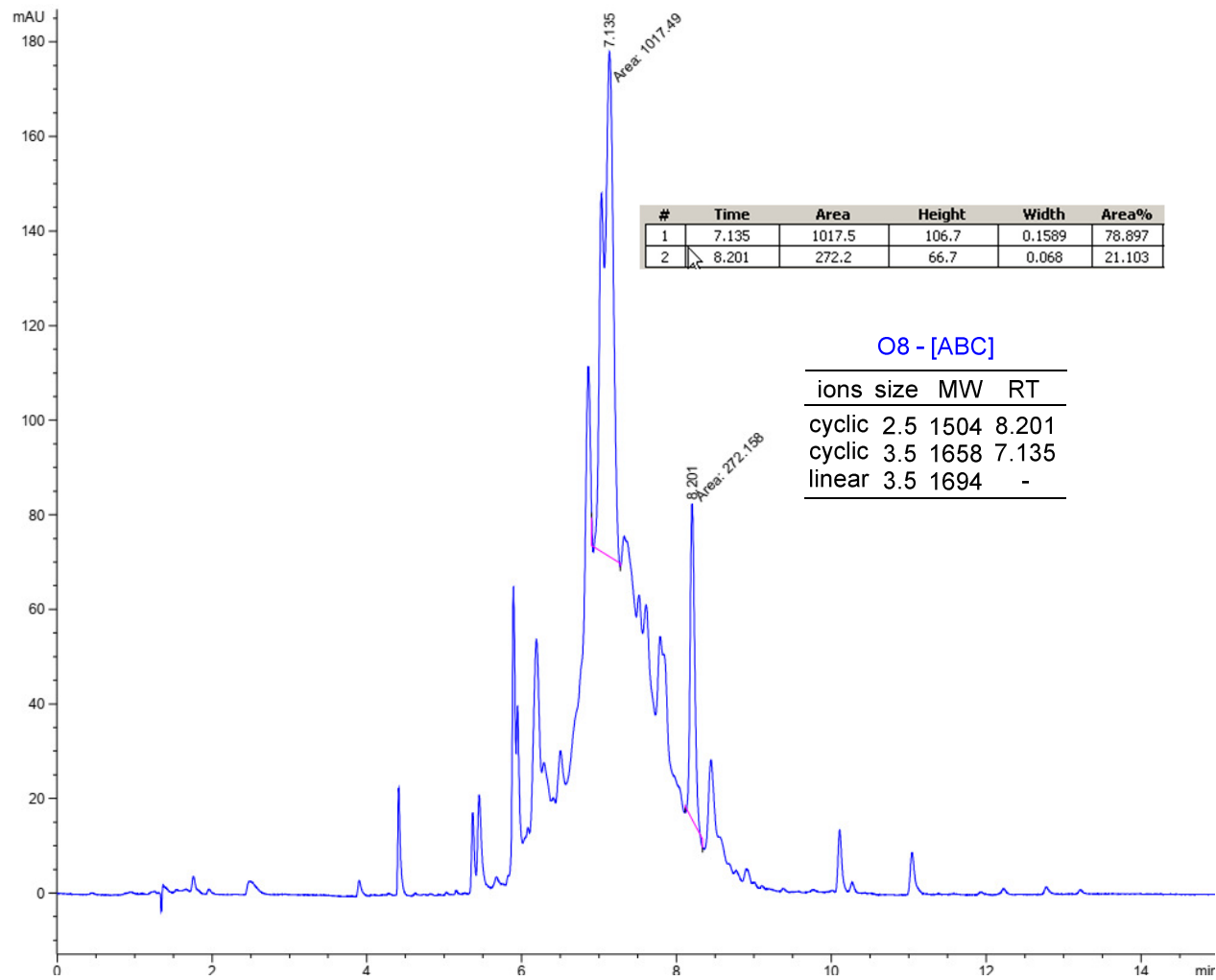
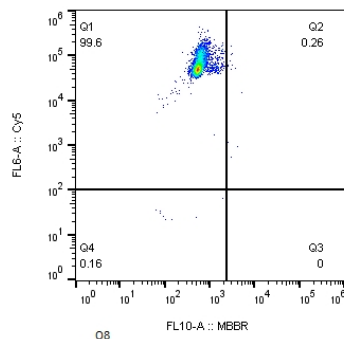
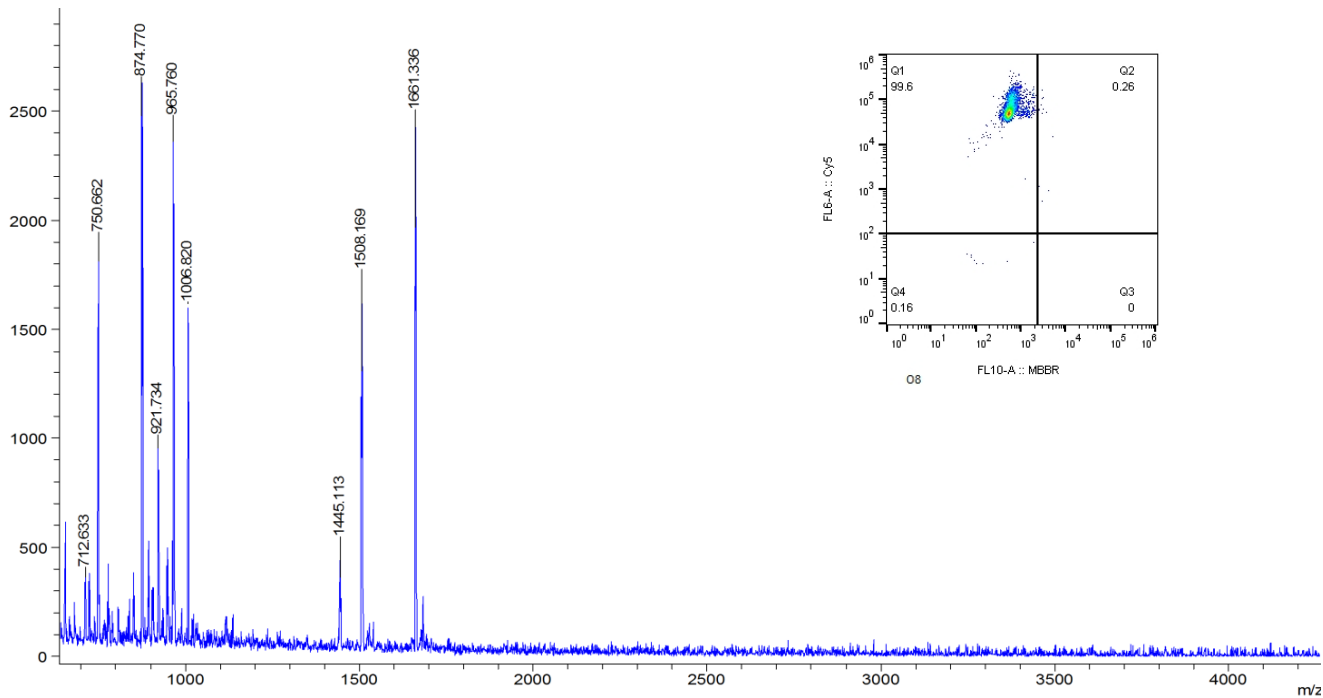


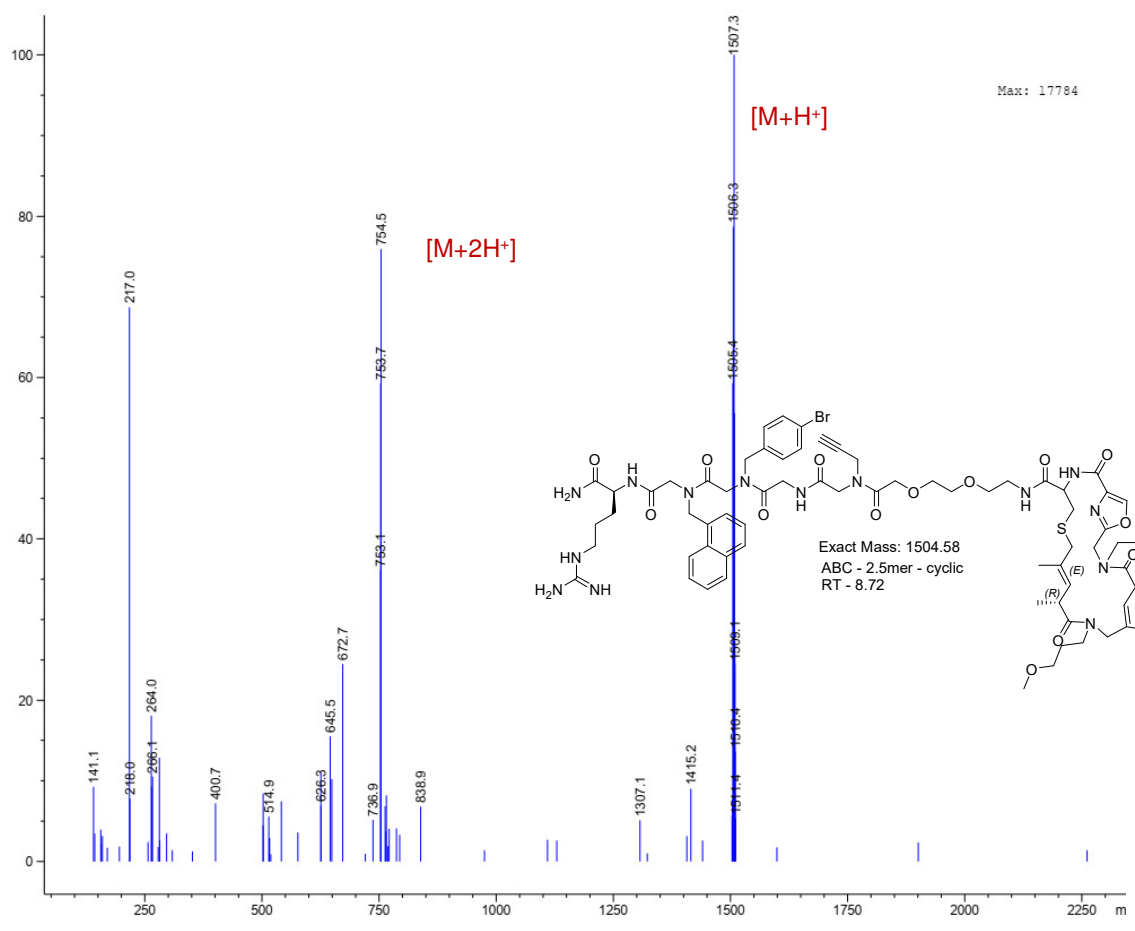
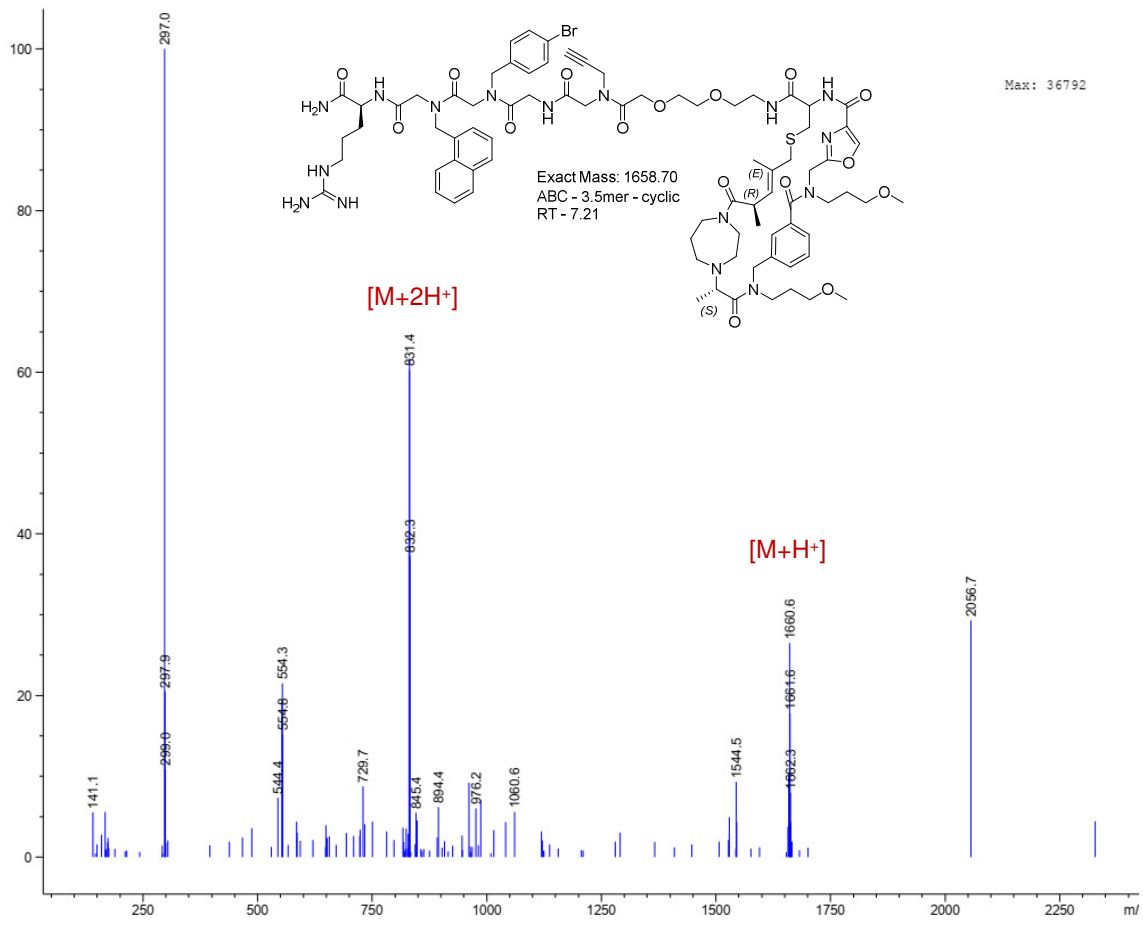




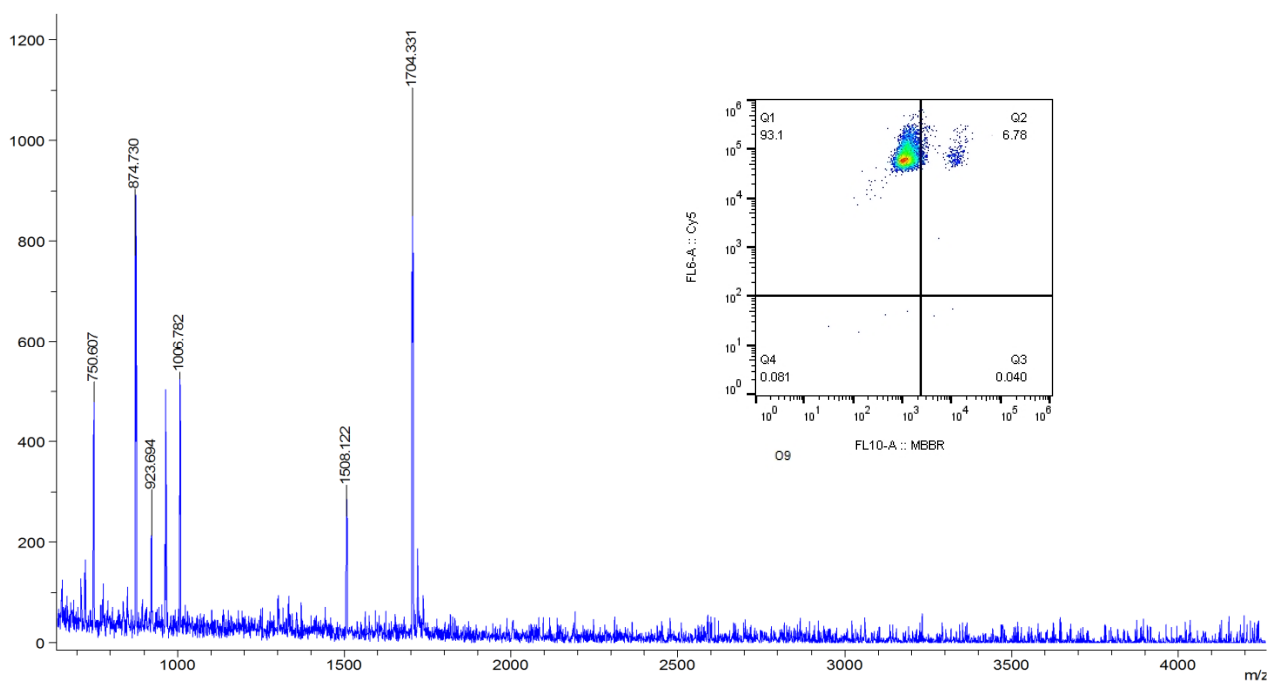
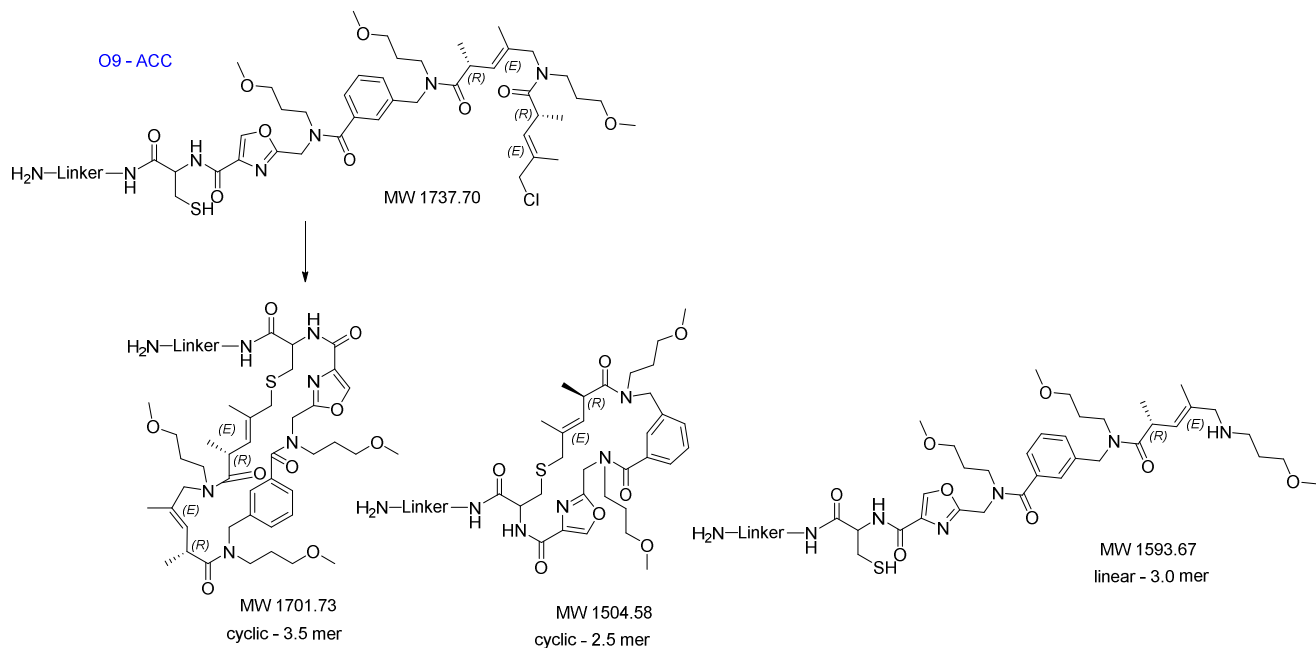
O8-[ABC]: Cyclization was complete on both 10 μm & 160 μm beads.

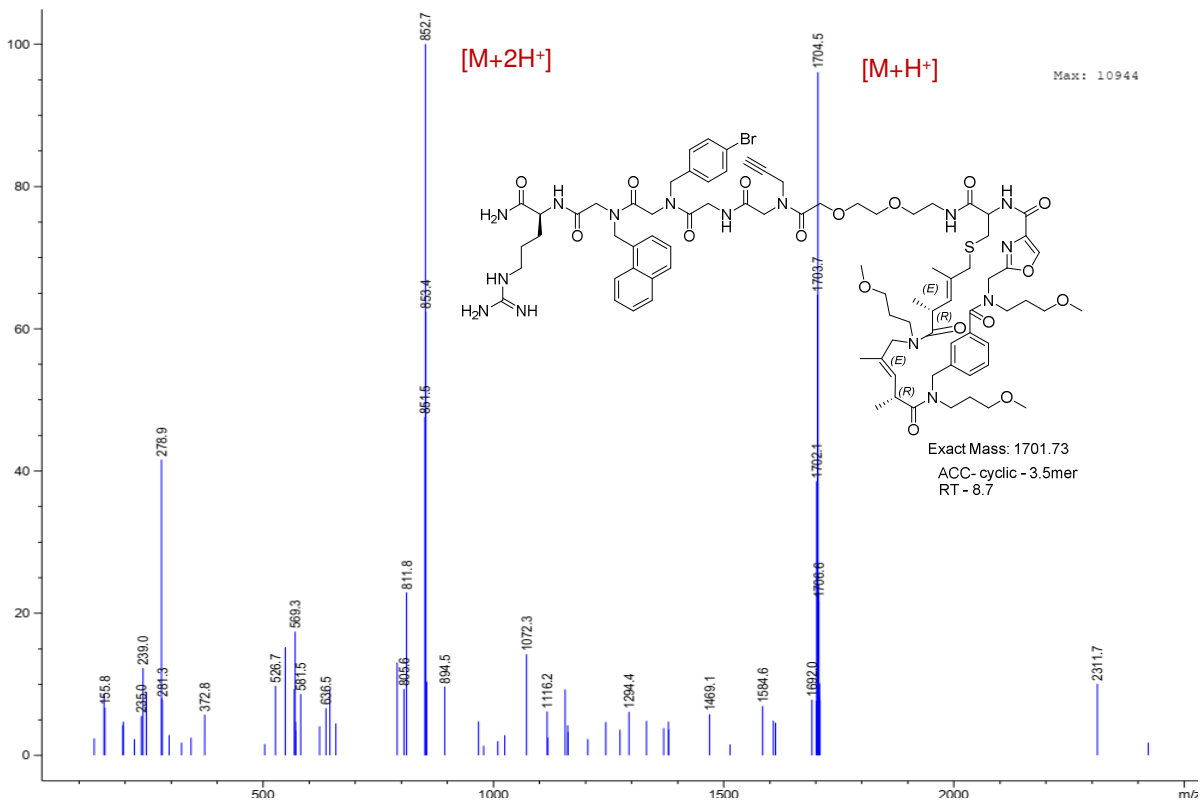
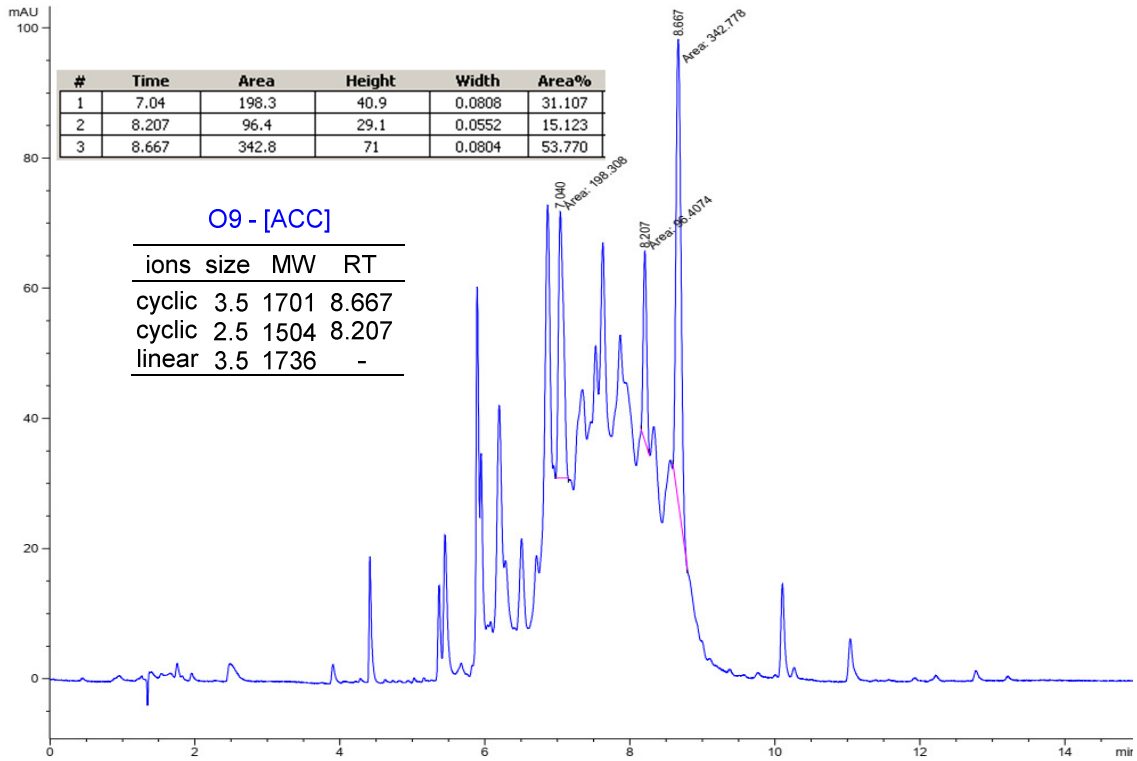




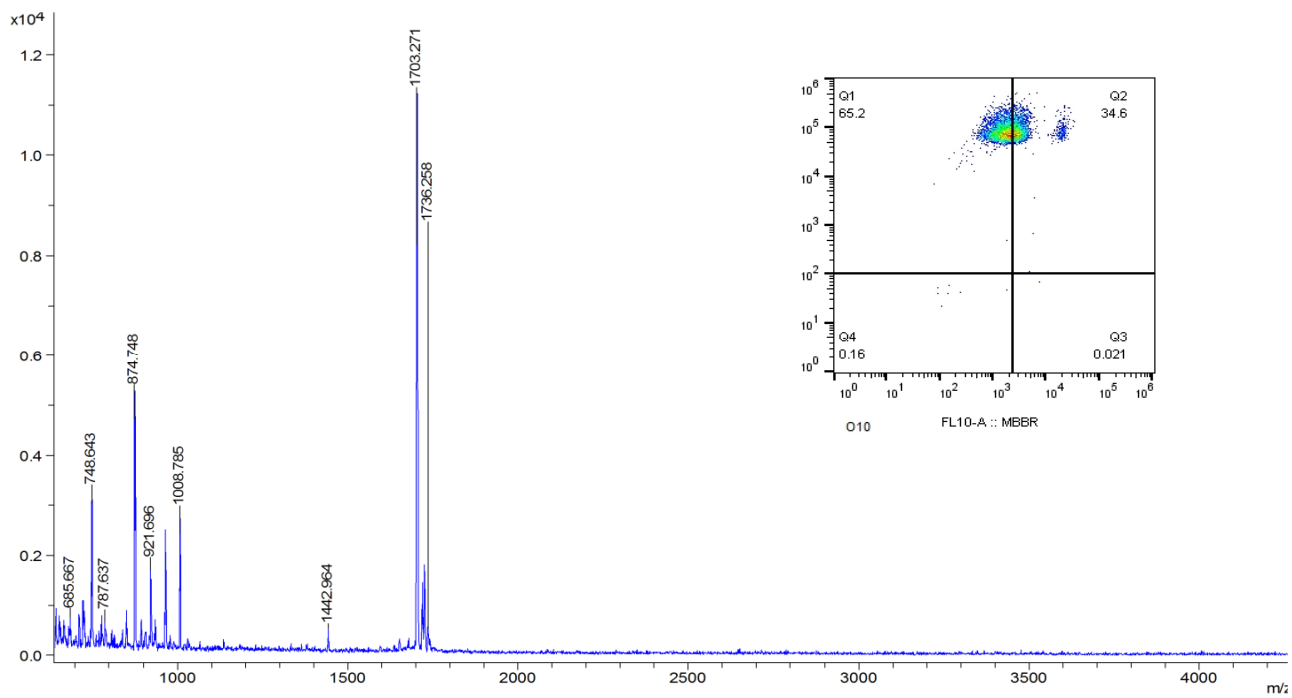
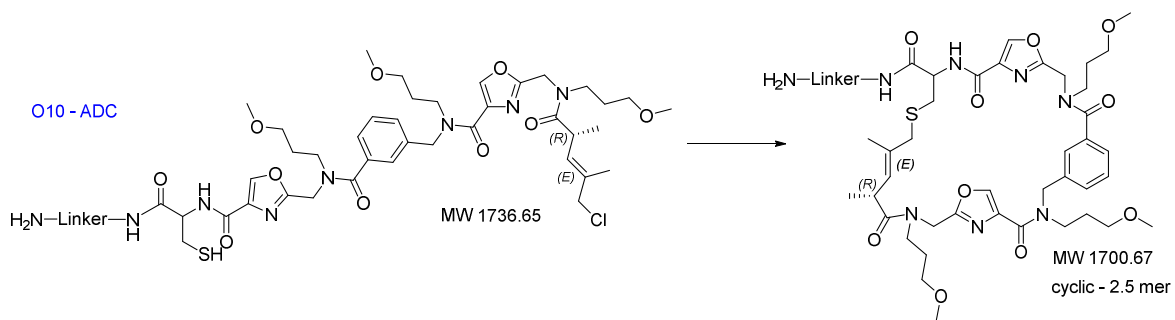


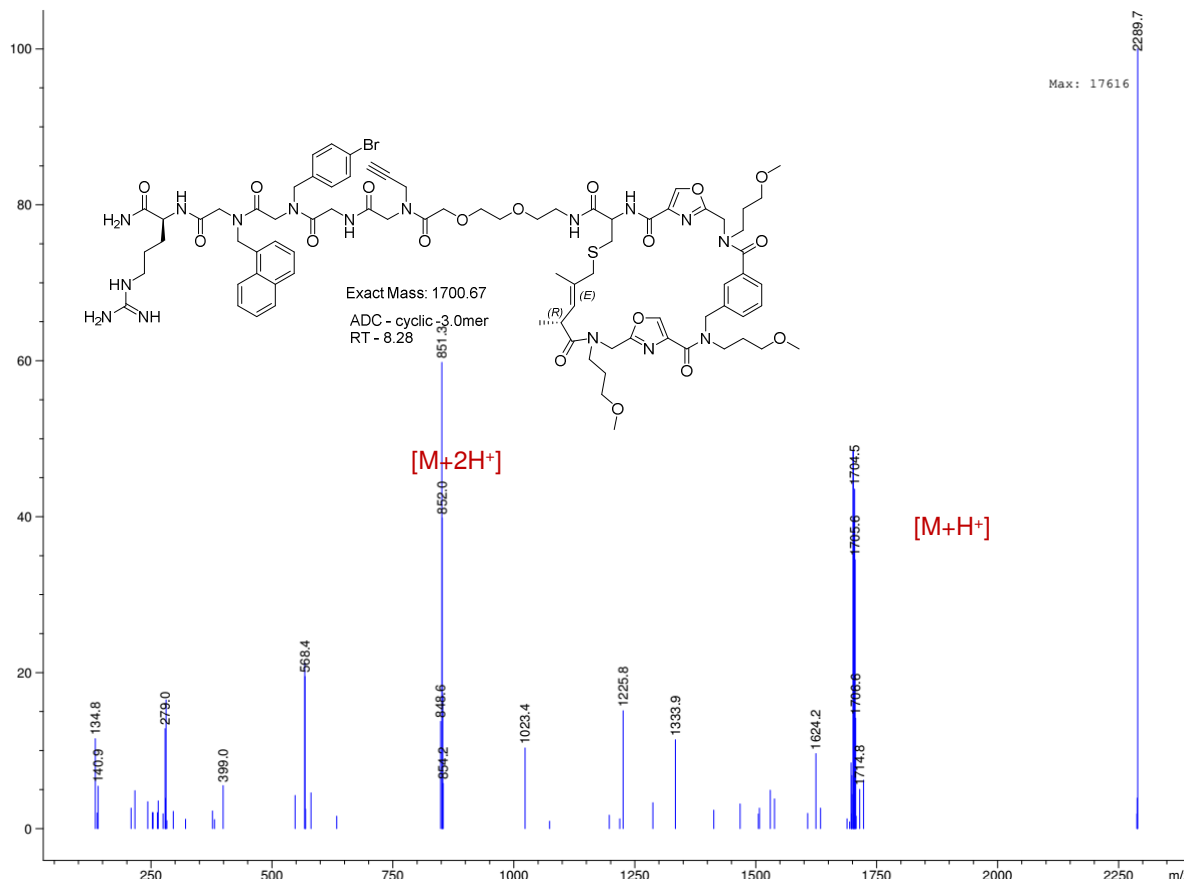
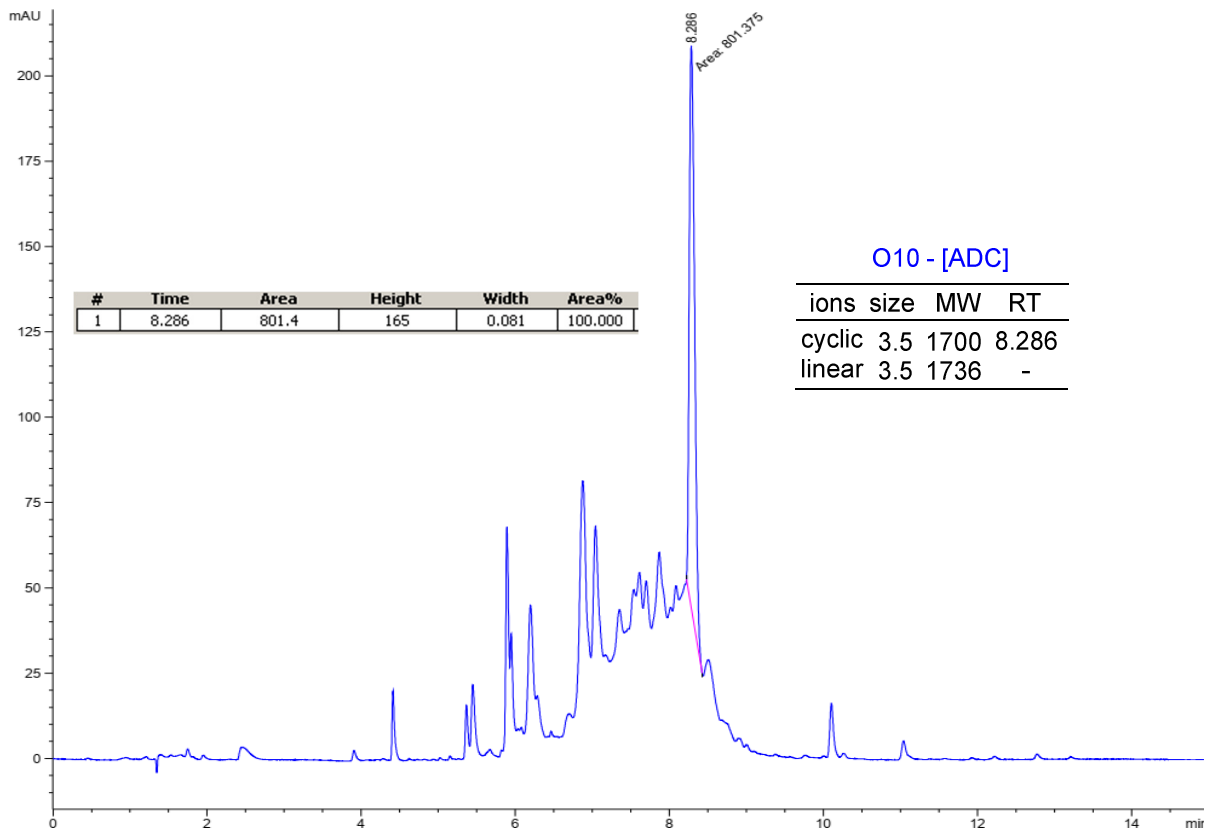
O9-[ACC]: Cyclization was complete on both 10 μm & 160 μm beads.



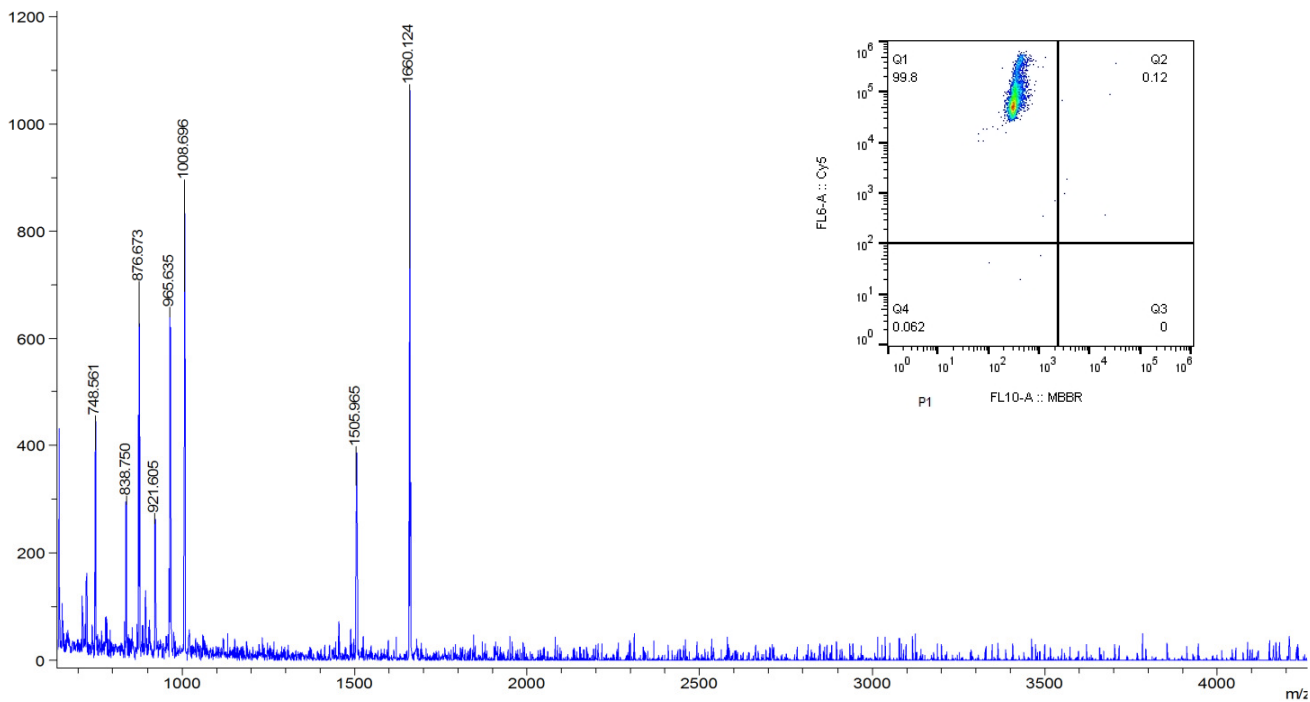
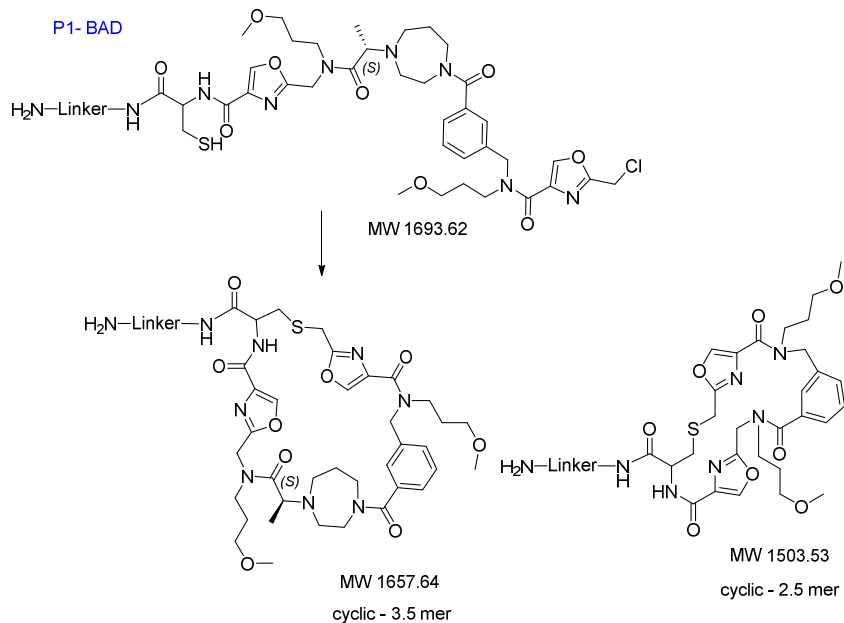


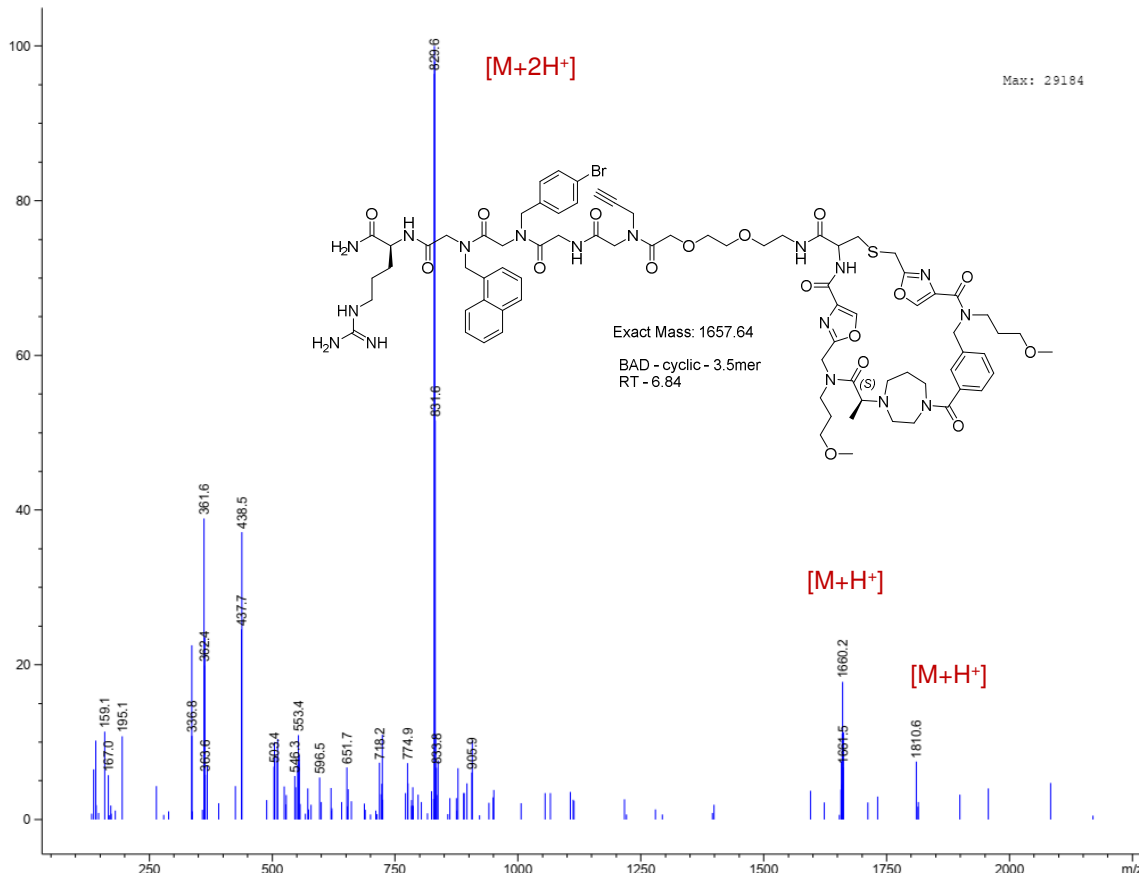
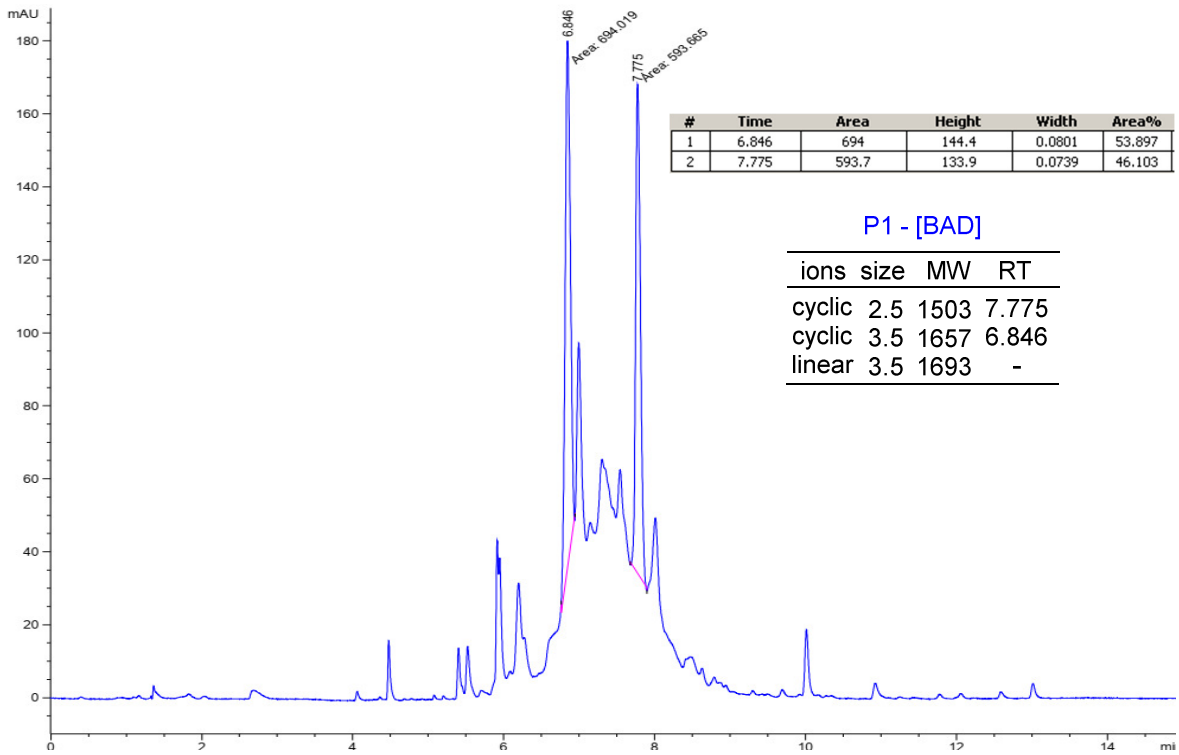
O10-[ADC]: Incomplete cyclization was detected on 10 μm but was completed on 160 μm beads.

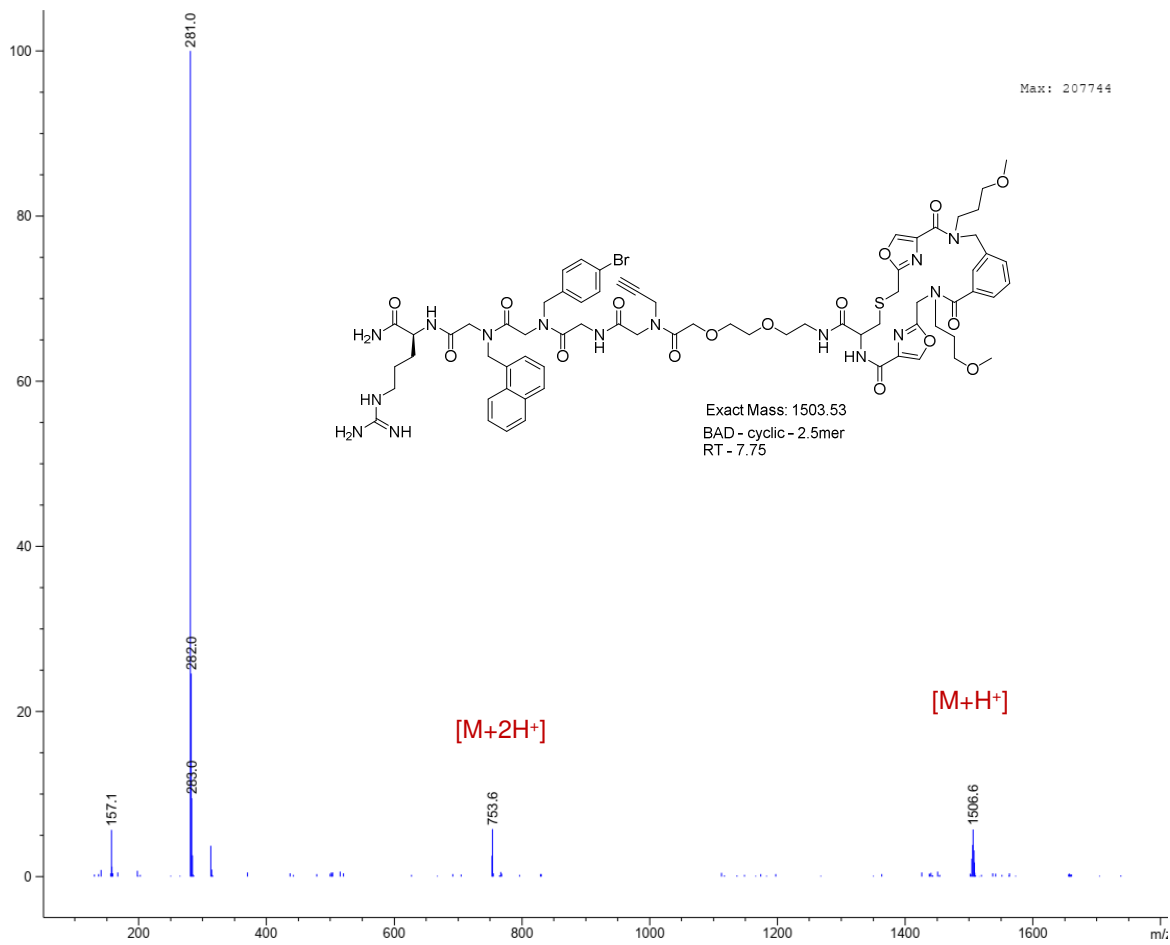




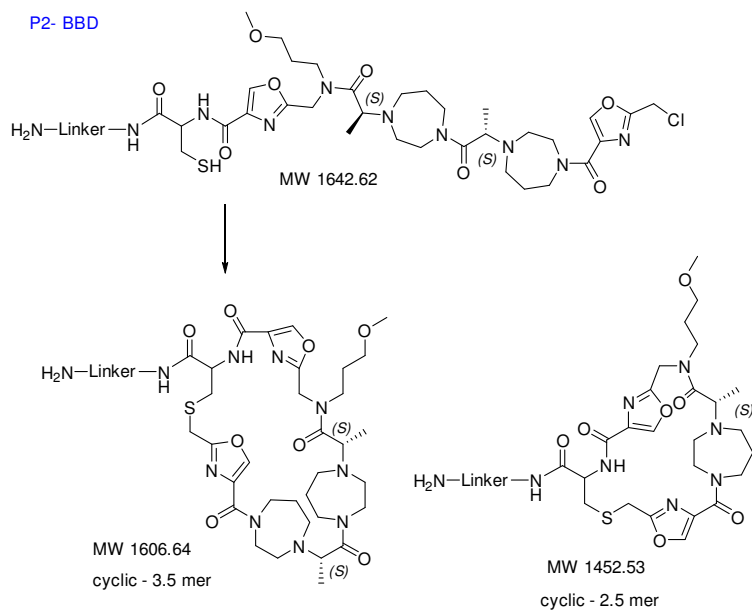
P1-[BAD]: Cyclization was complete on both 10 μm & 160 μm beads.

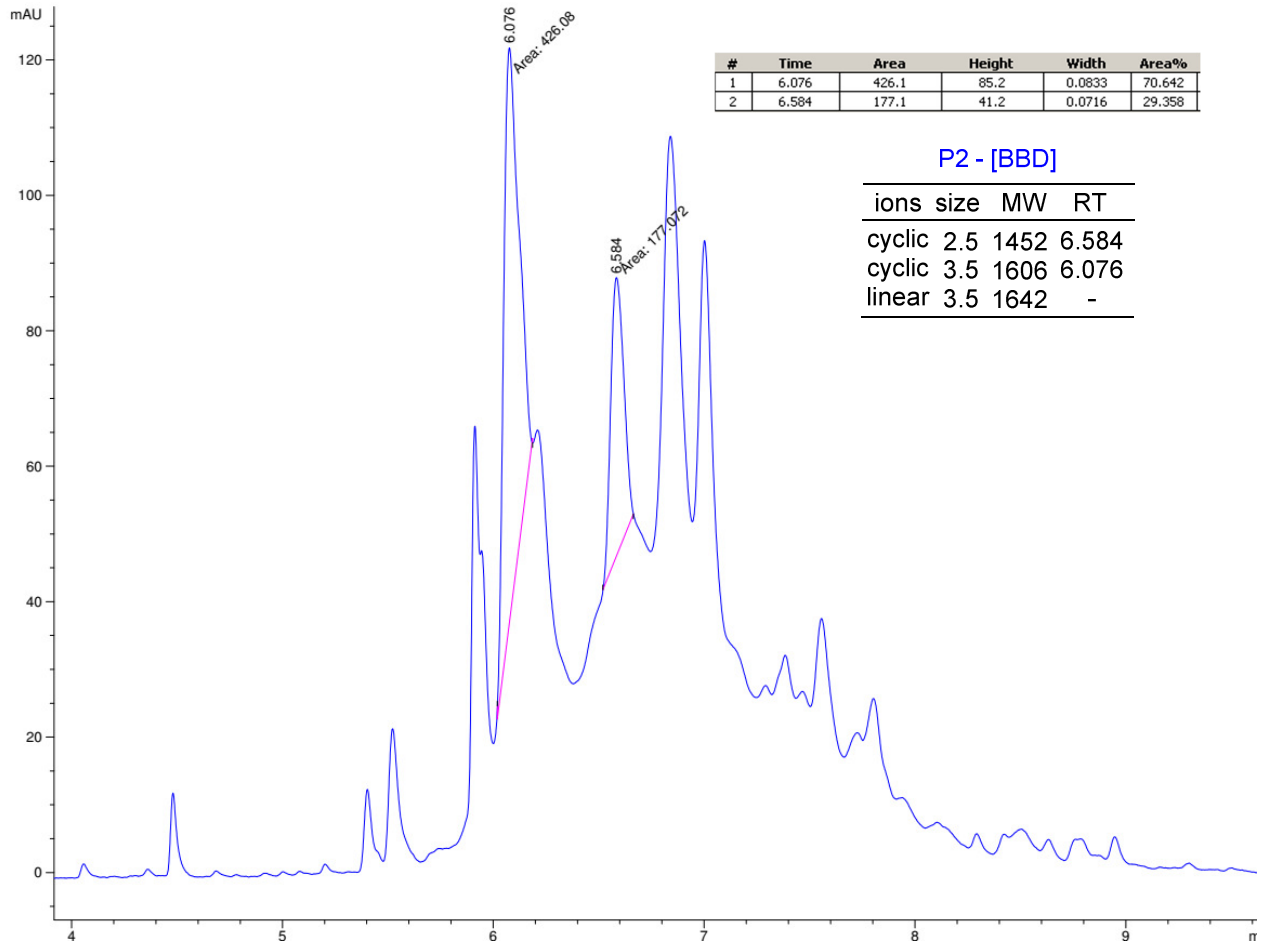
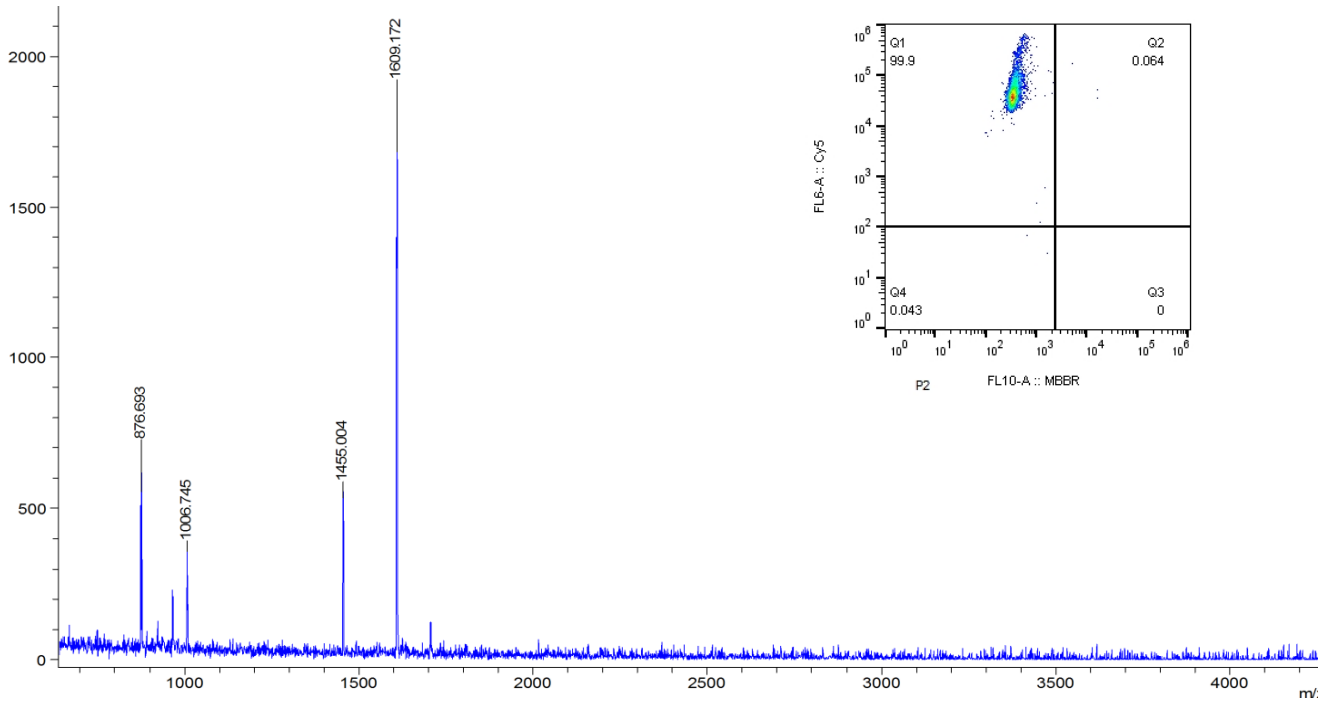


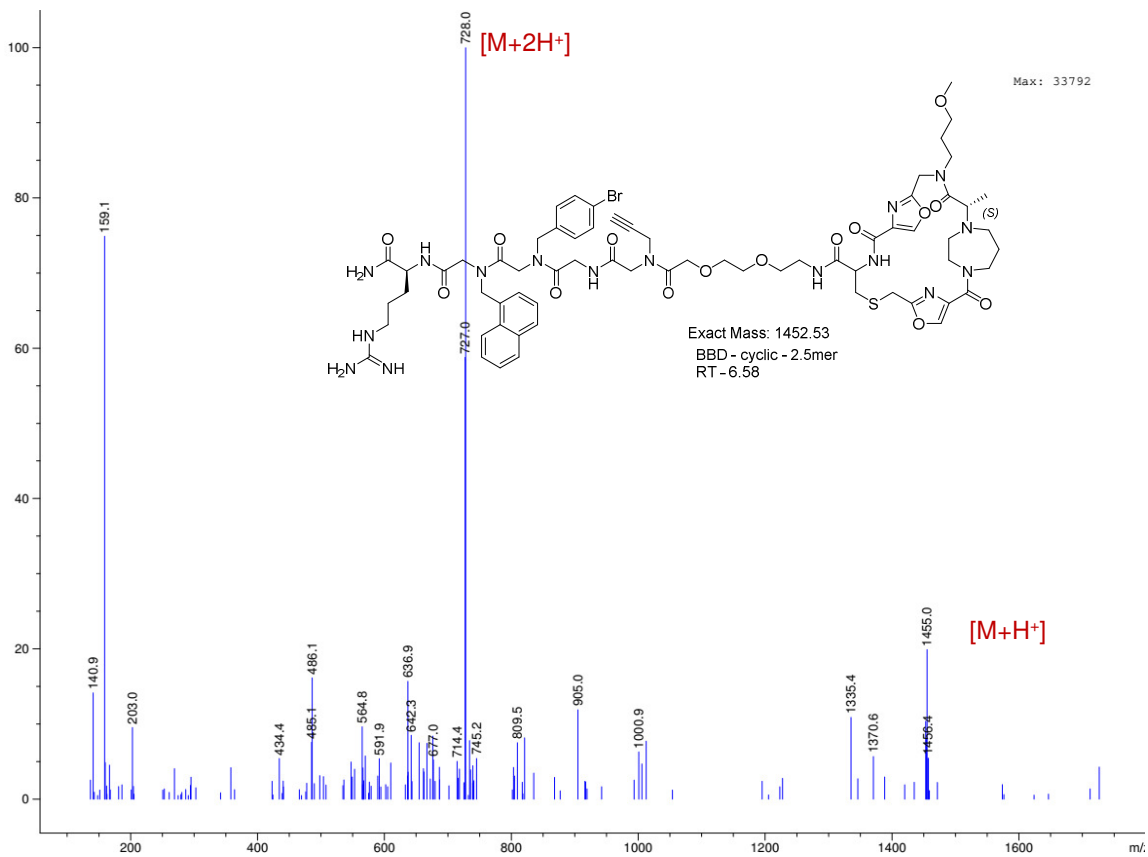
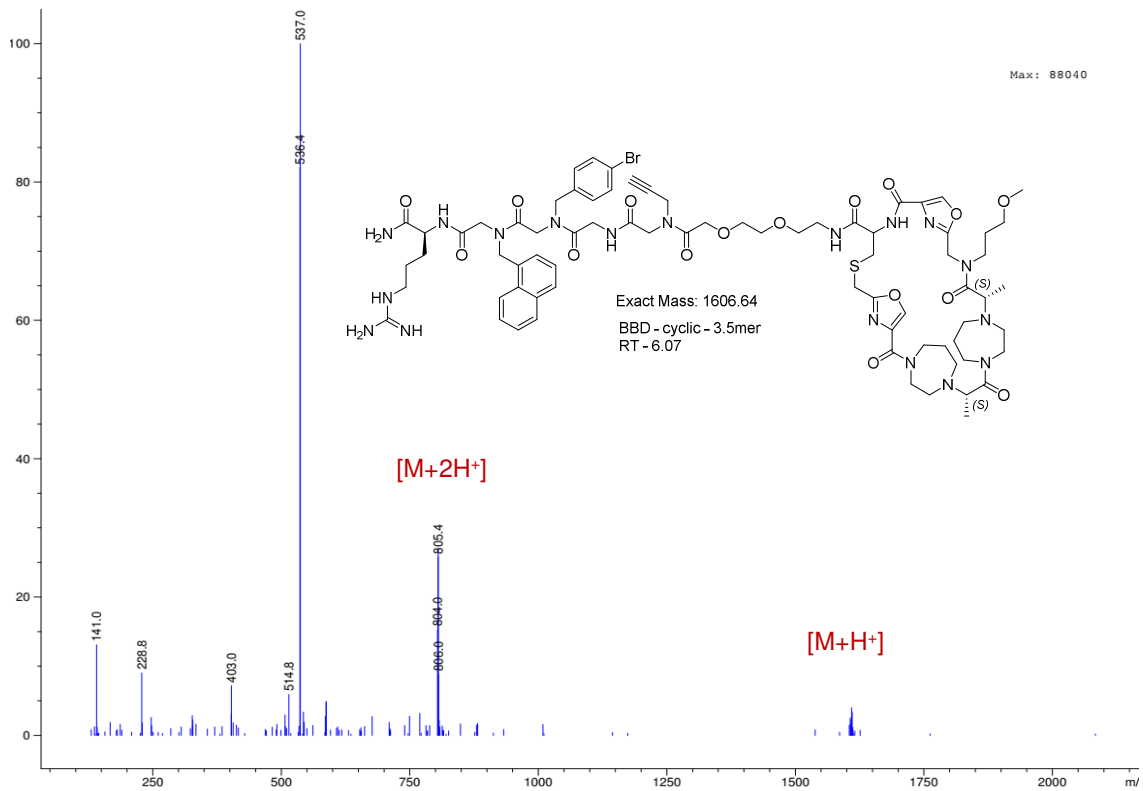




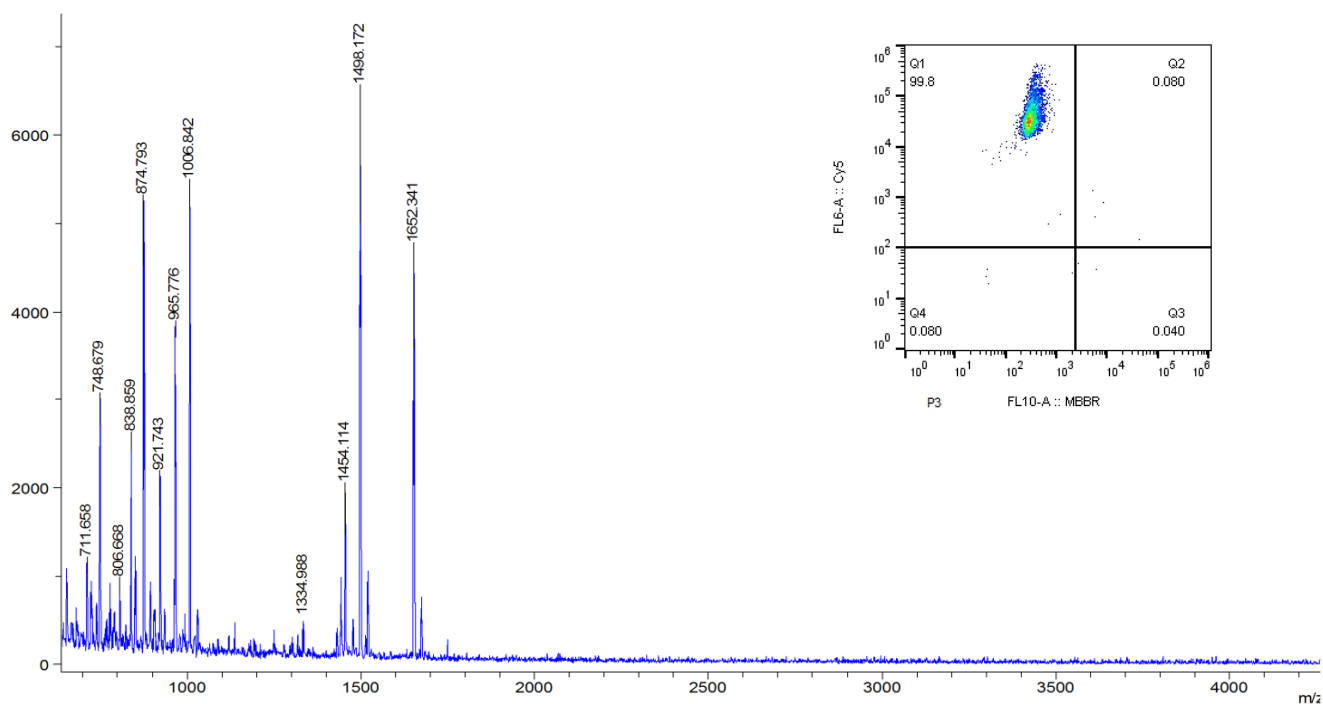
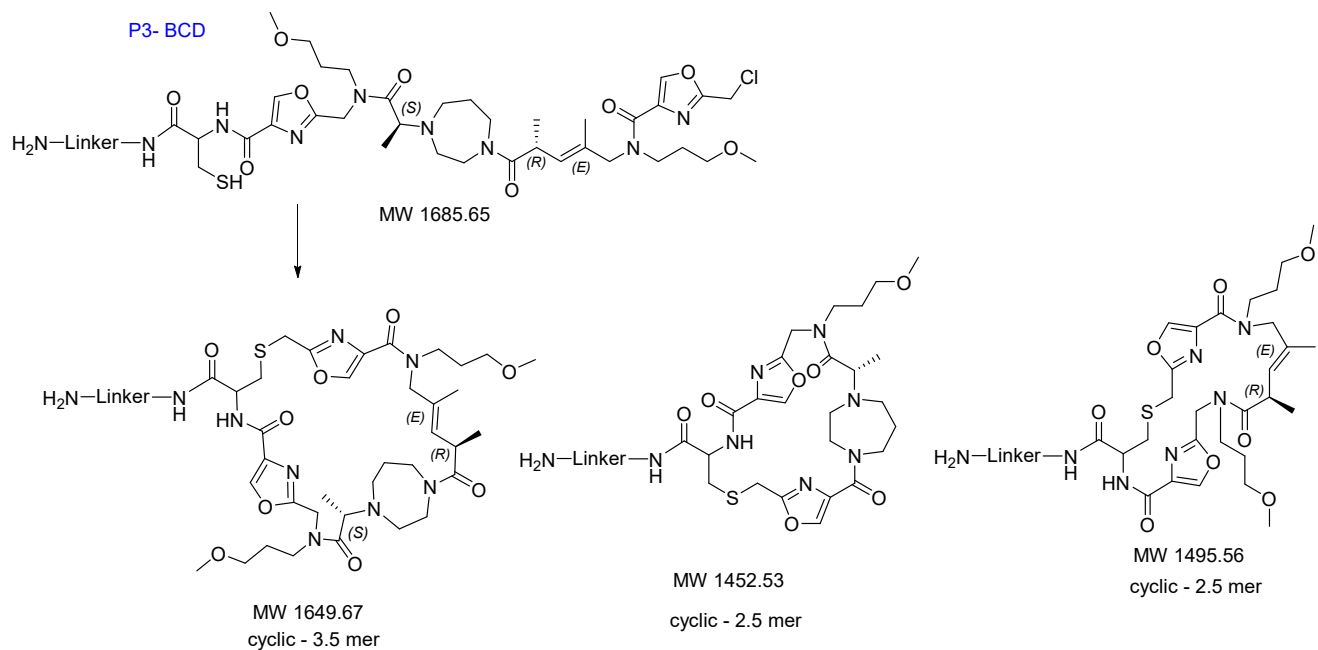
P2-[BBD]: Cyclization was complete on both 10 μm & 160 μm beads.

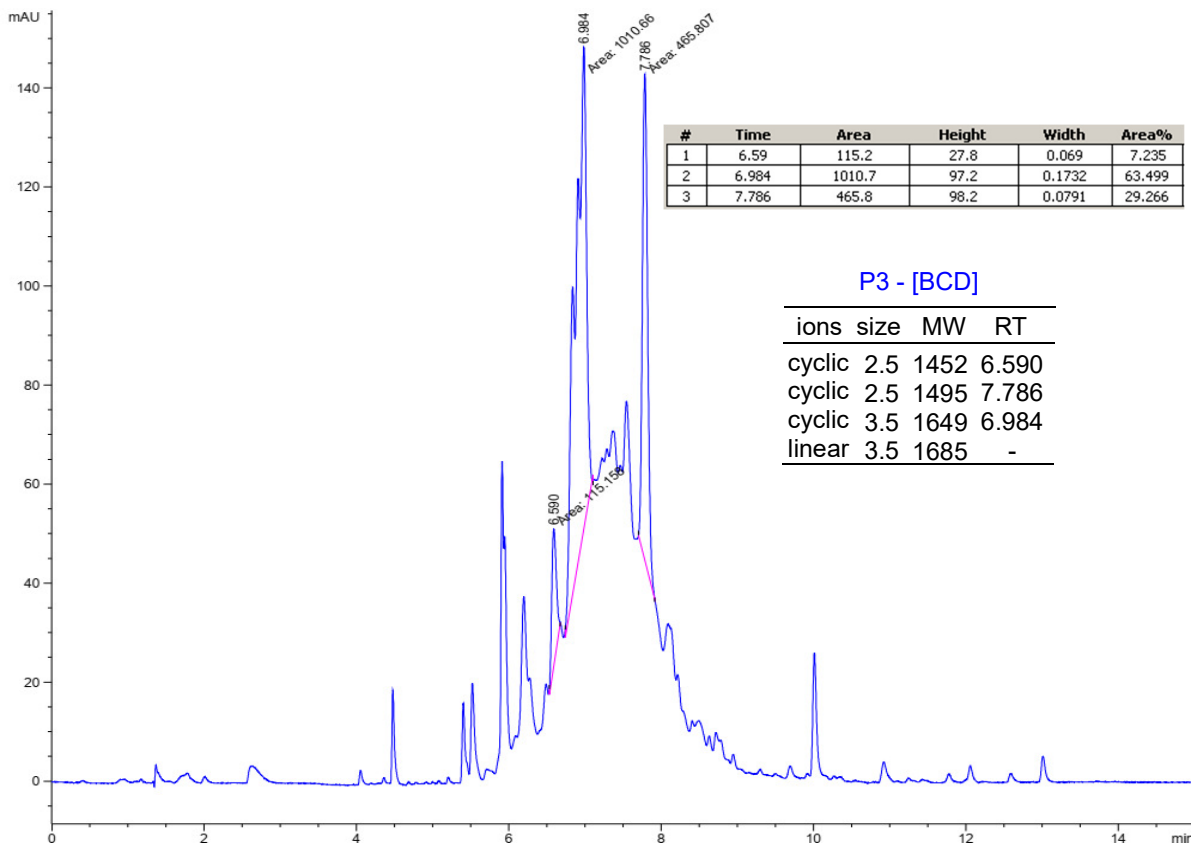






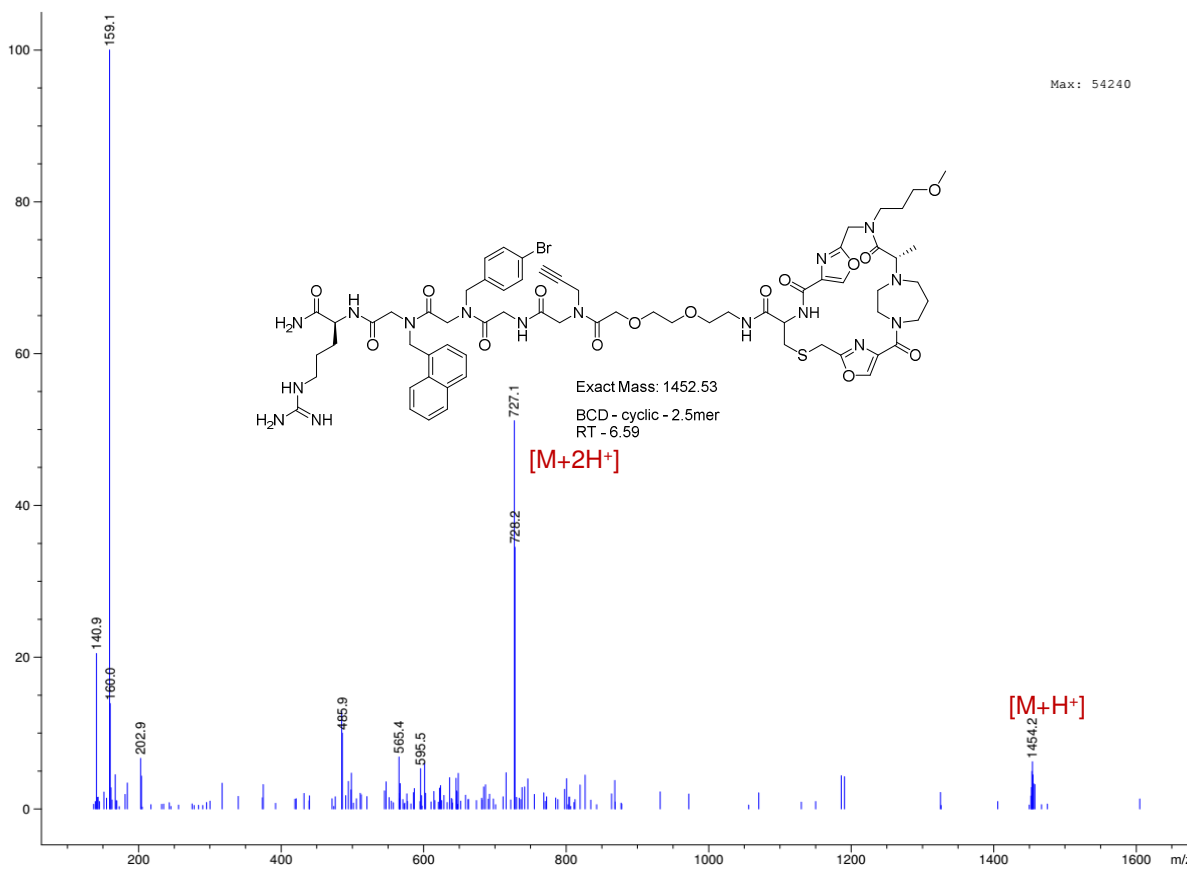
P3-[BCD]: Cyclization was complete on both 10 μm & 160 μm beads.

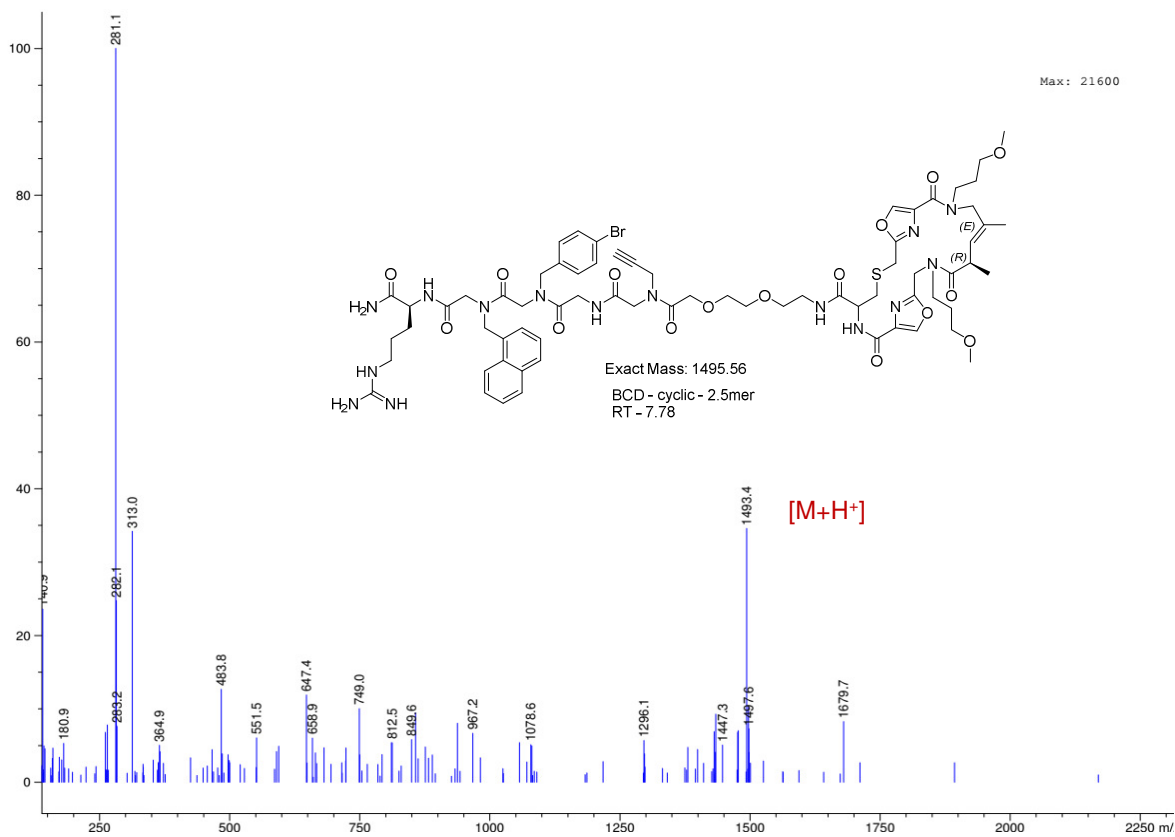
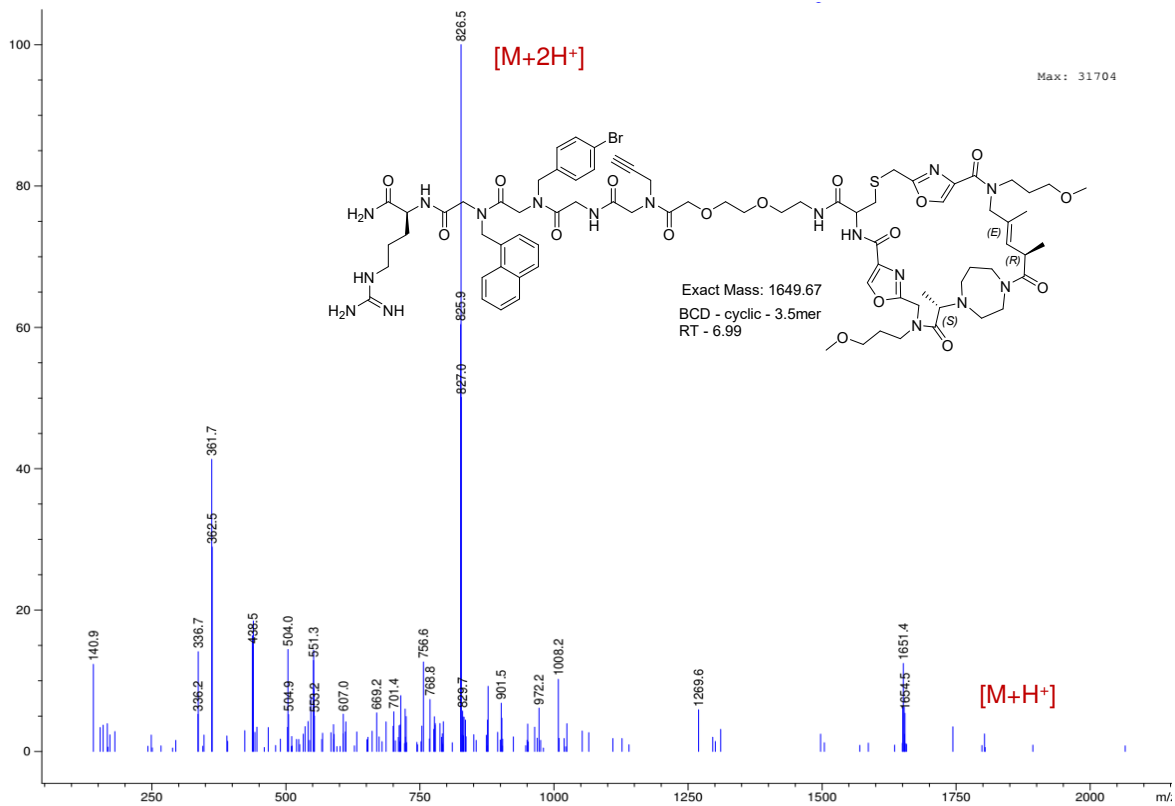


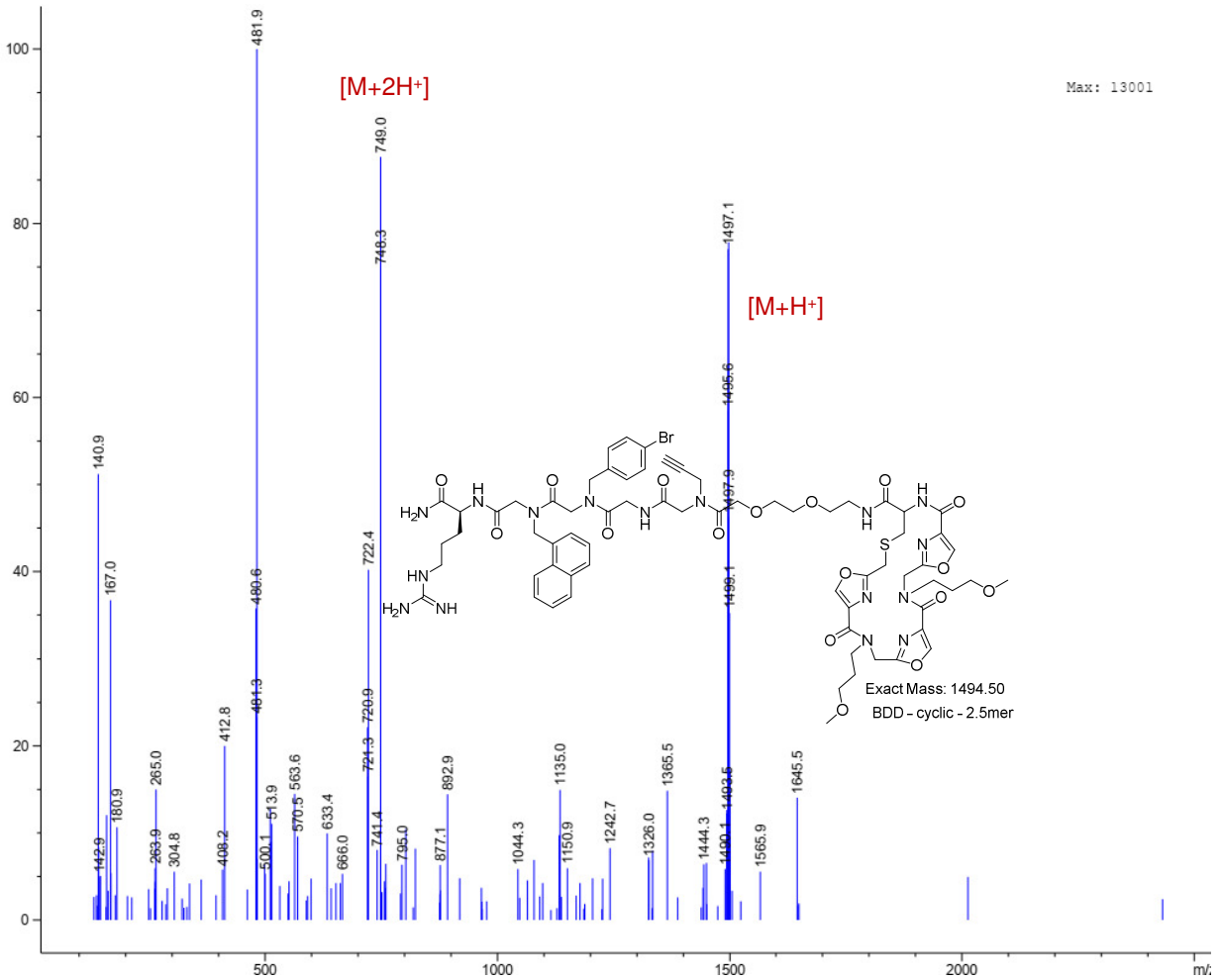


P3 - [BCD]

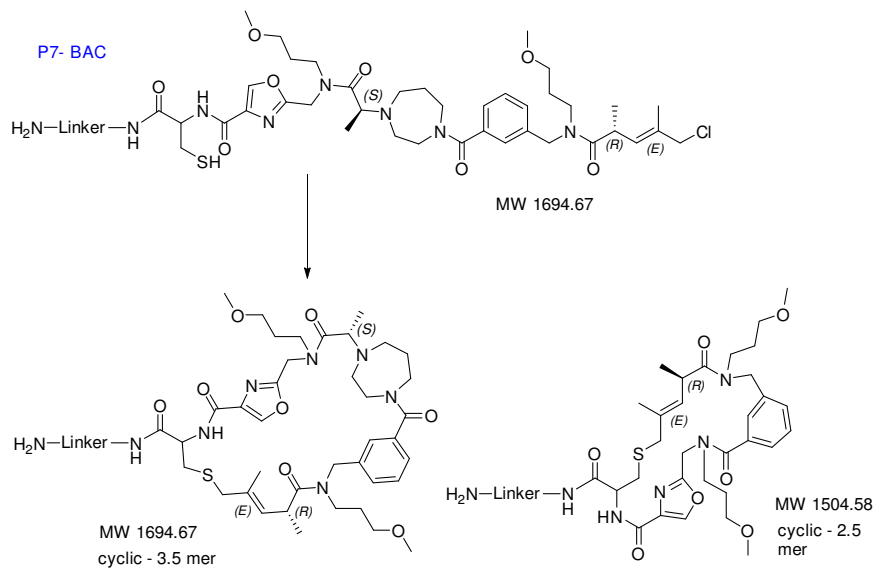
	ions size	MW	RT
cyclic	2.5	1452	6.590
cyclic	2.5	1495	7.786
cyclic	3.5	1649	6.984
linear	3.5	1685	-

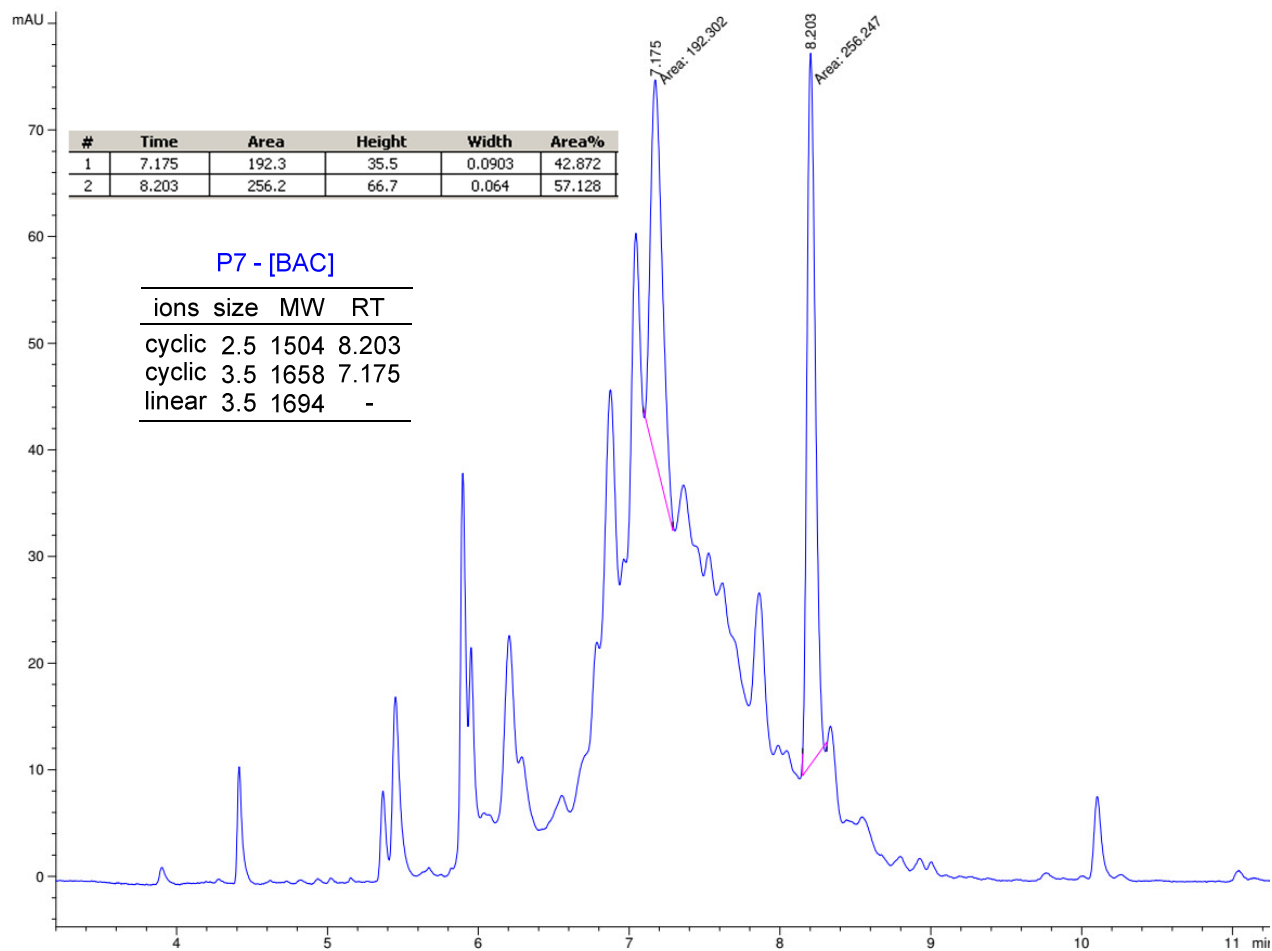
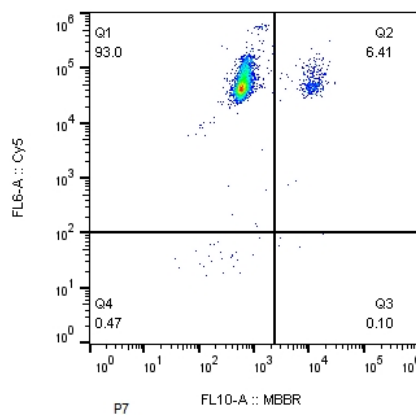
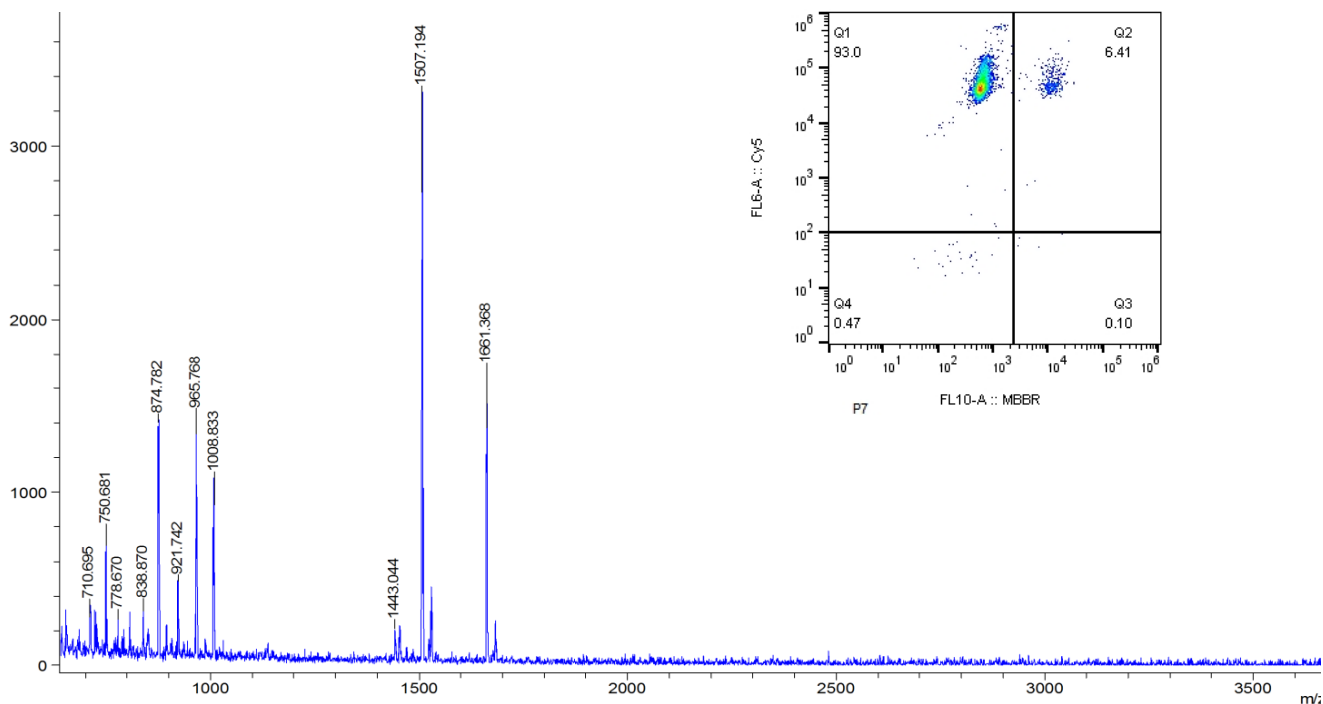


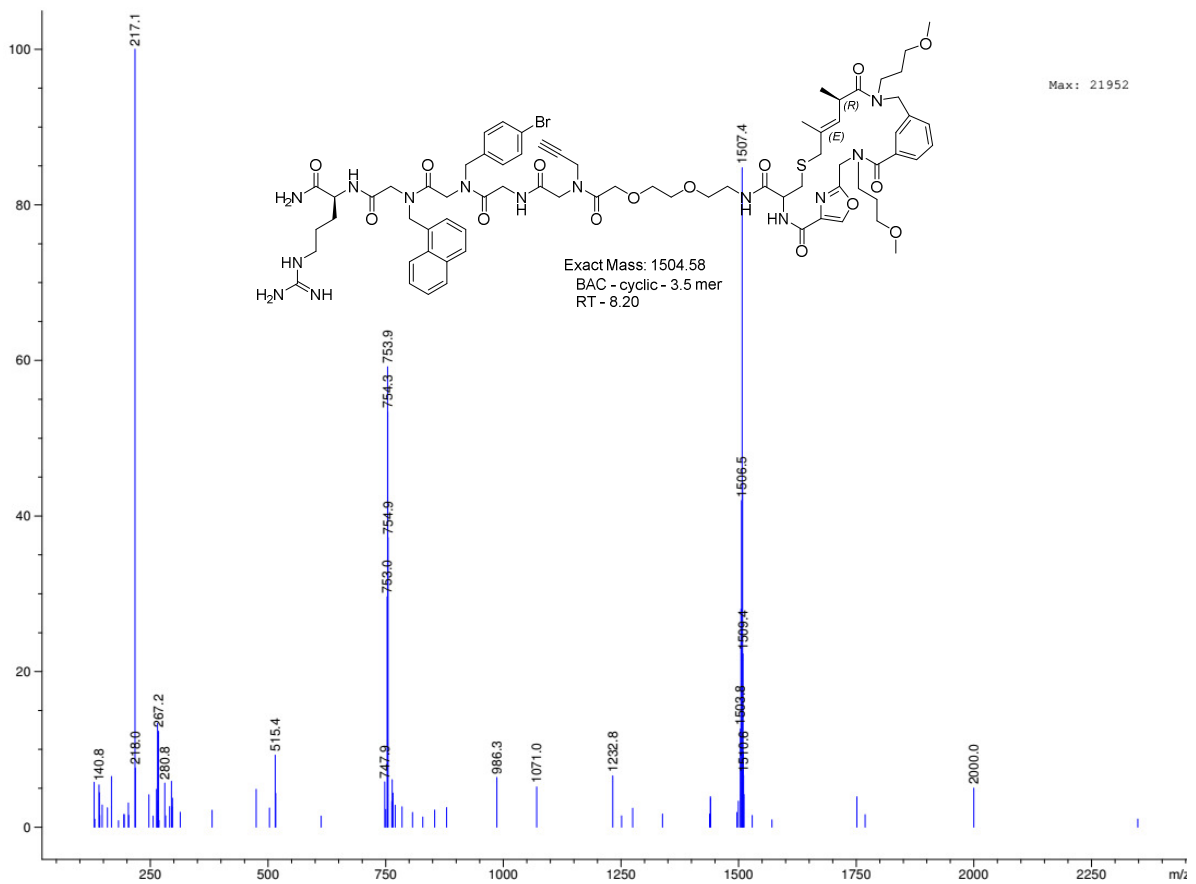
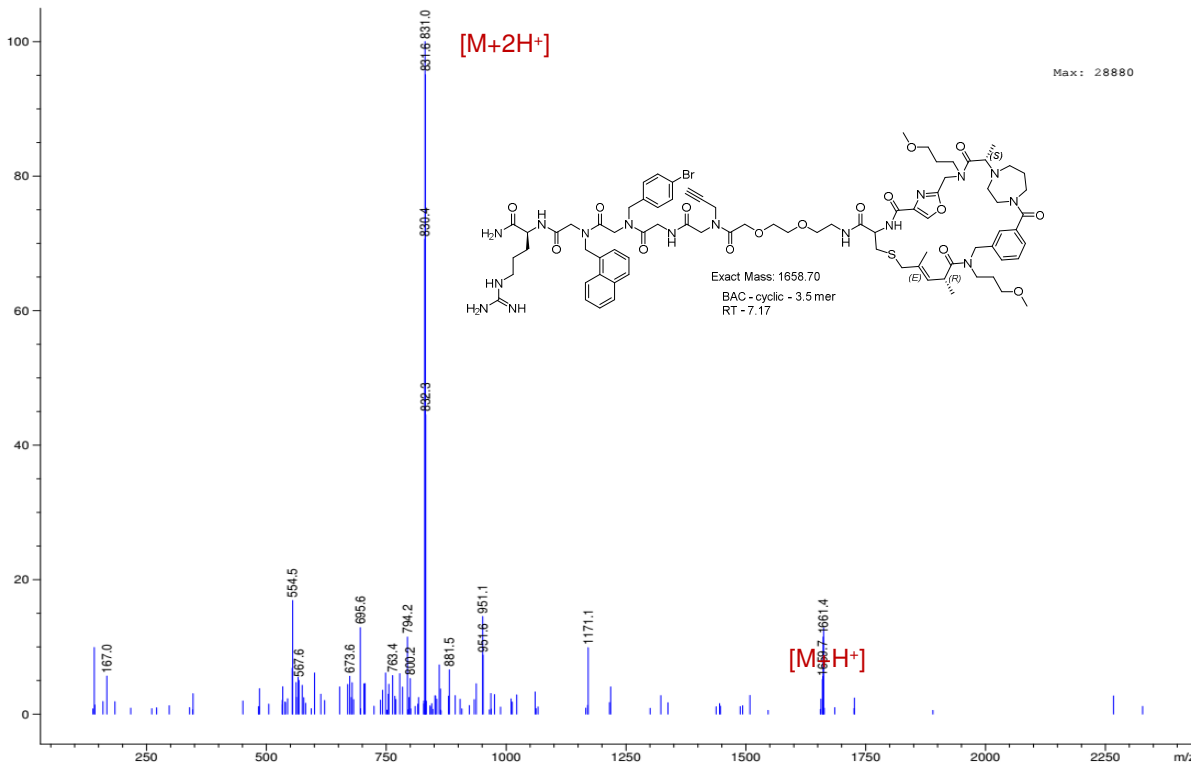




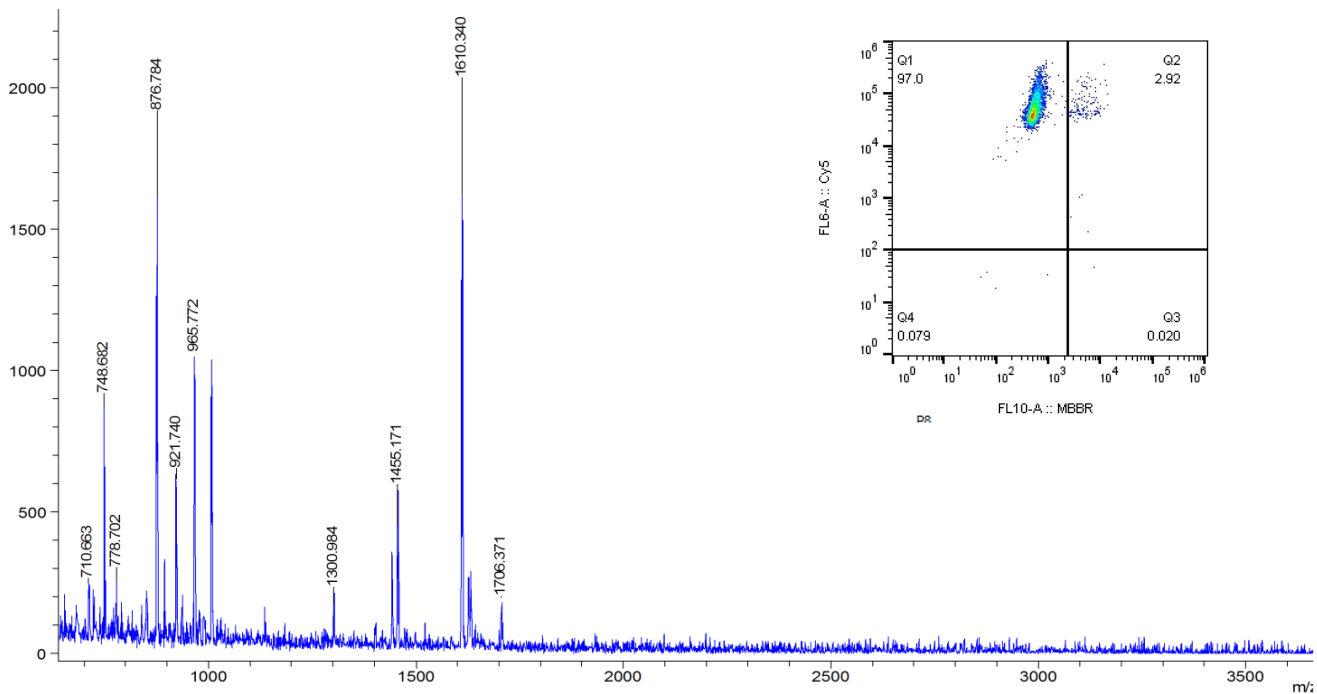
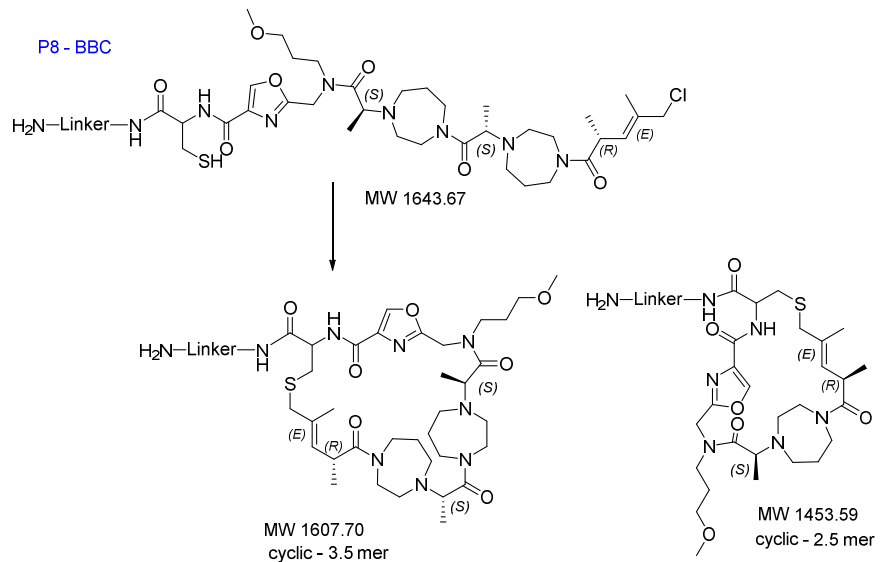
P7-[BAC]: Cyclization was complete on both 10 μm & 160 μm beads.

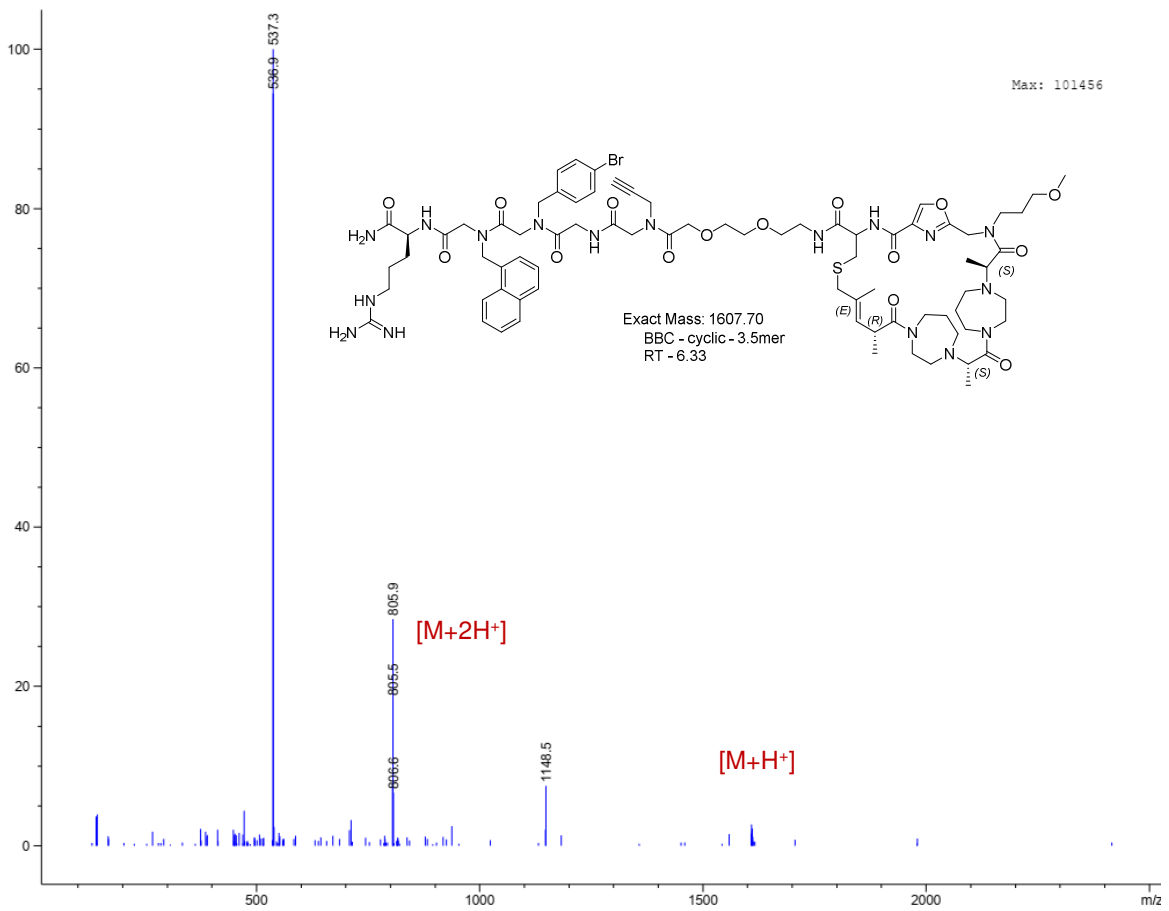
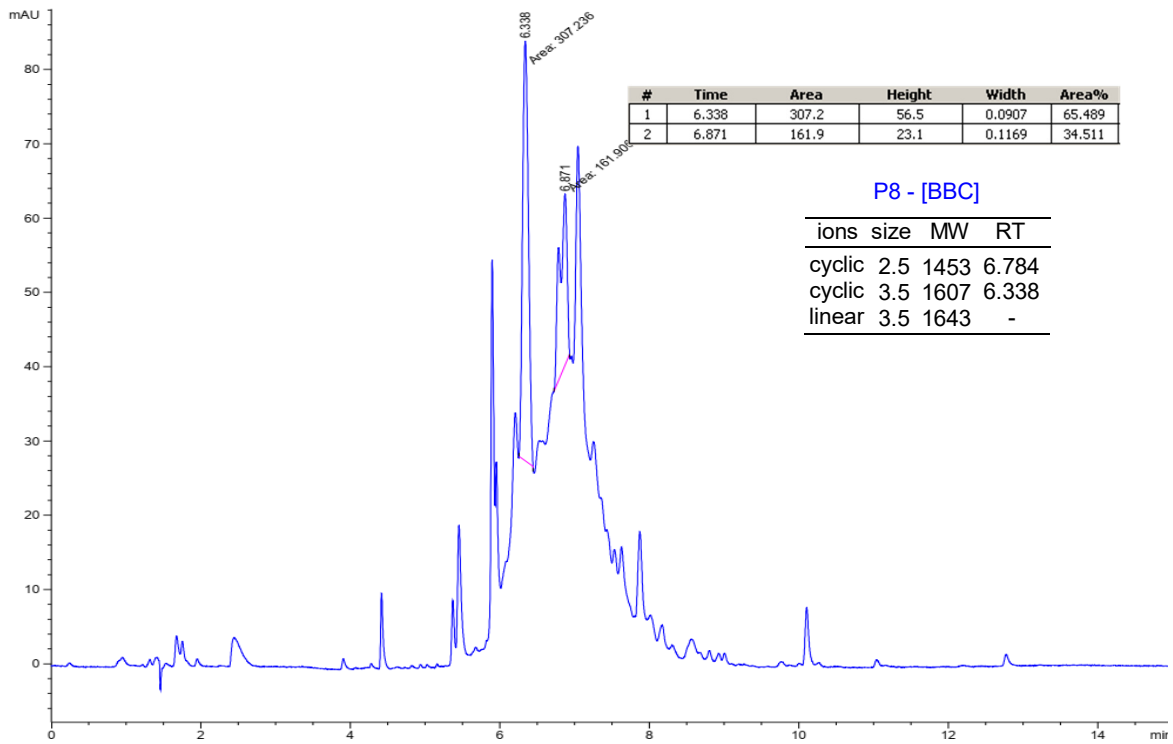


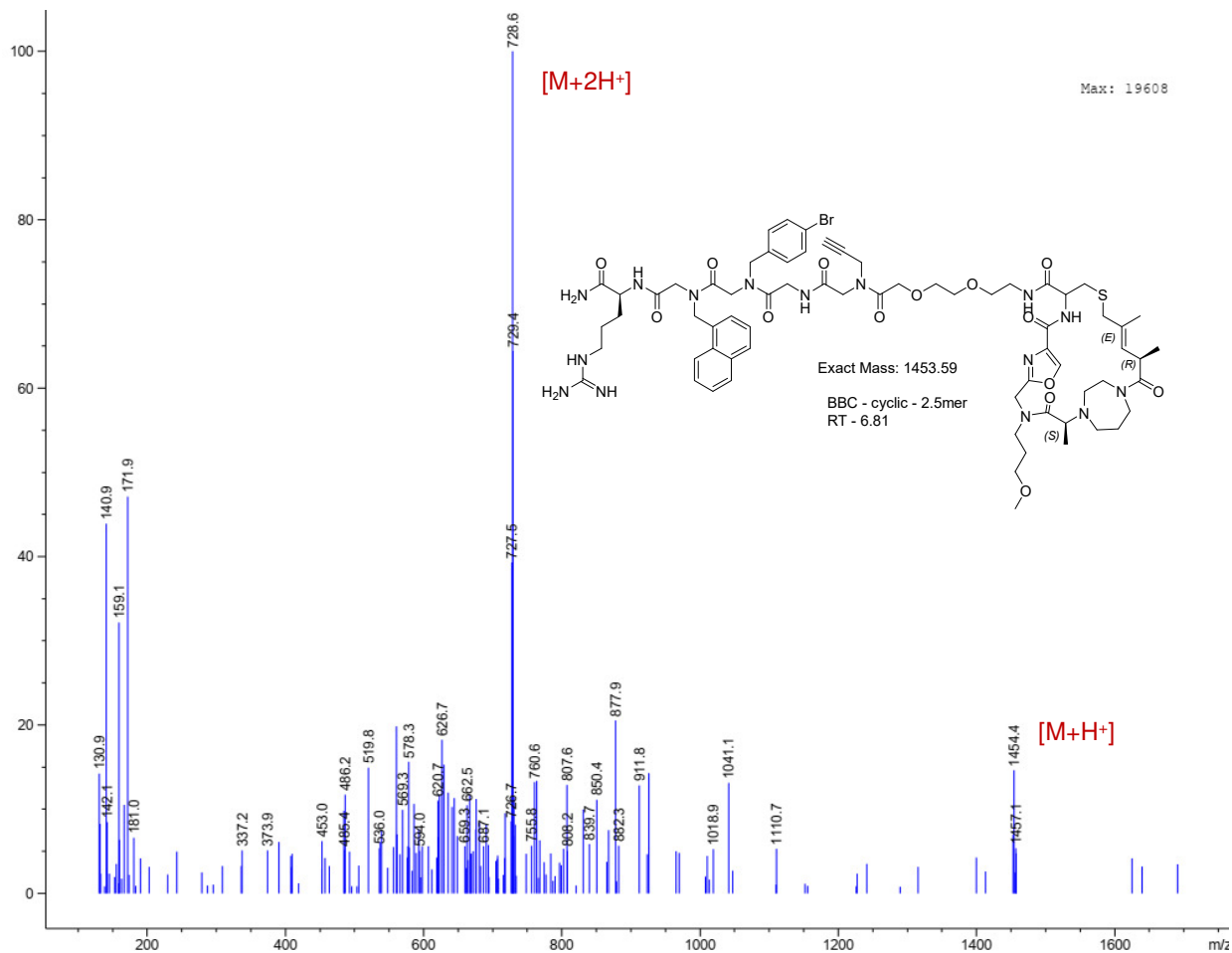




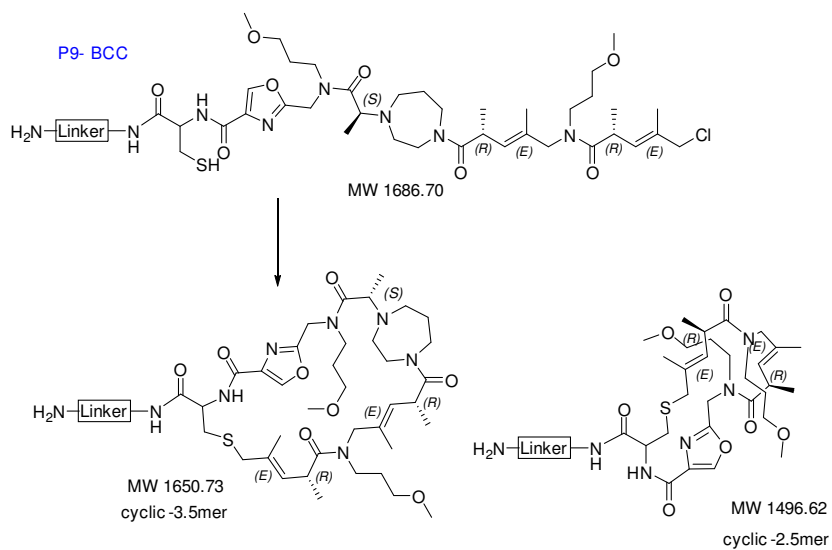
P8-[BBC]: Cyclization was complete on both 10 μm & 160 μm .

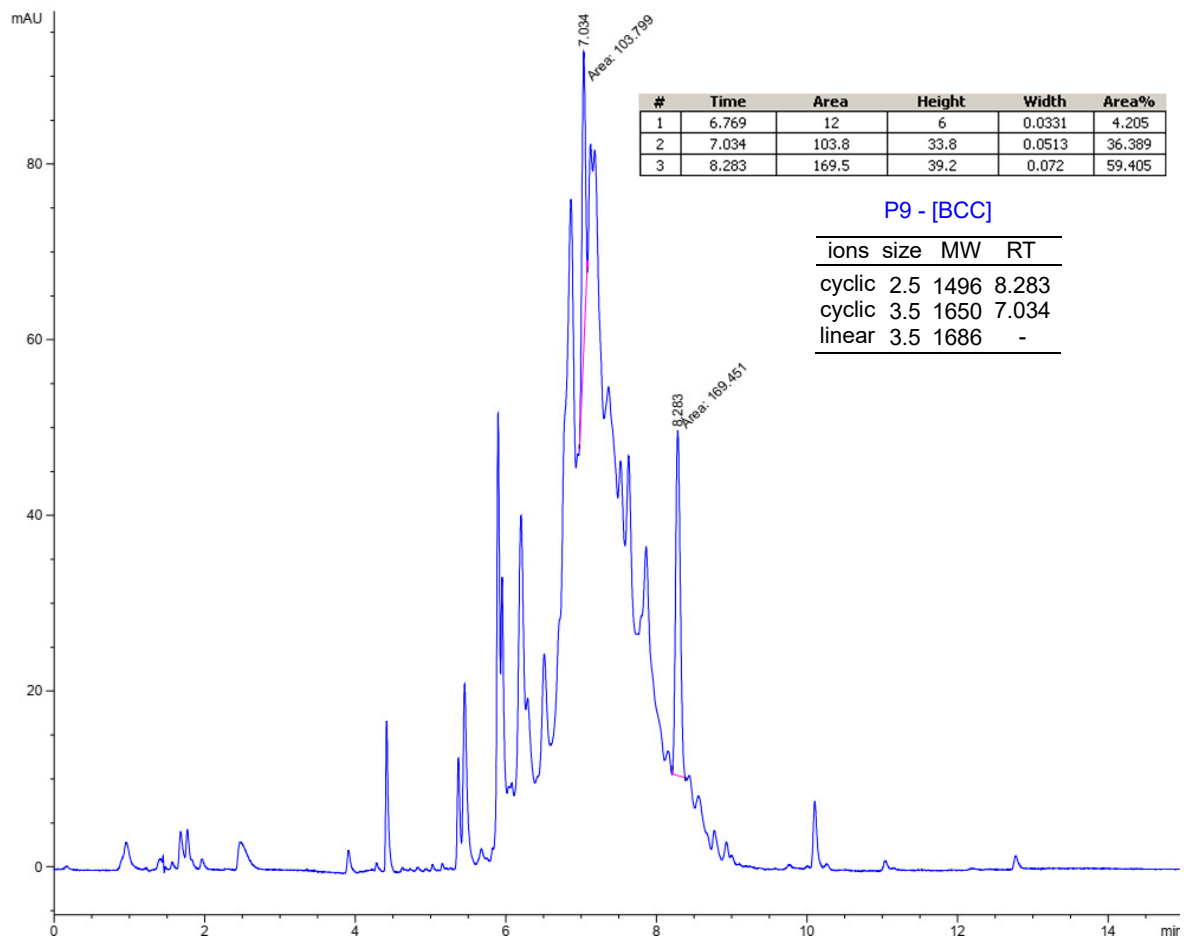
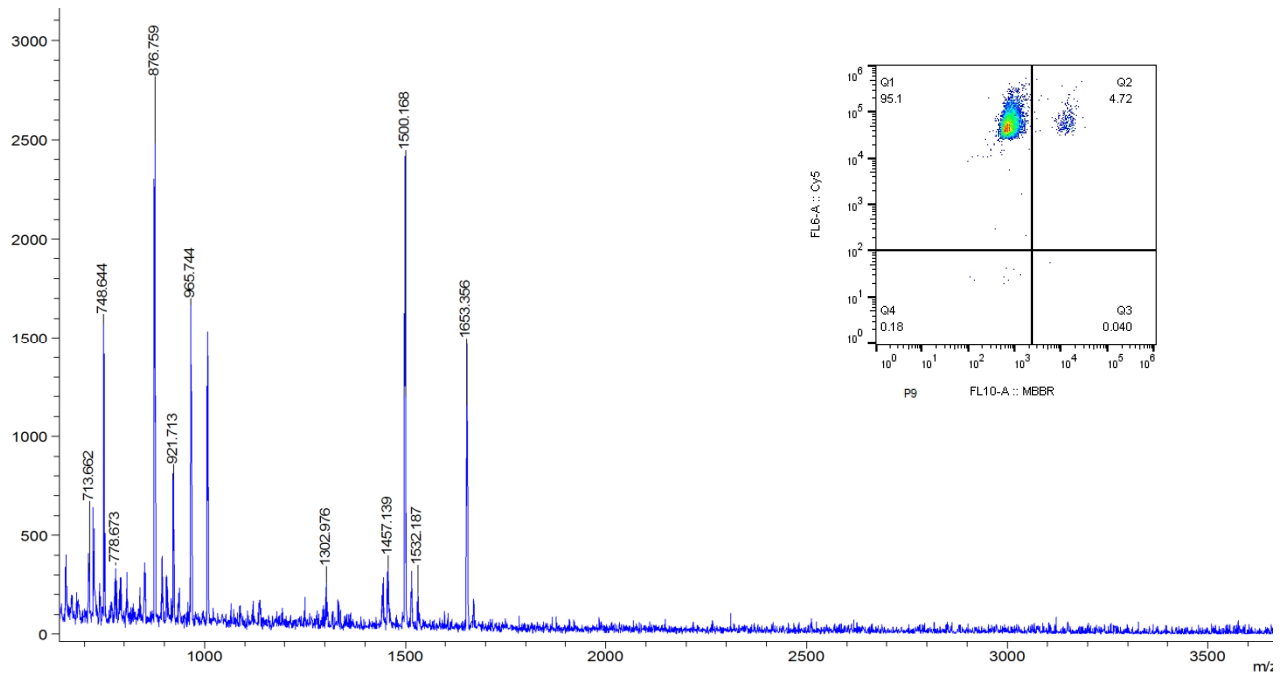


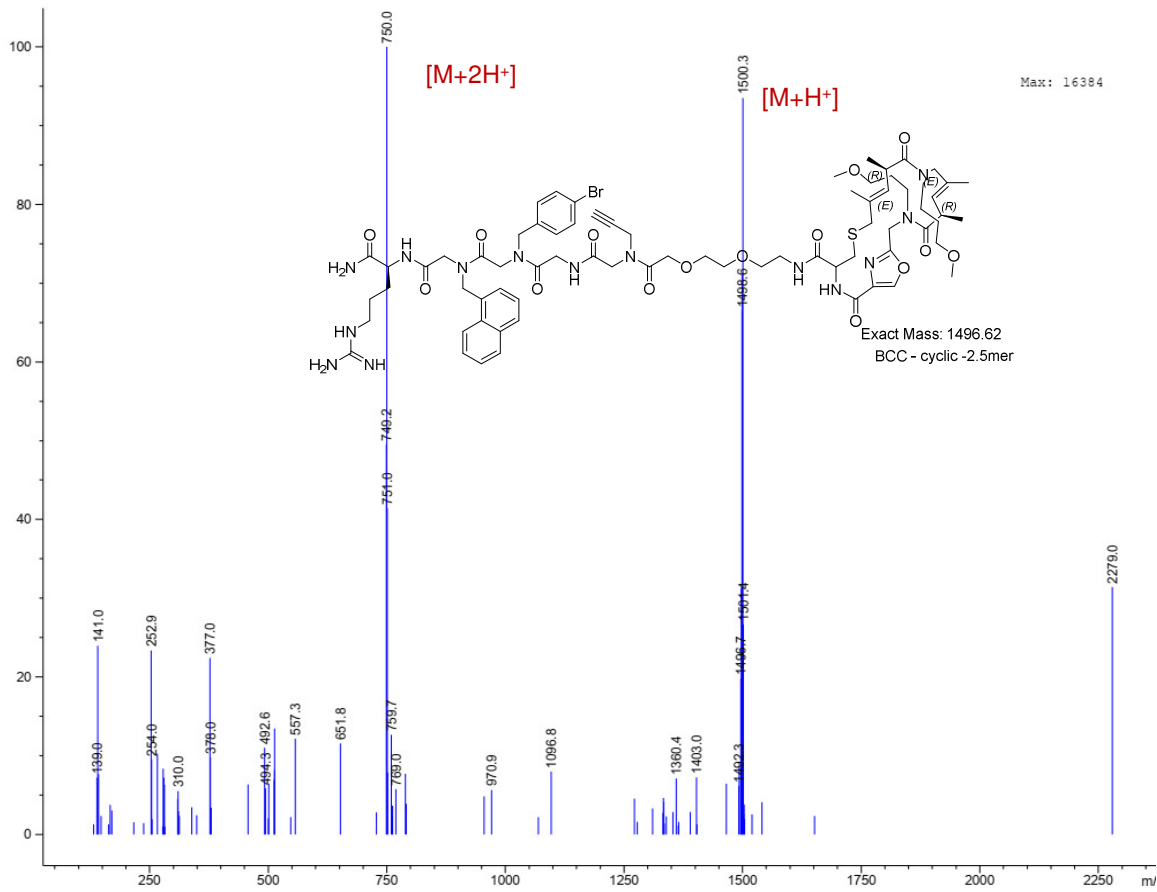
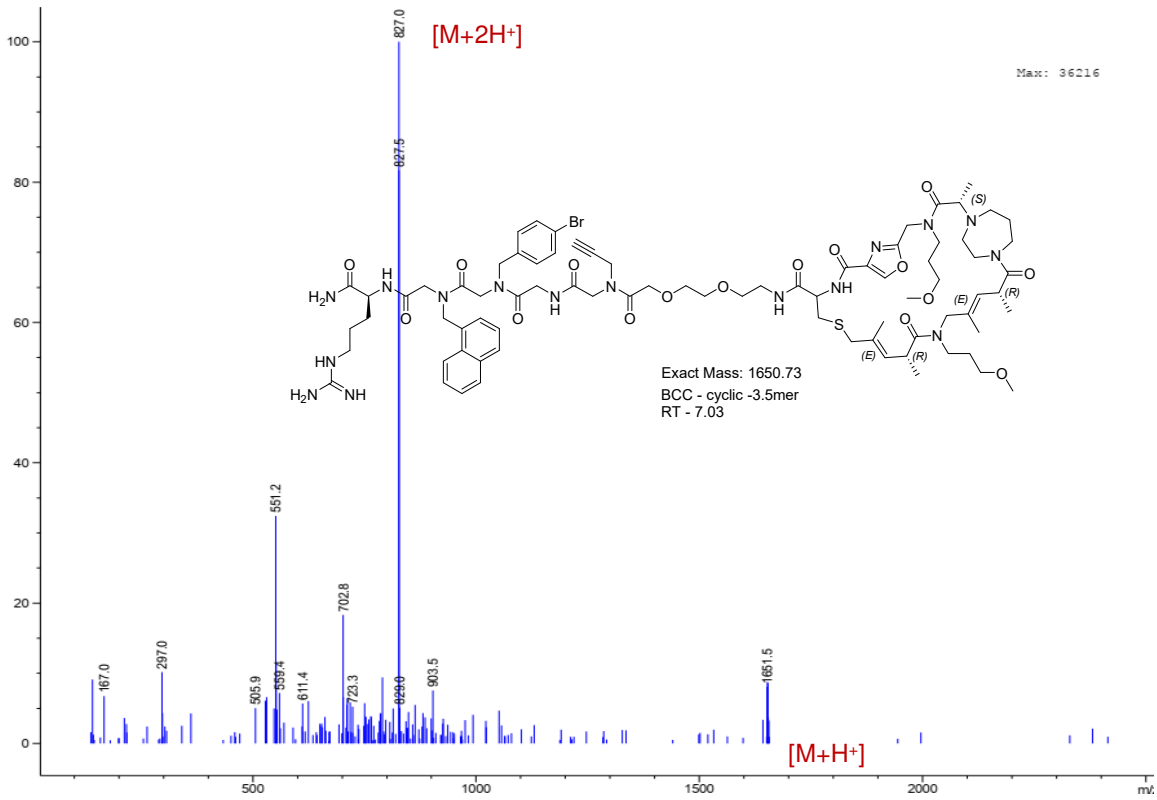




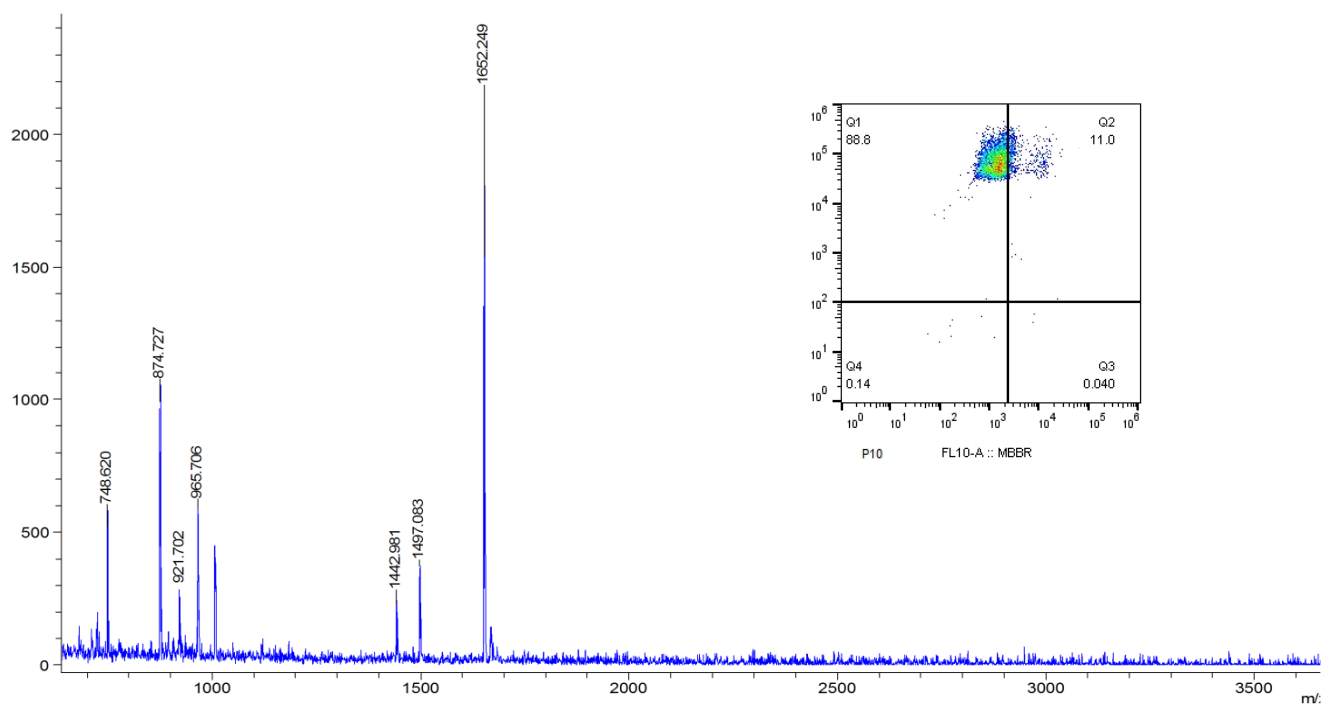
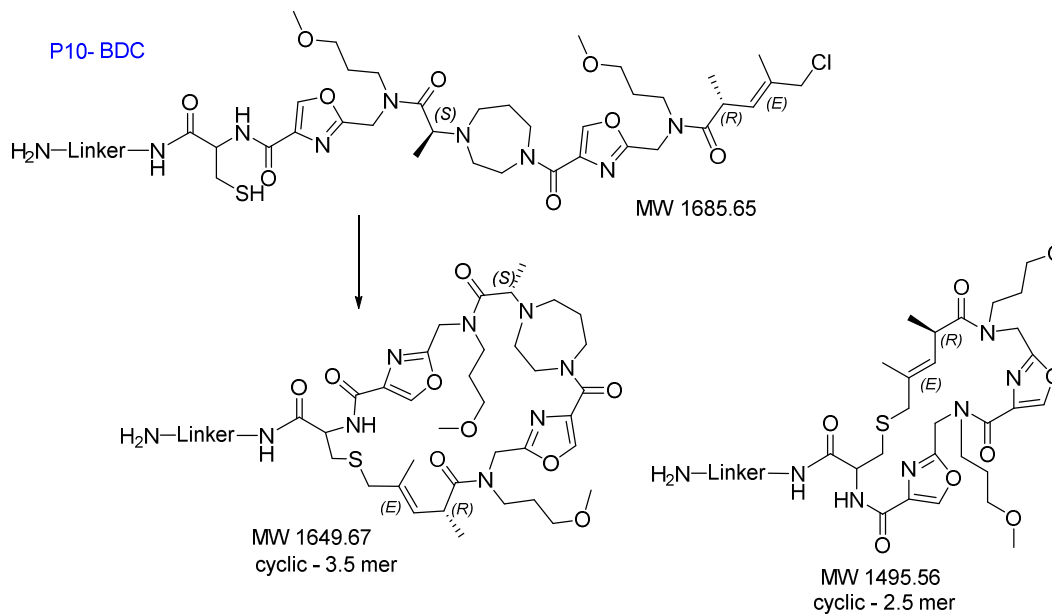
P9-[BCC]: Cyclization was complete on both 10 μm & 160 μm beads.

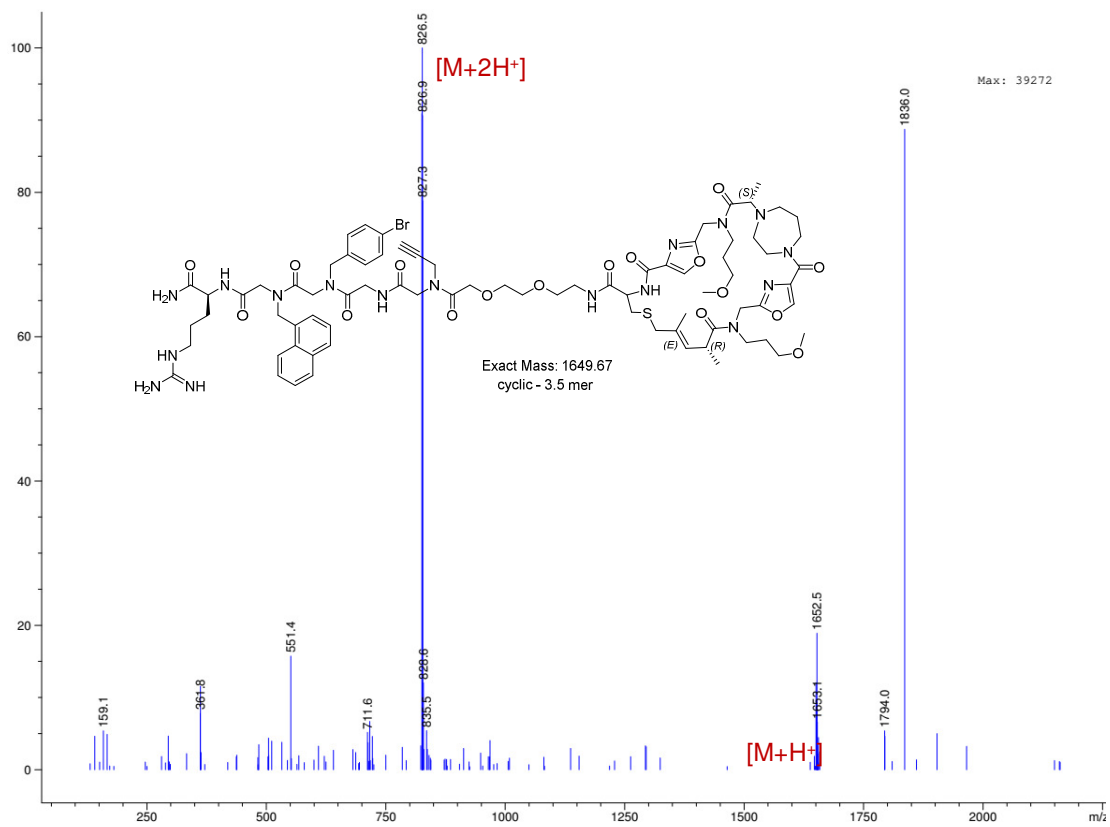
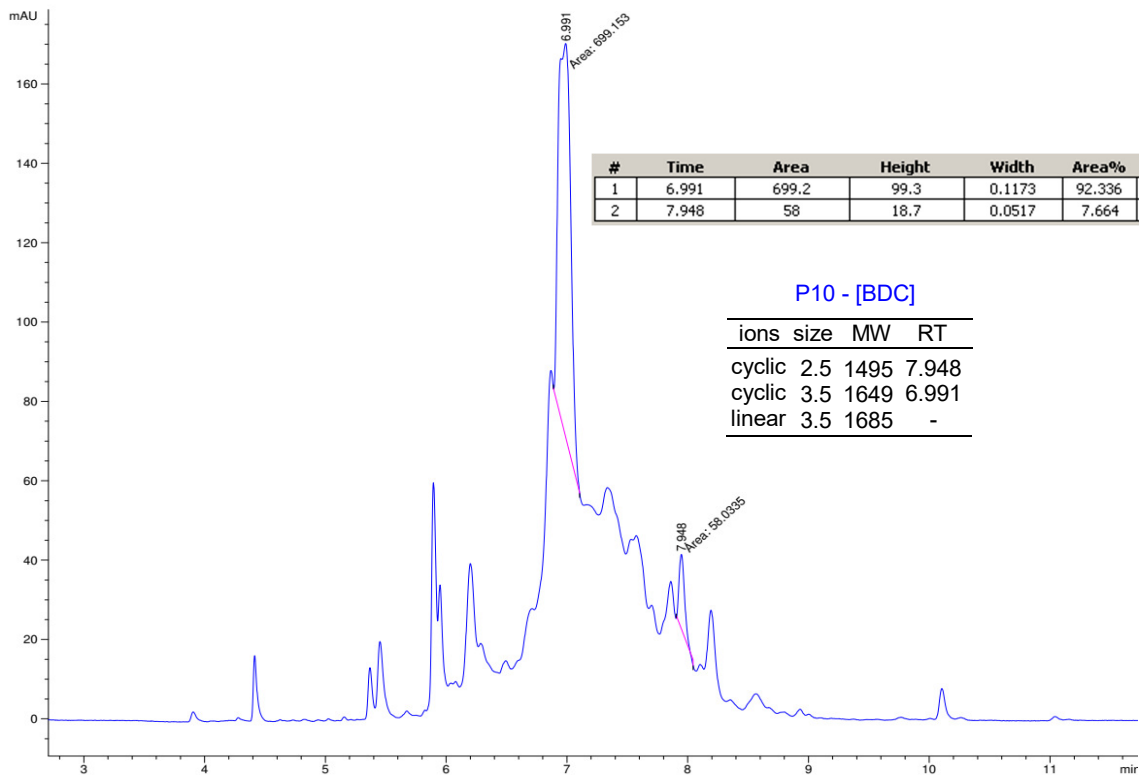


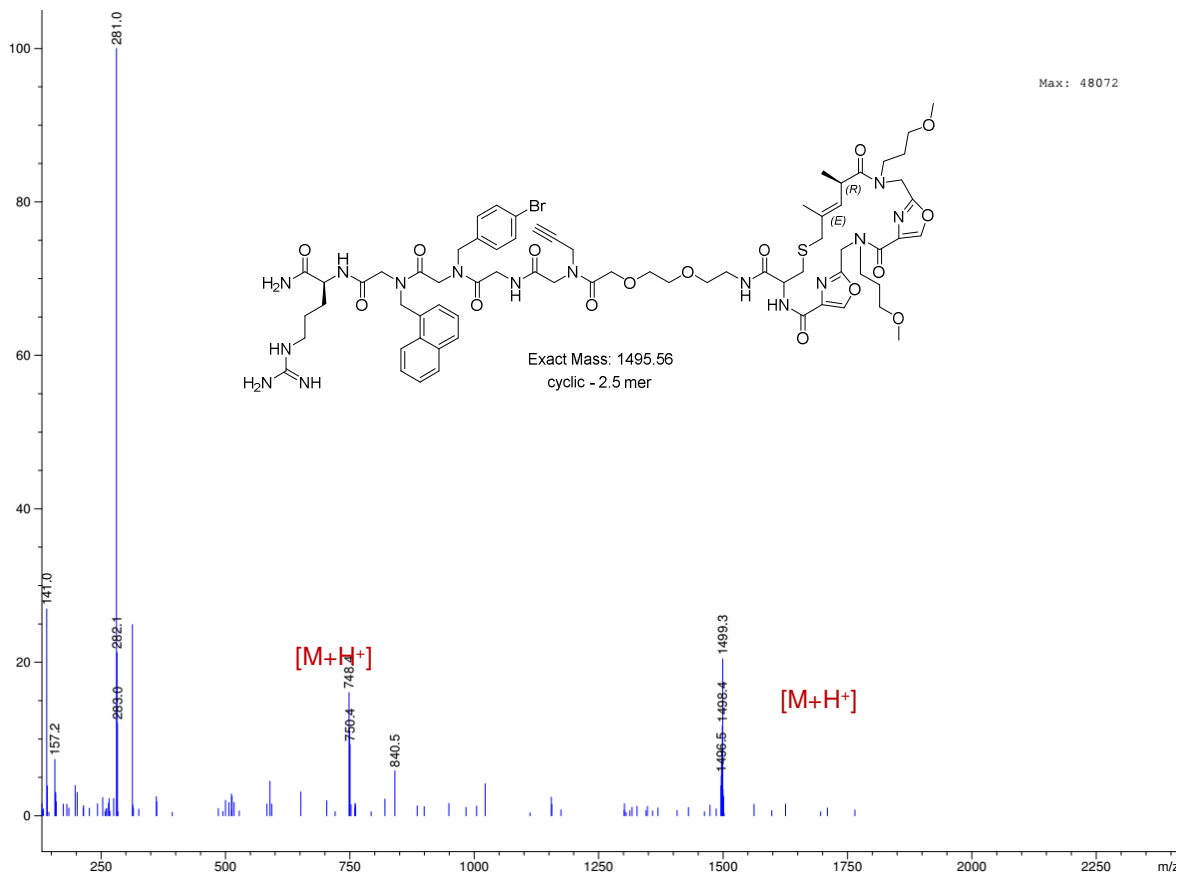




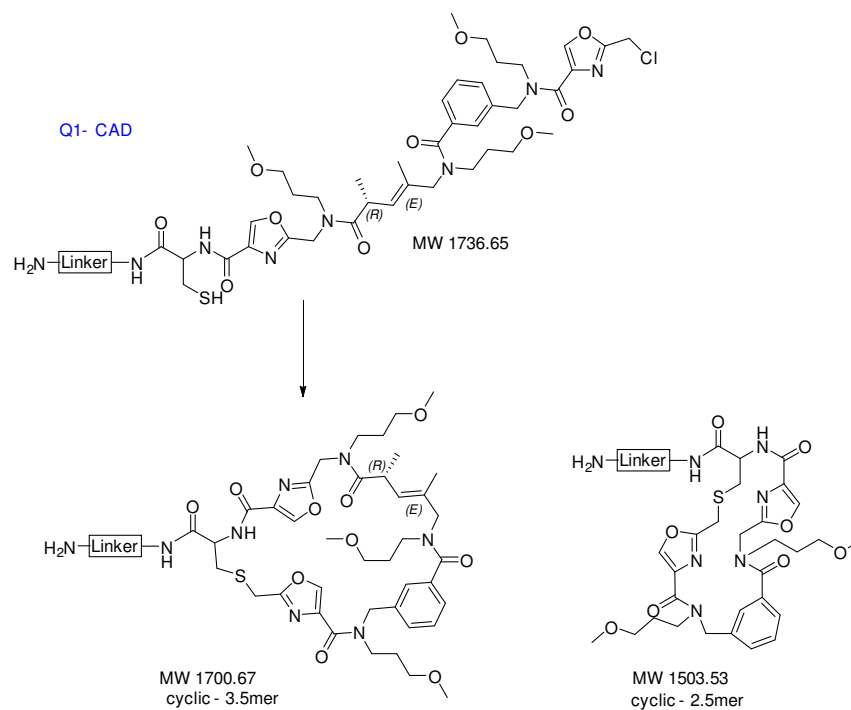
P10-[BDC]: Incomplete cyclization was detected on 10 μm but was complete on 160 μm beads.

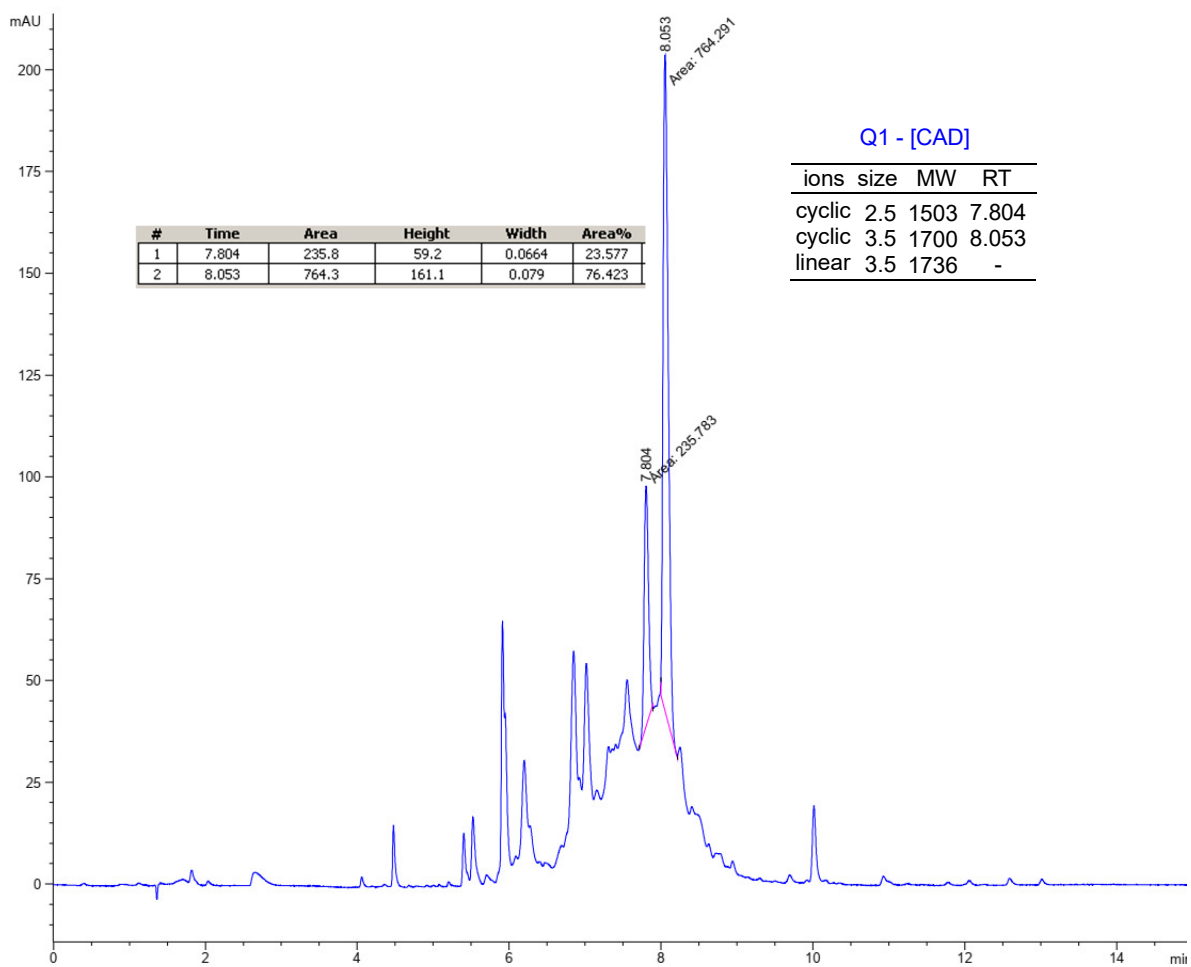
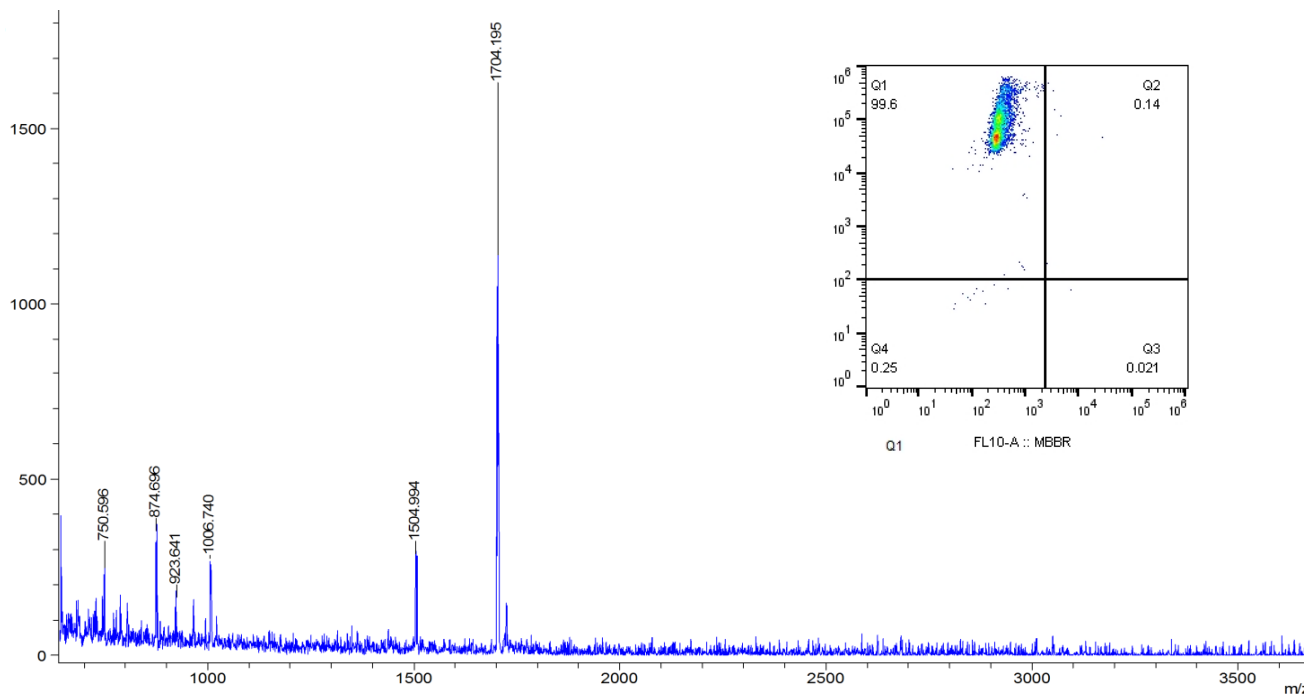


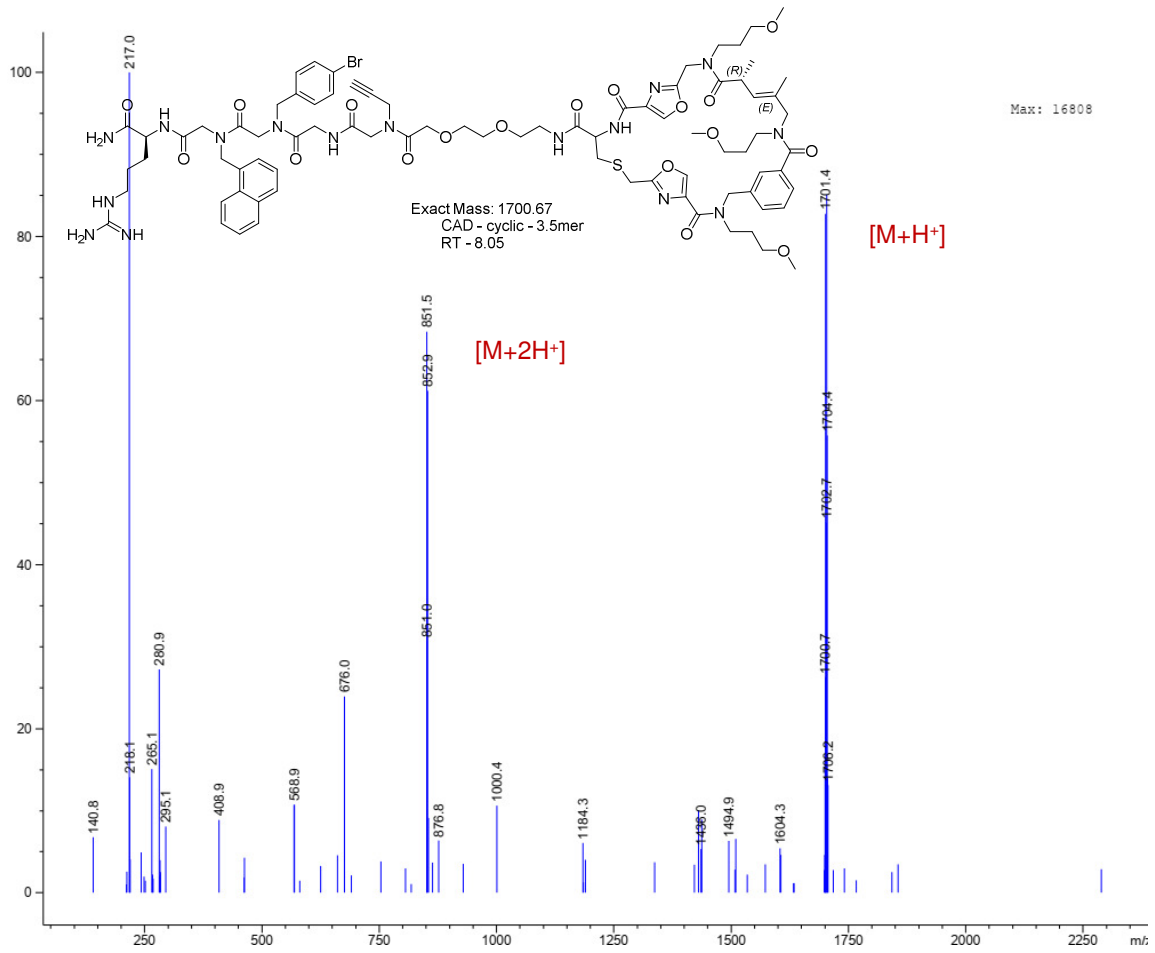
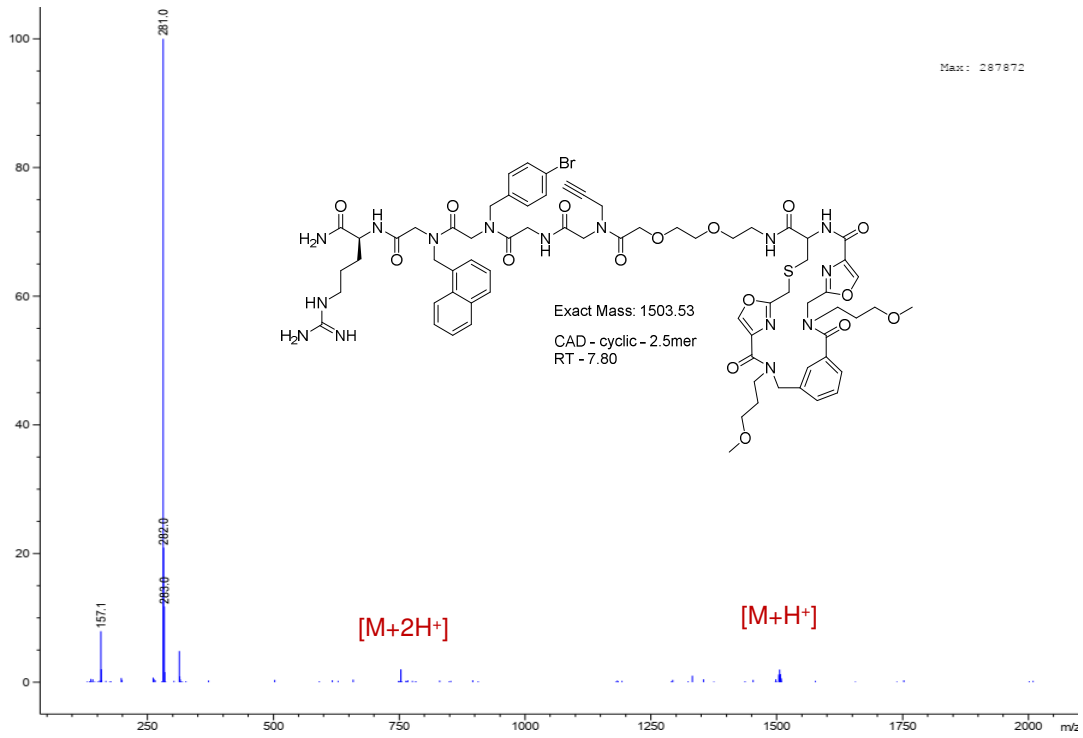




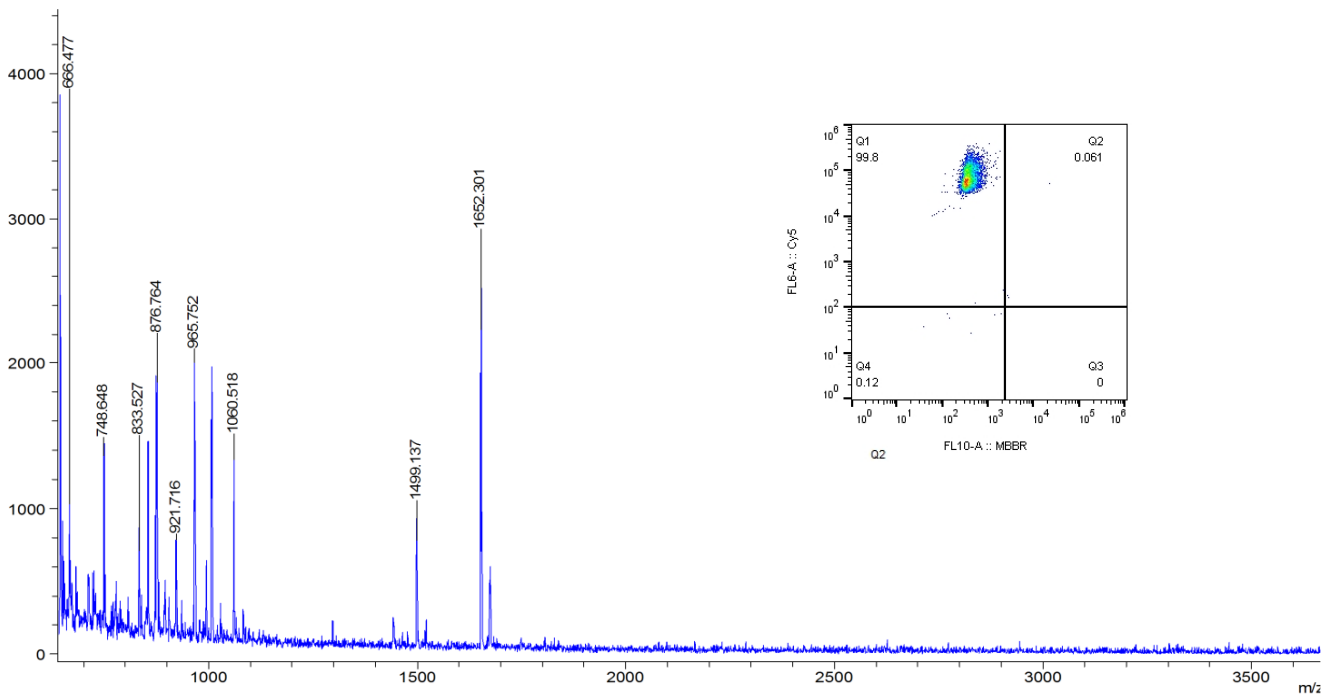
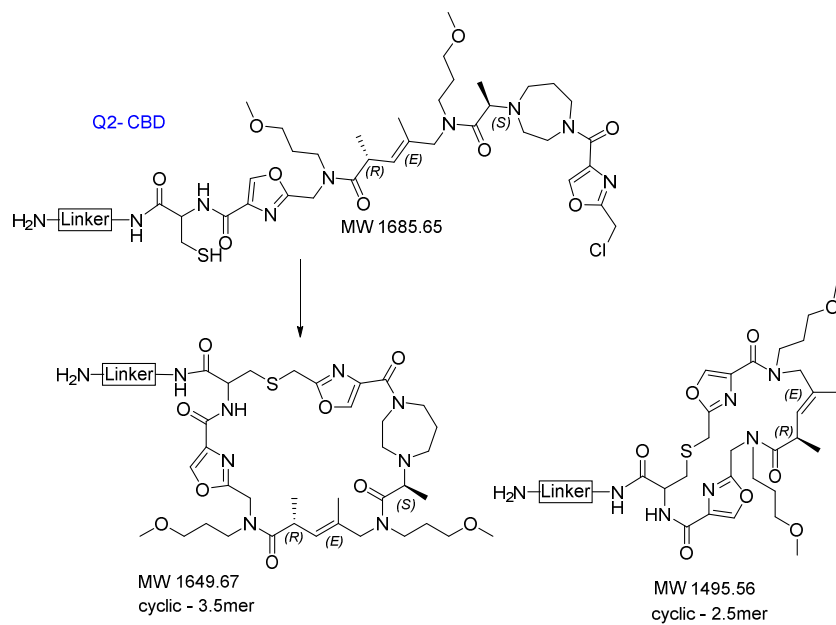
Q1-[CAD]: Cyclization was complete on both 10 μm & 160 μm beads.

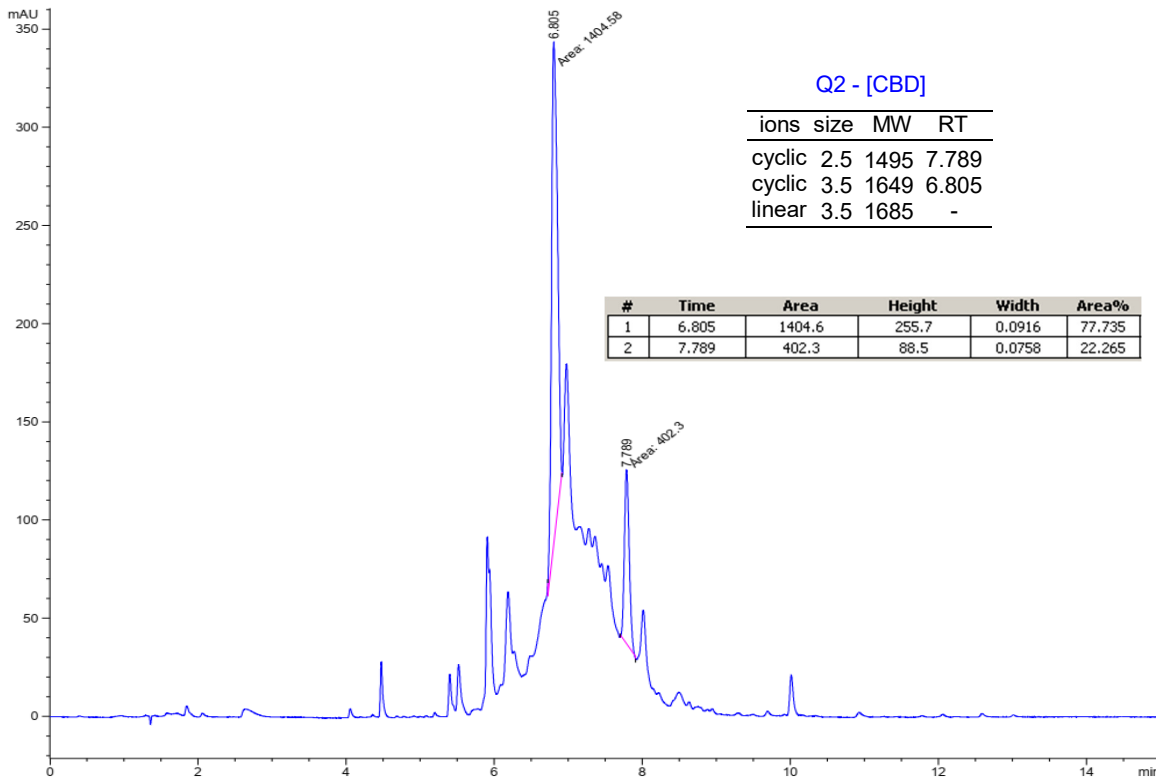






Q2-[CBD]: Cyclization was complete on both 10 μm & 160 μm beads.

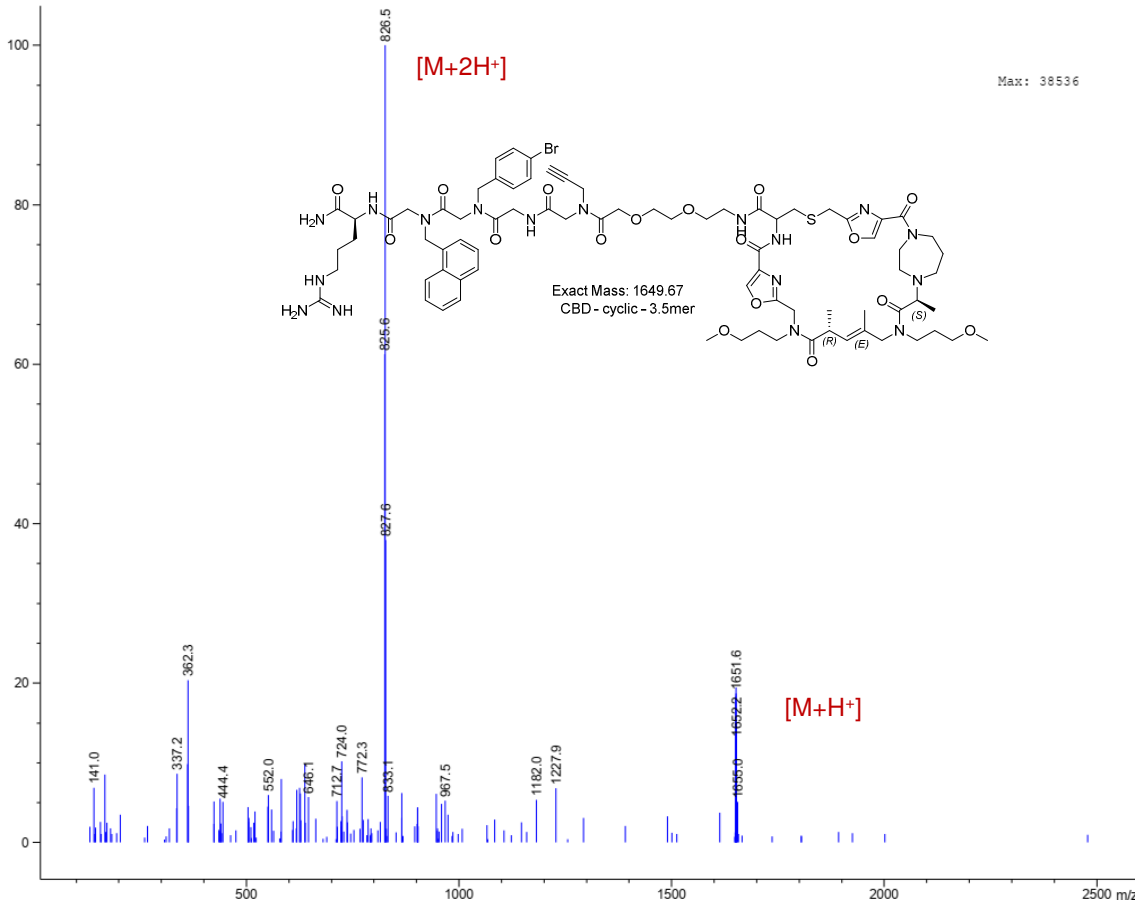


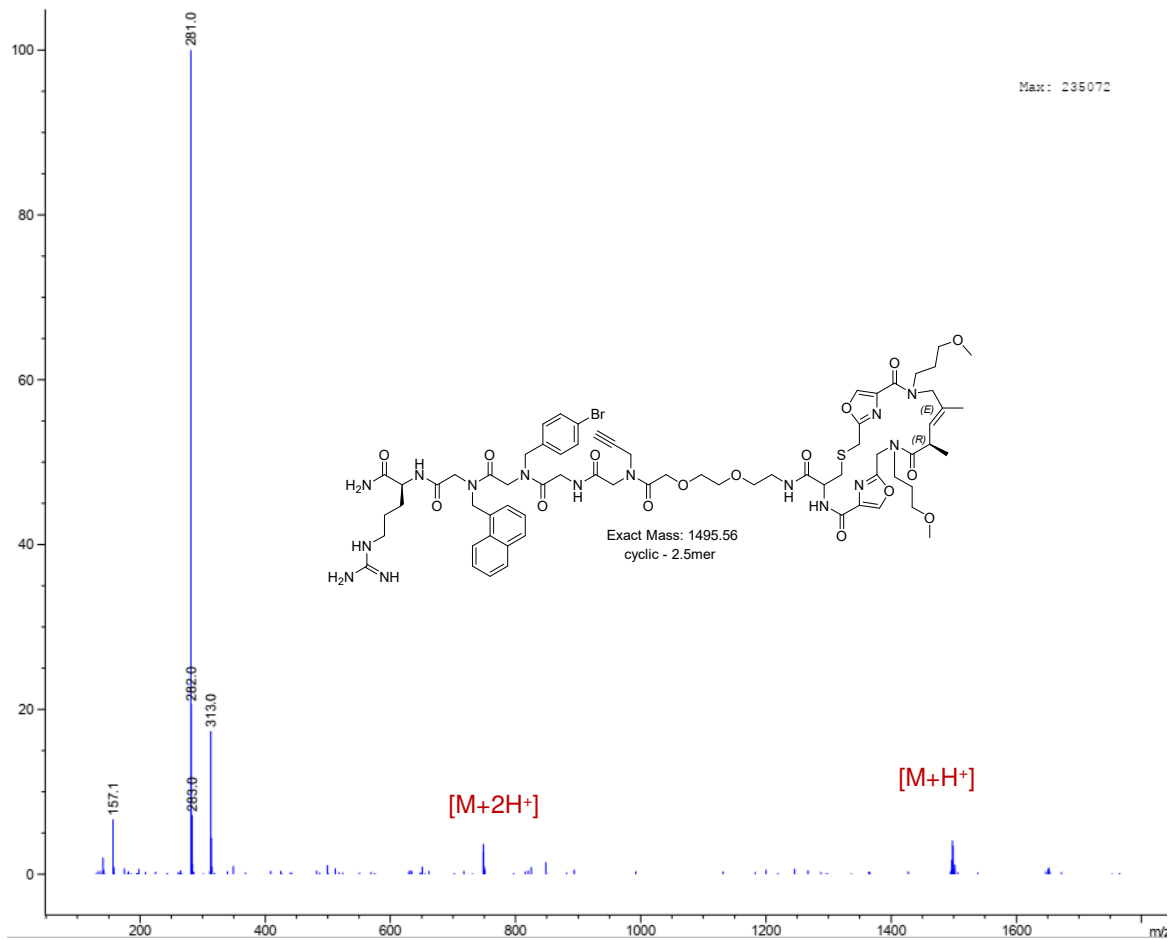


Q2 - [CBD]

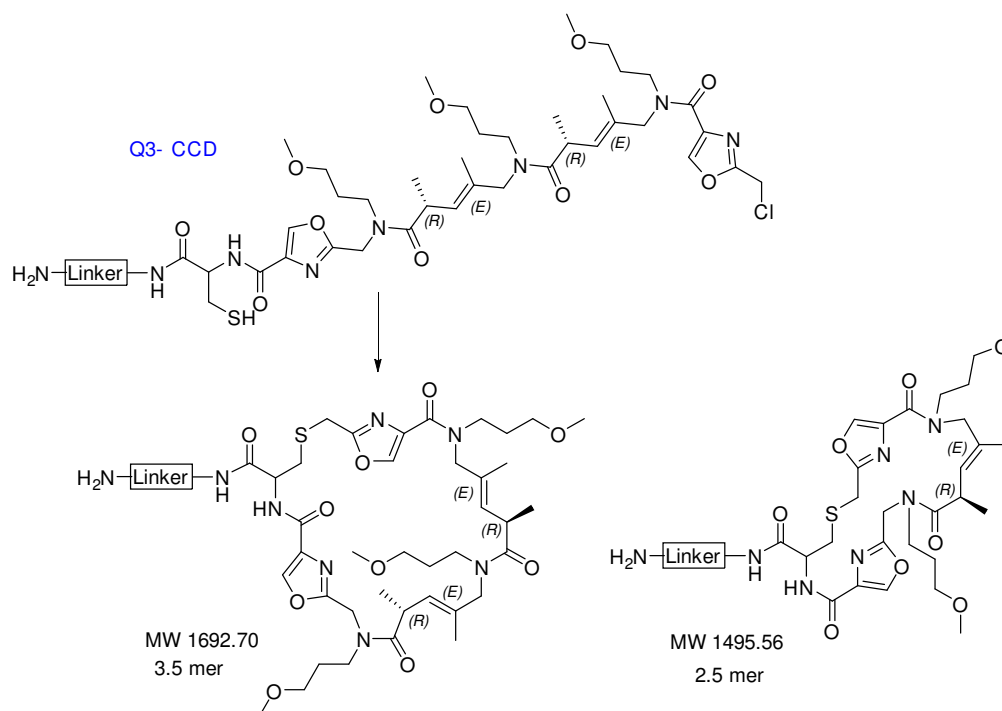
ions	size	MW	RT
cyclic	2.5	1495	7.789
cyclic	3.5	1649	6.805
linear	3.5	1685	-

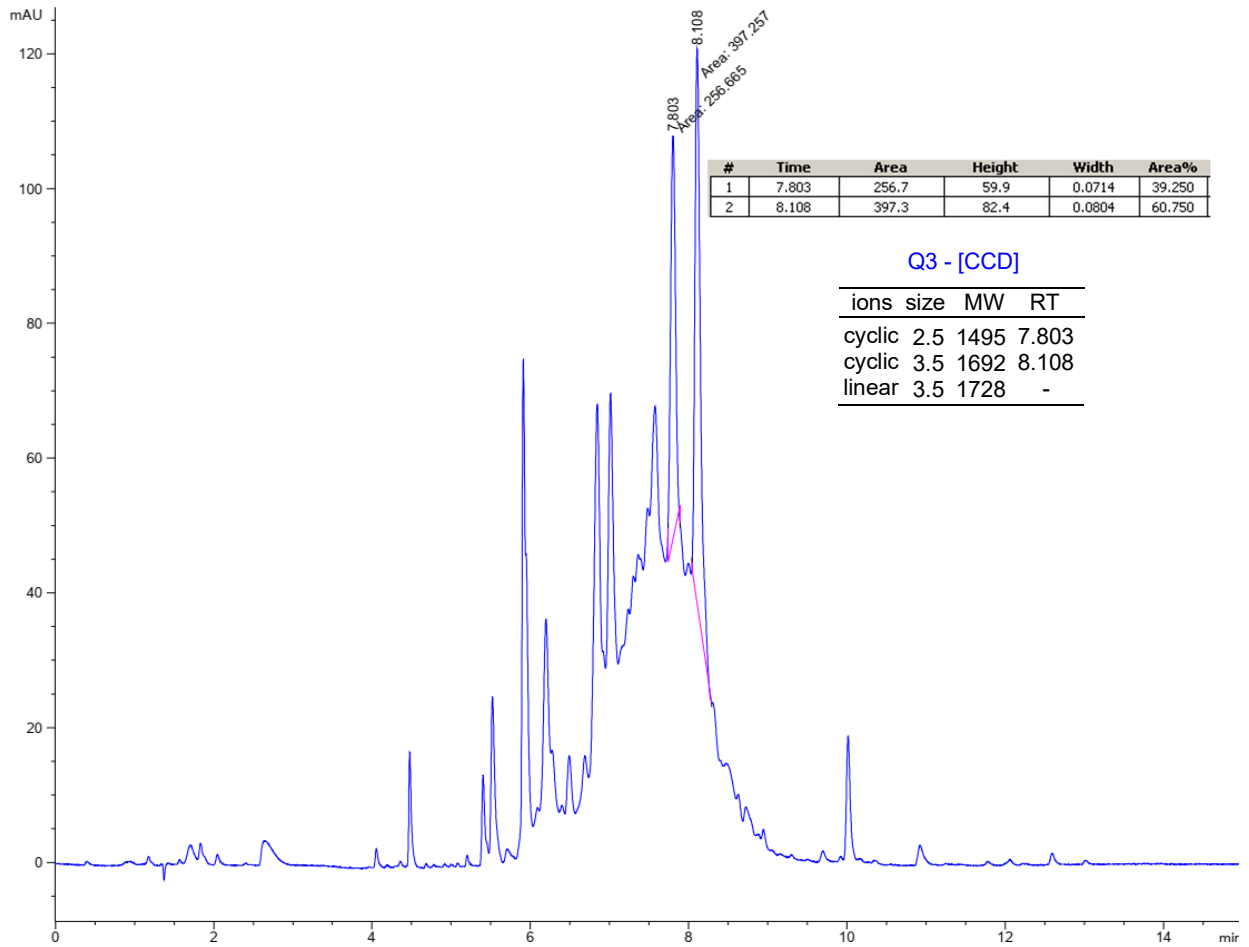
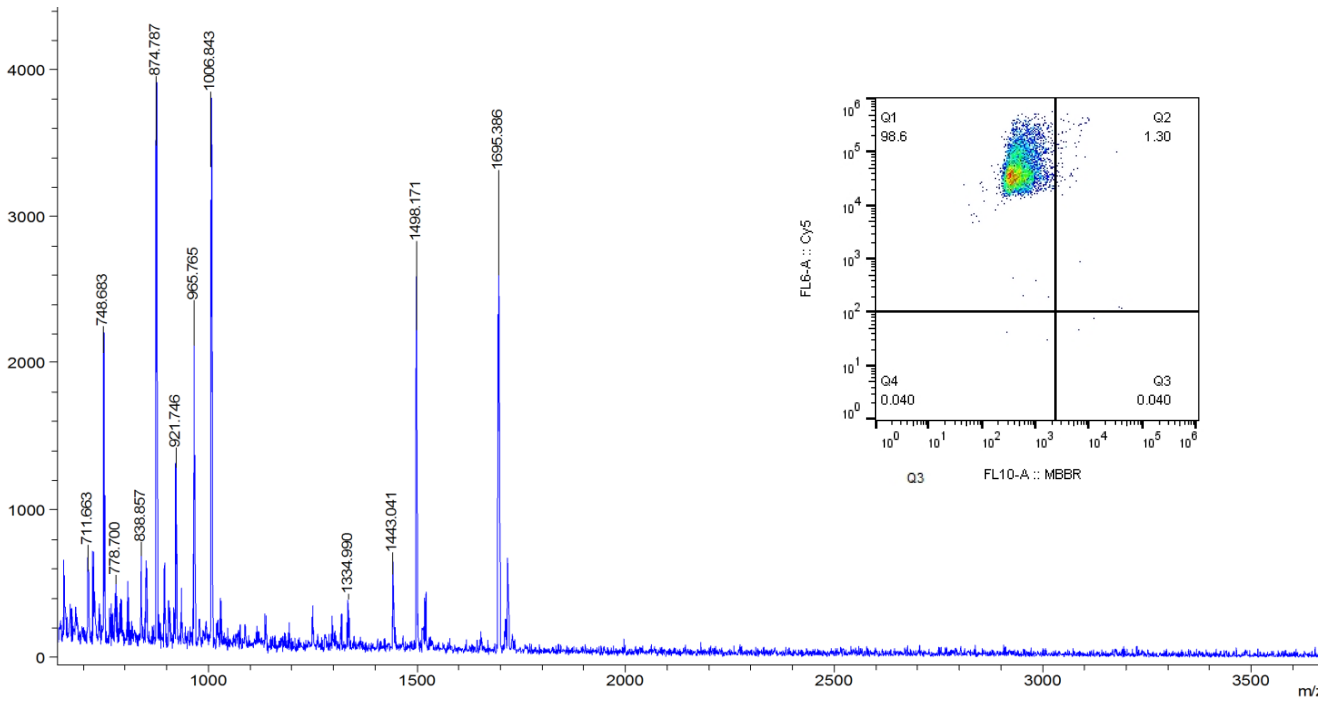
#	Time	Area	Height	Width	Area%
1	6.805	1404.6	255.7	0.0916	77.735
2	7.789	402.3	88.5	0.0758	22.265

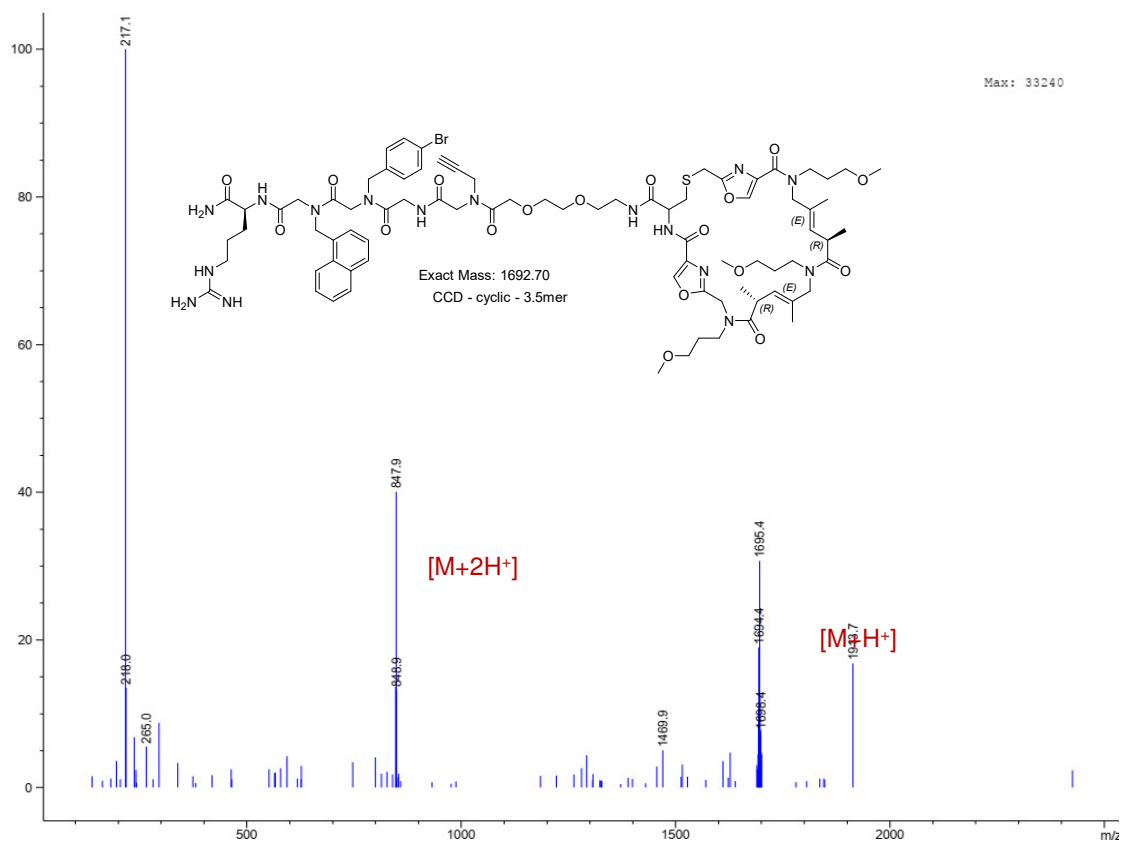
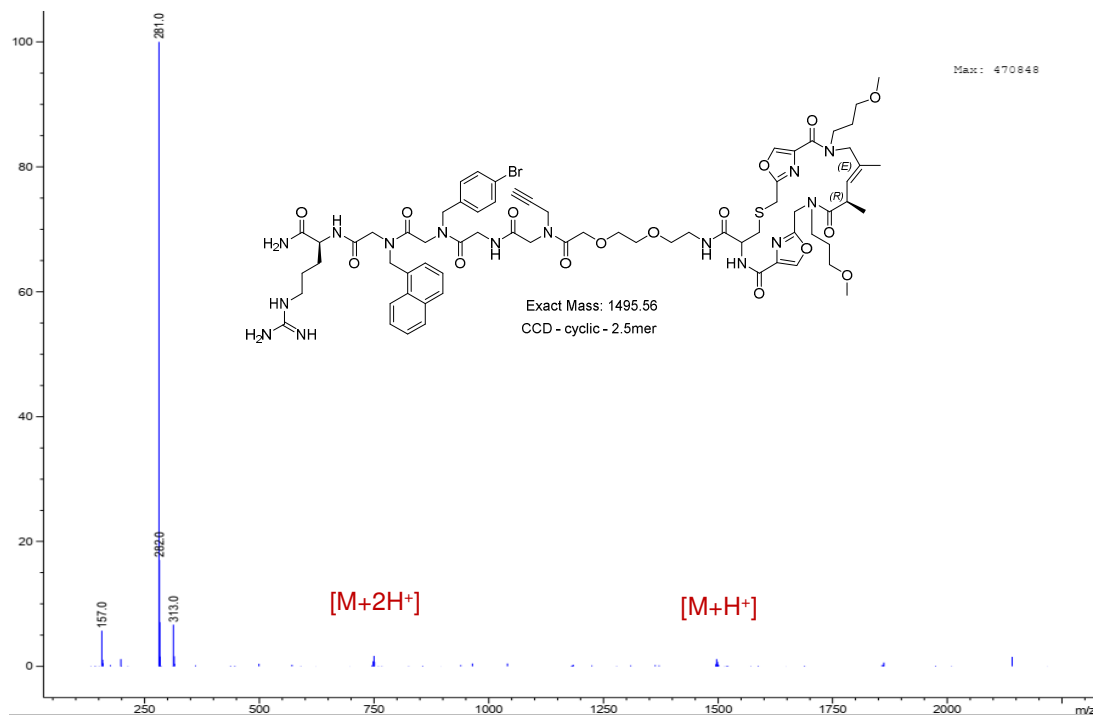




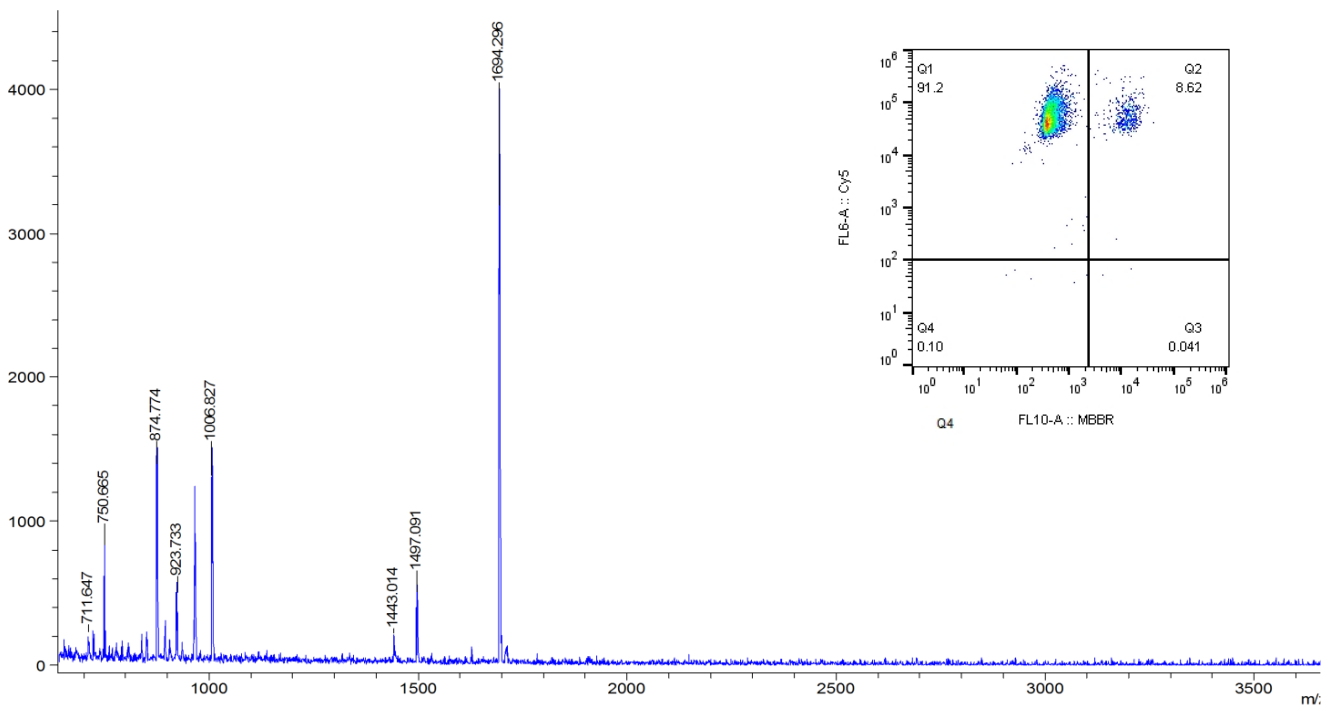
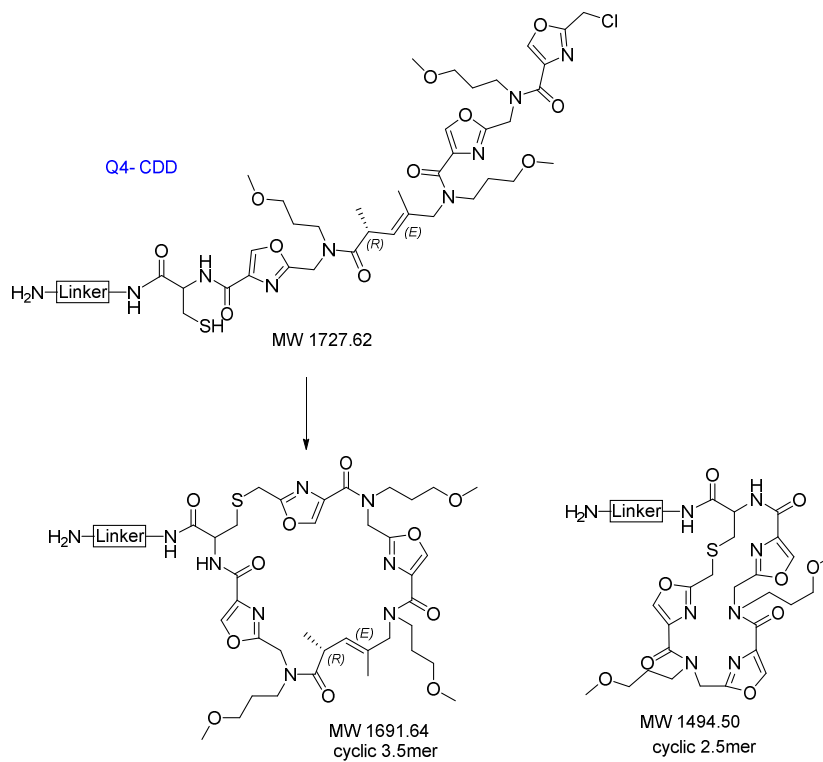
Q3-[CCD]: Cyclization was complete on both 10 μm & 160 μm beads.

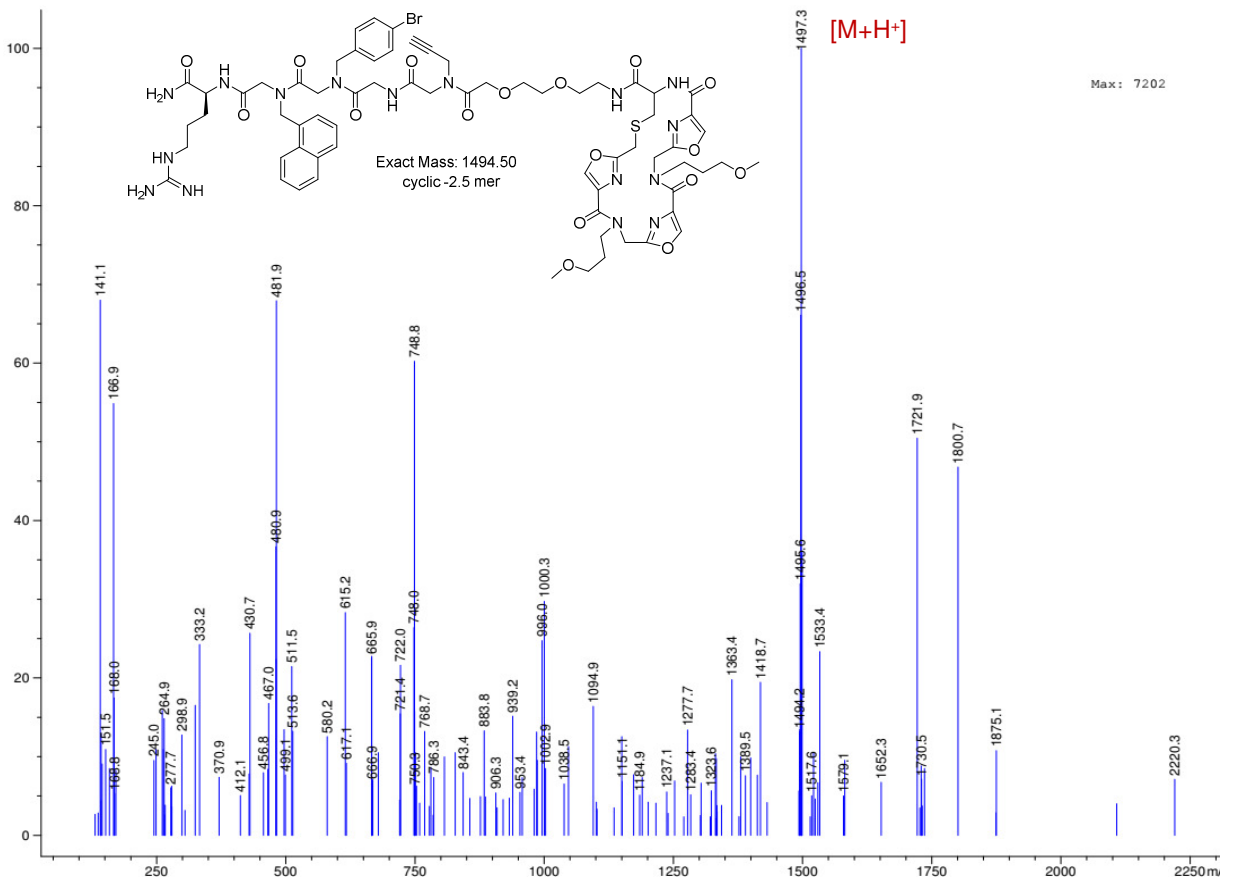
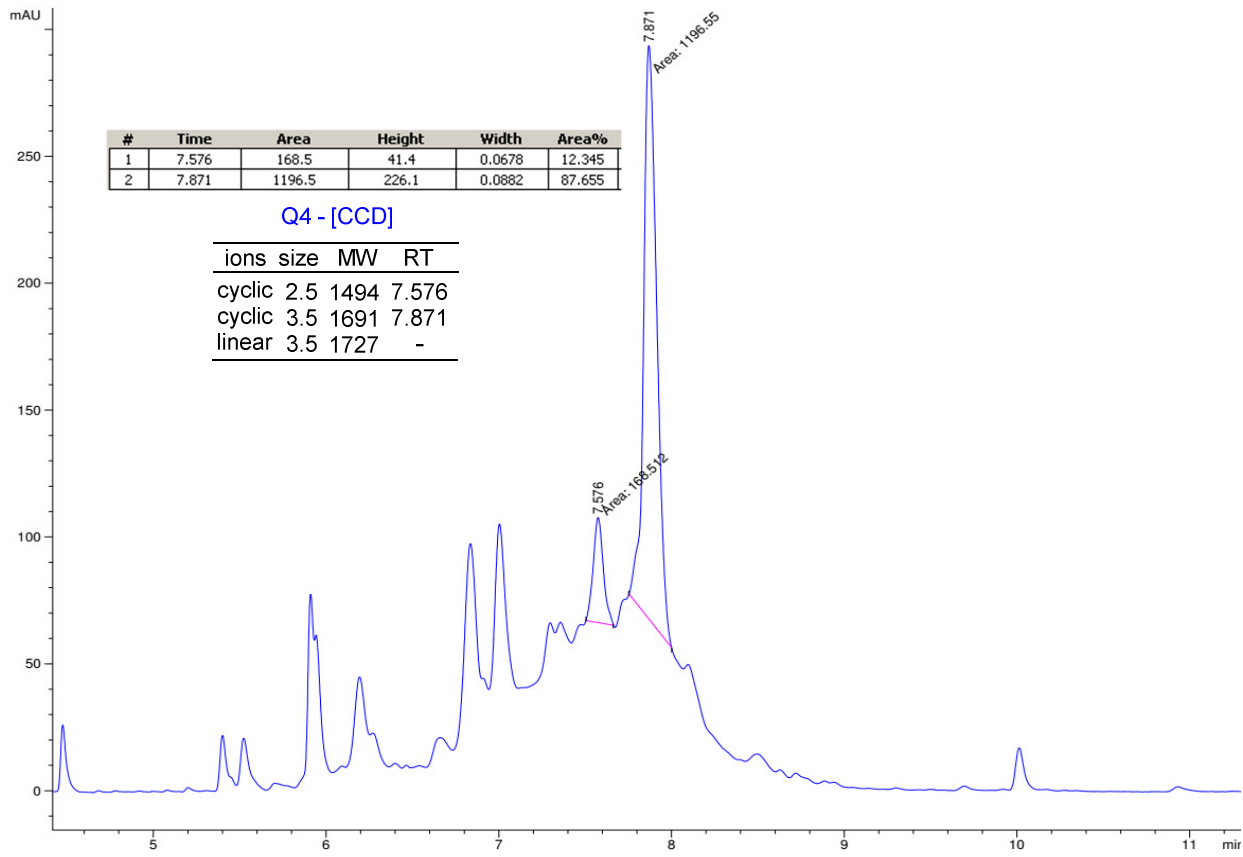


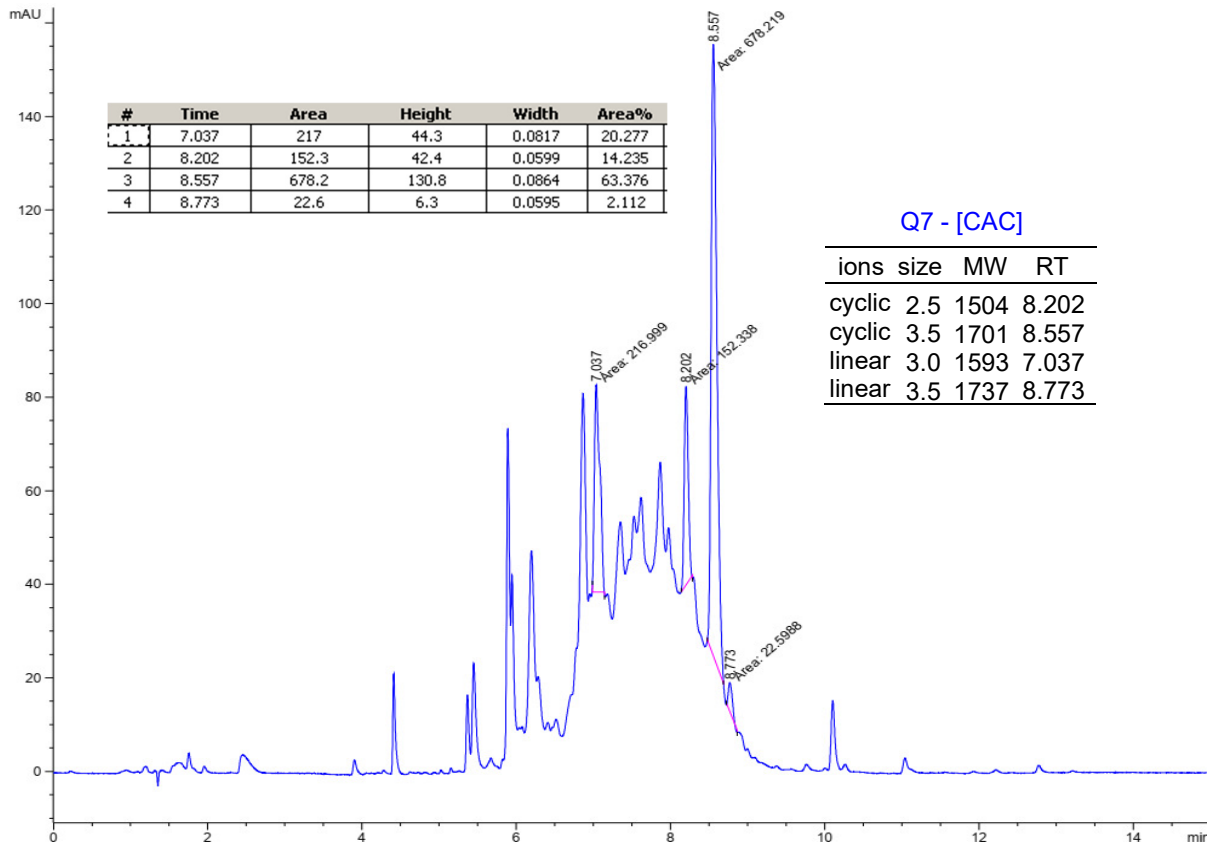
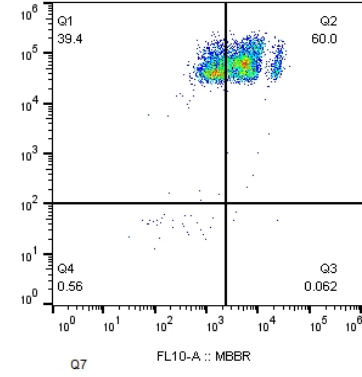
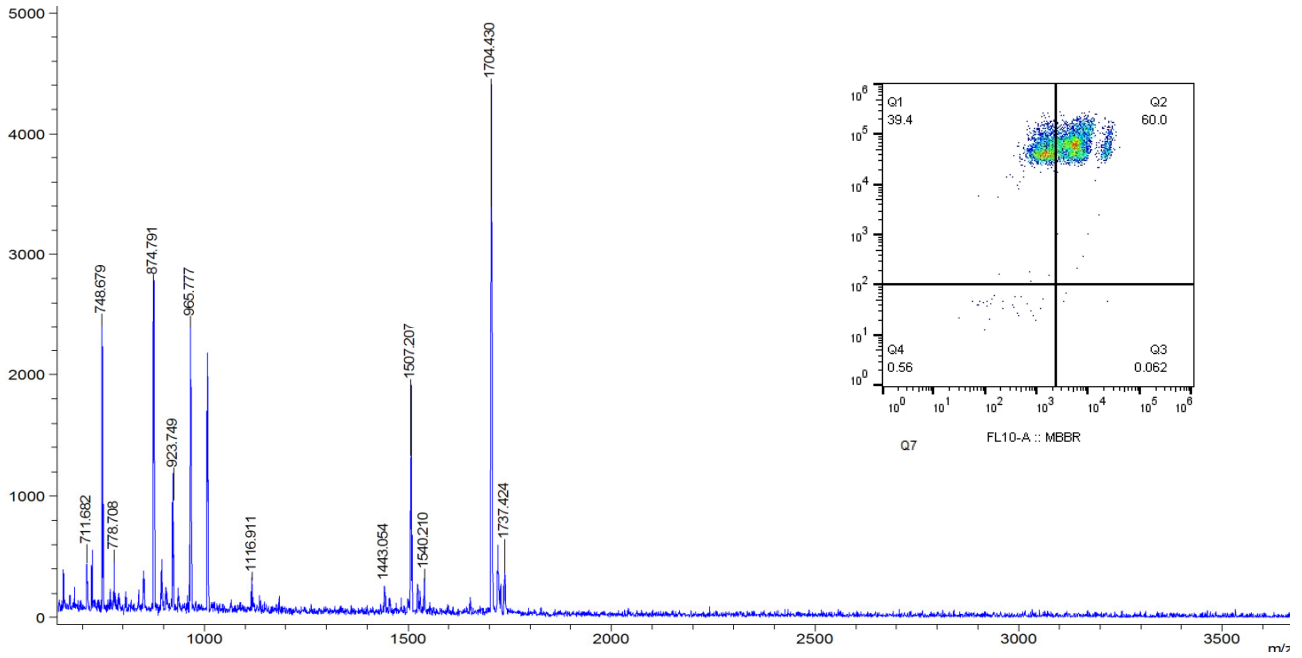


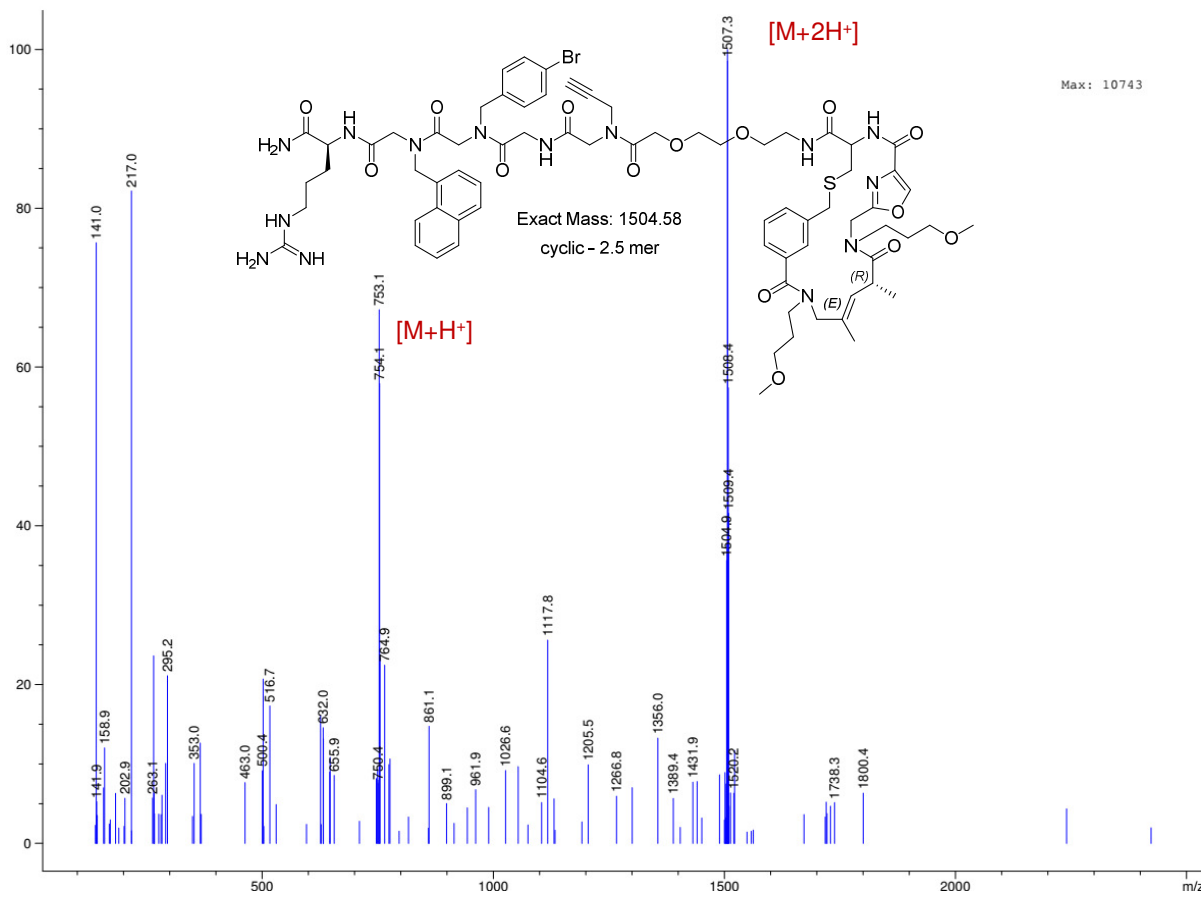
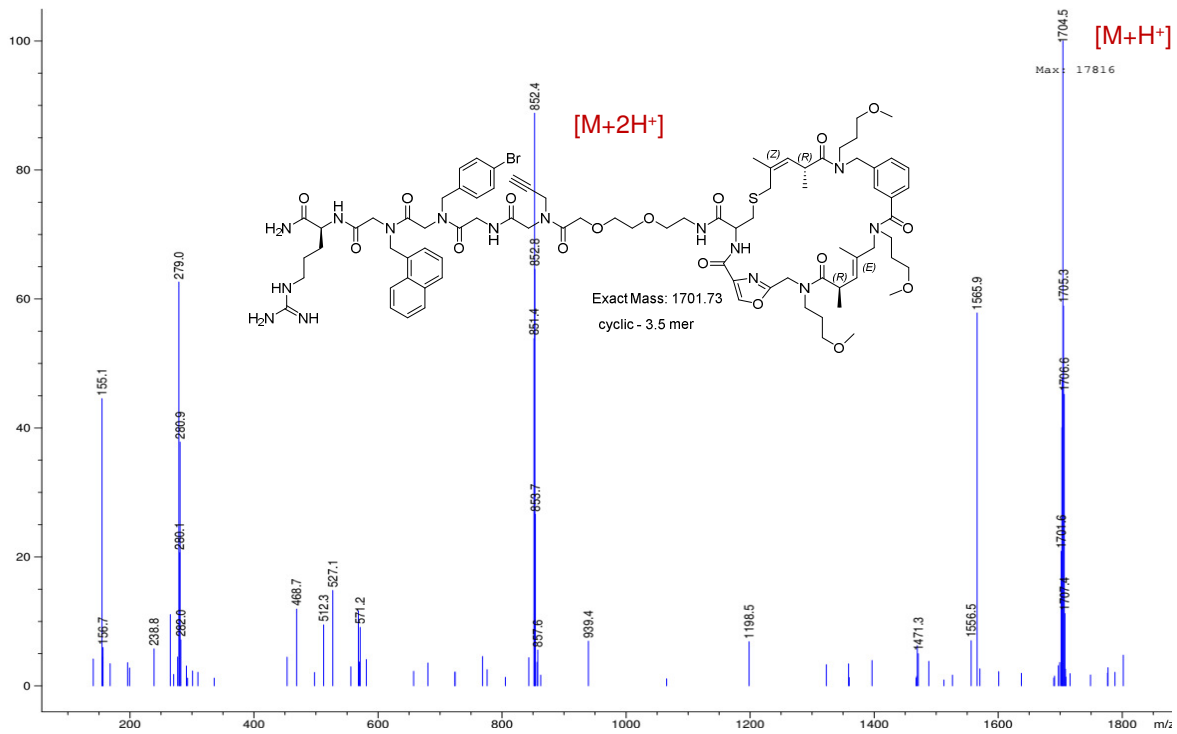


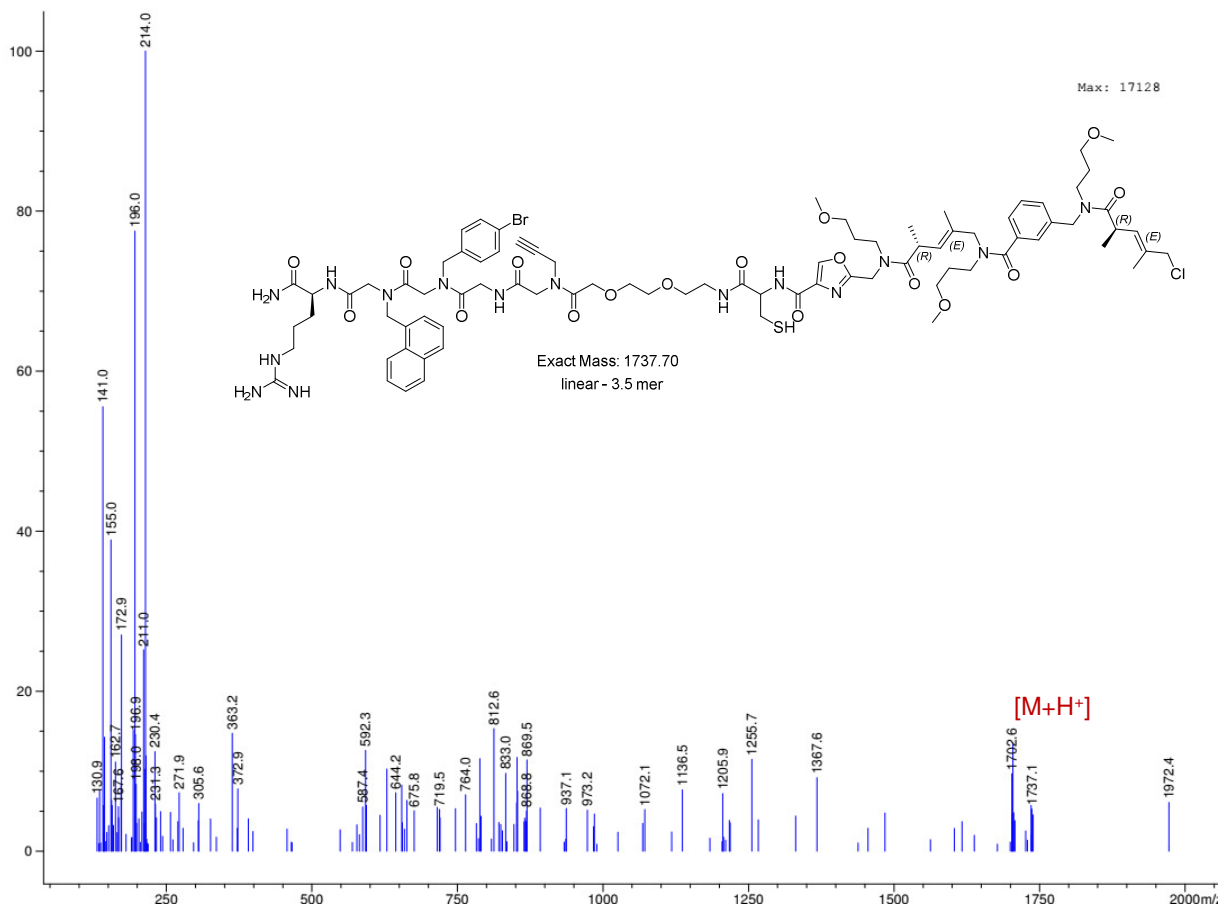
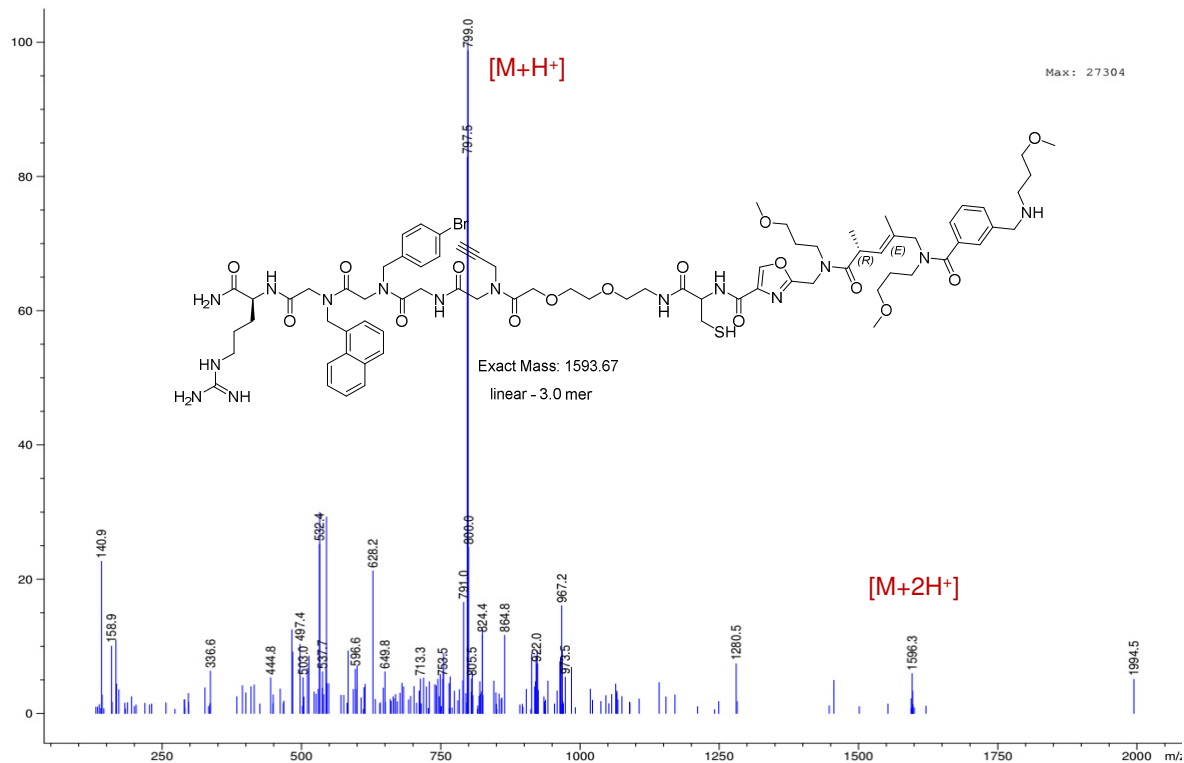
Q4-[CDD]: Cyclization was complete on both 10 μm & 160 μm beads.



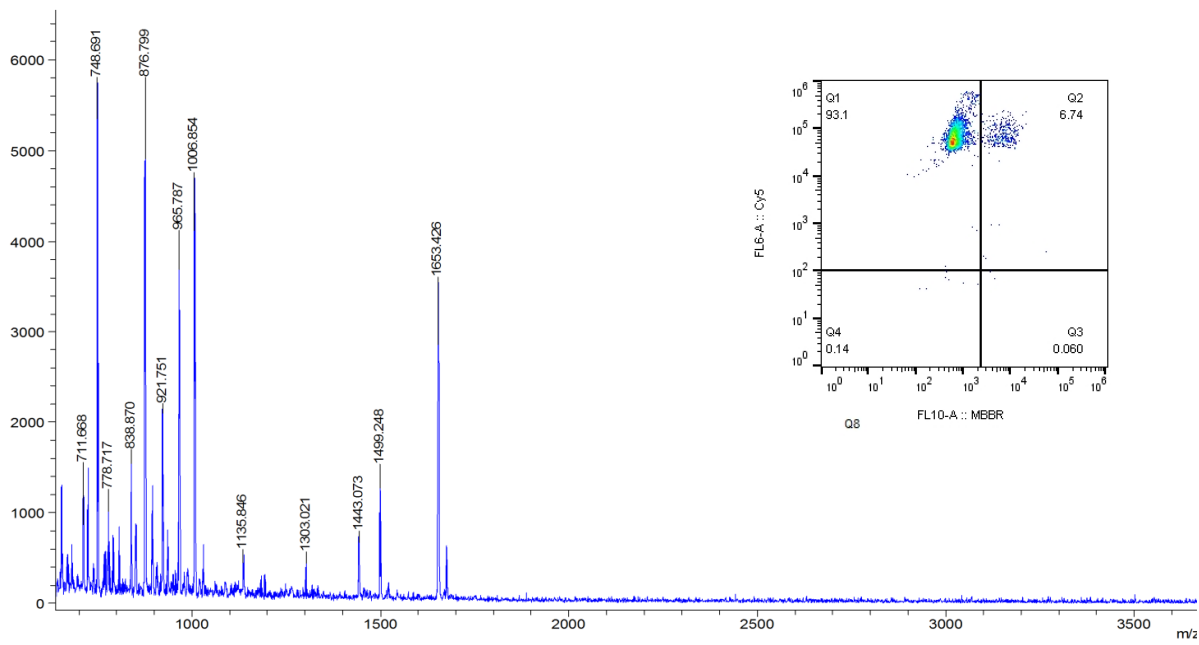
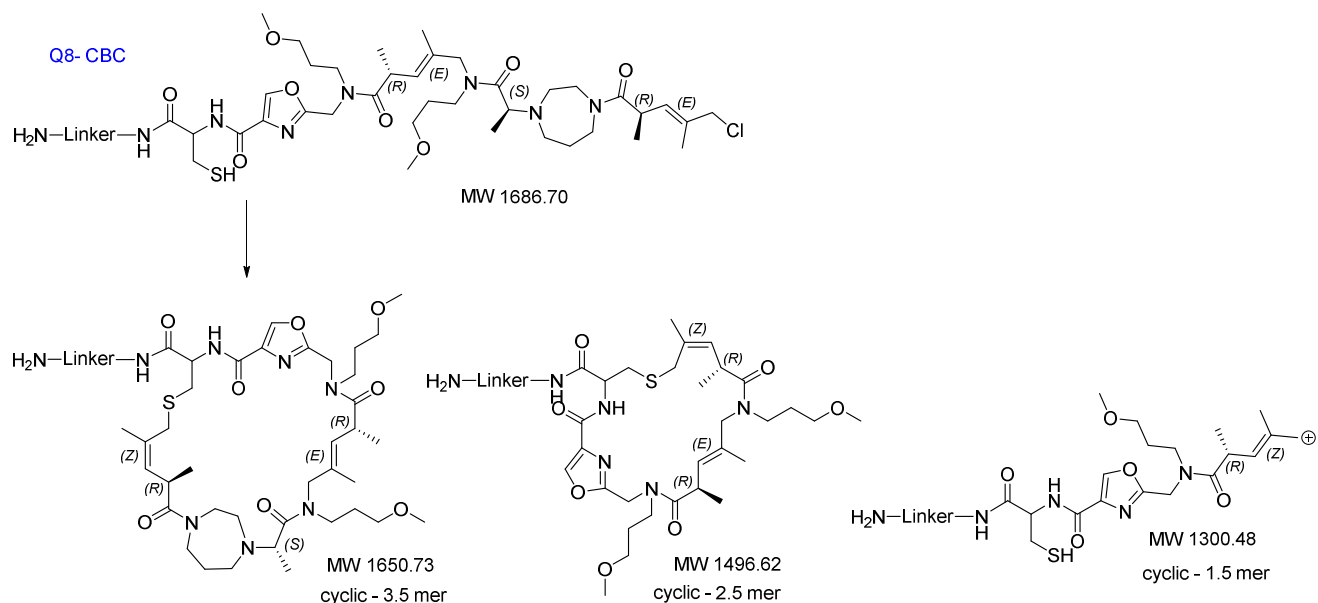


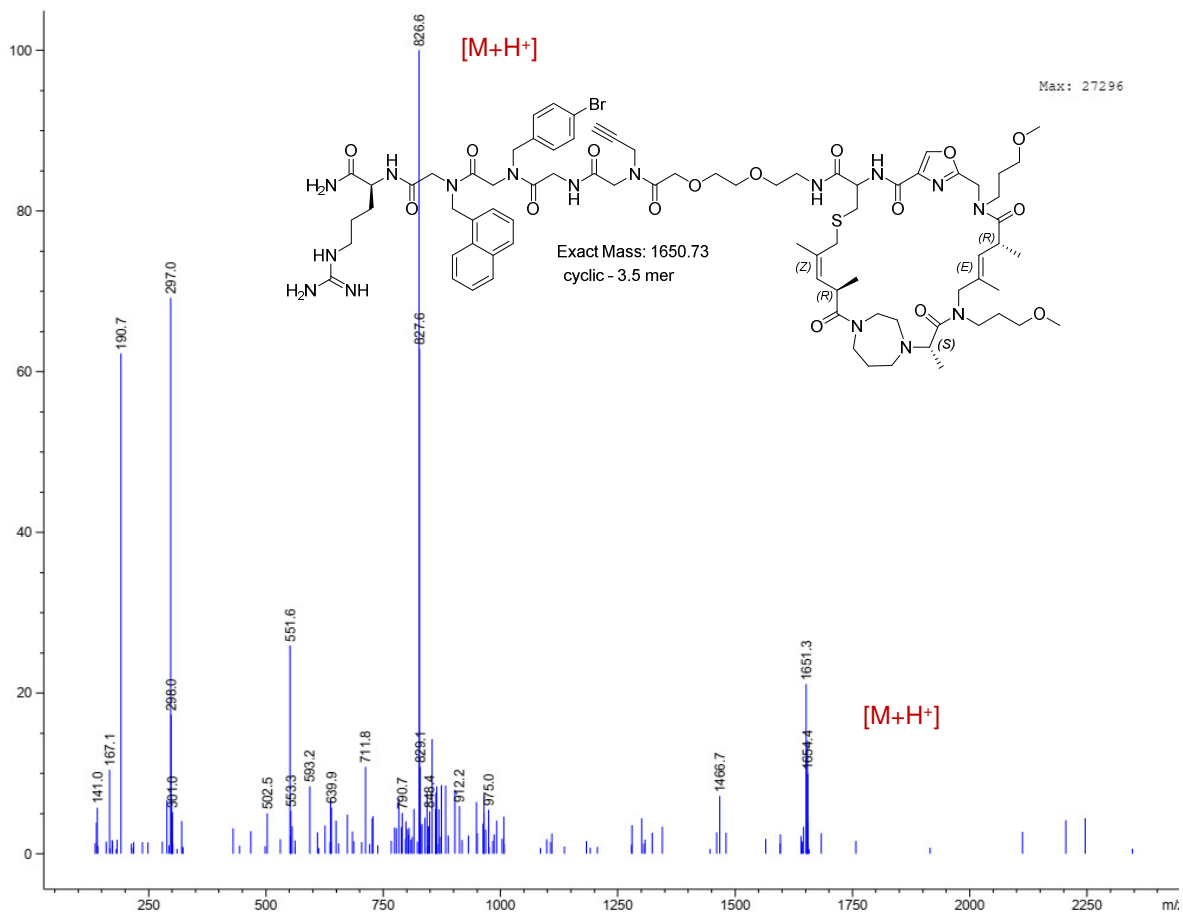
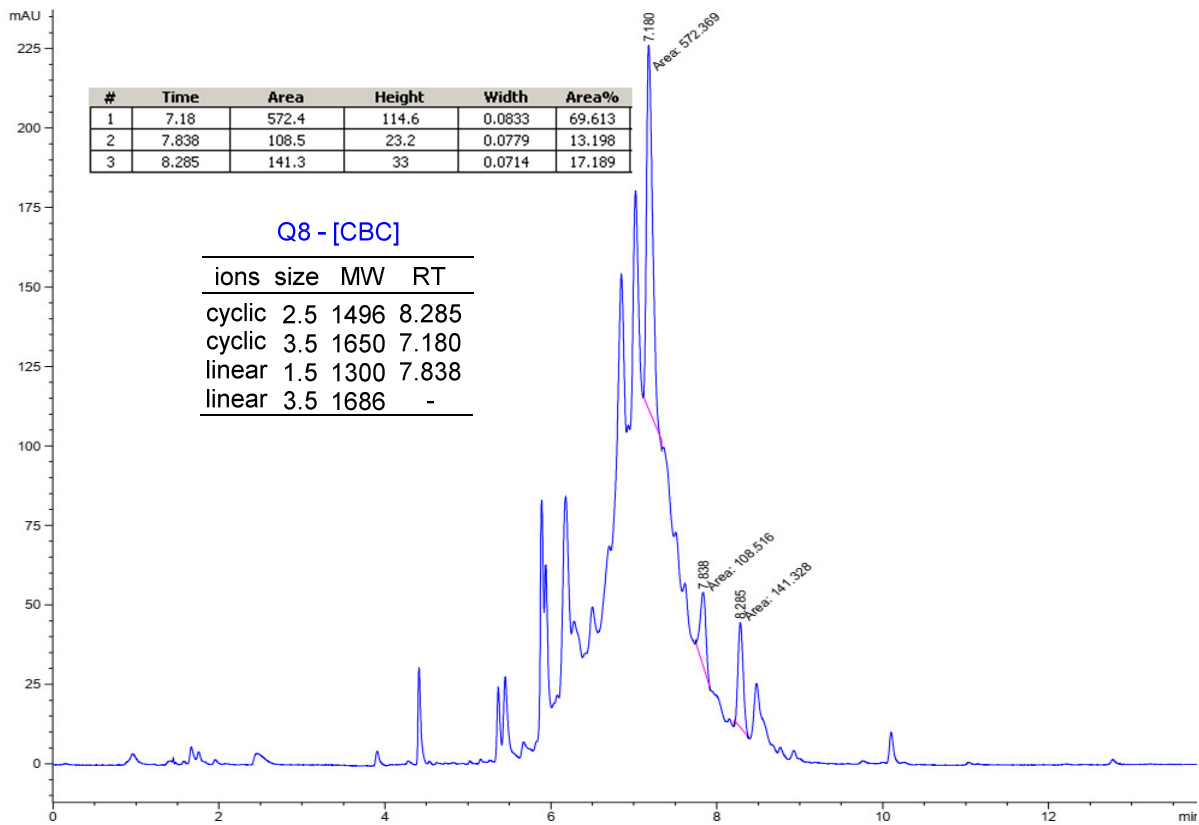


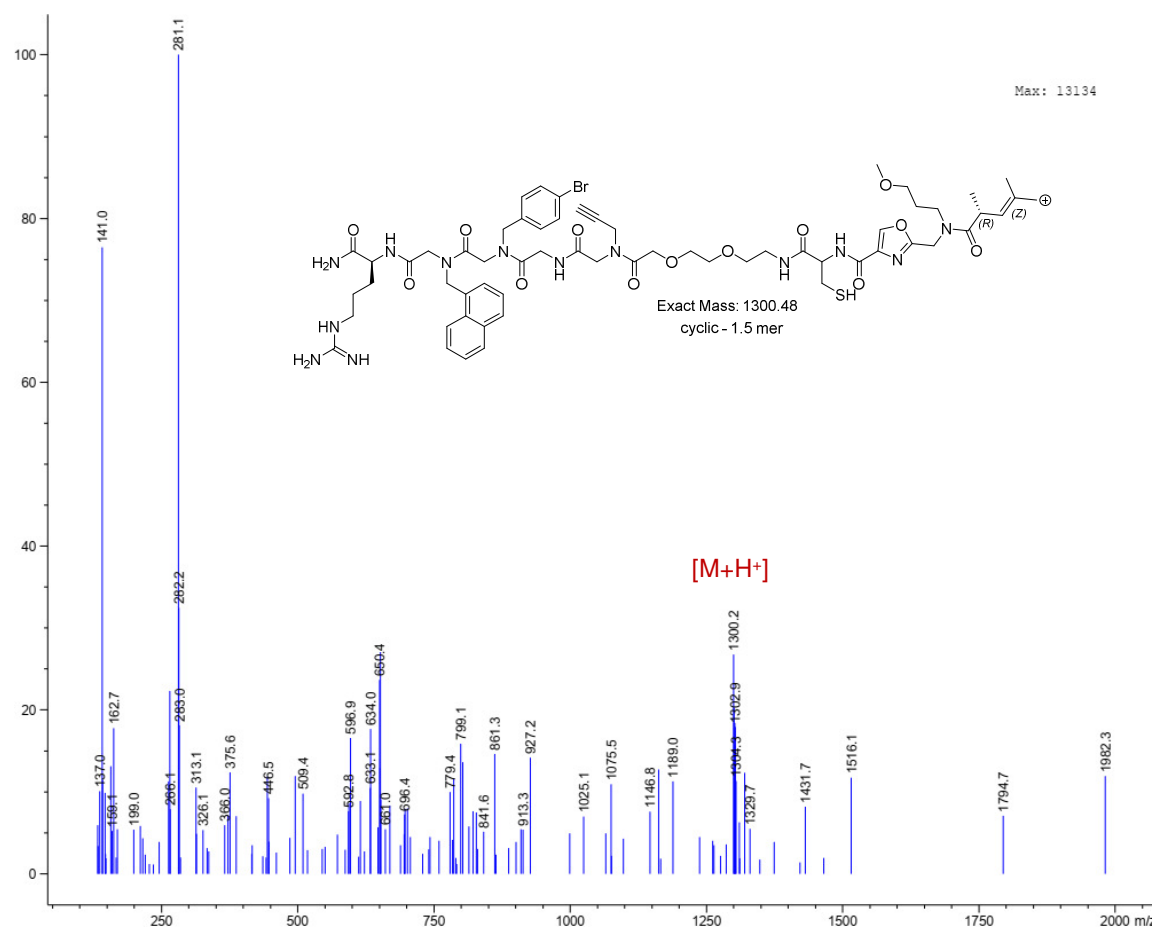
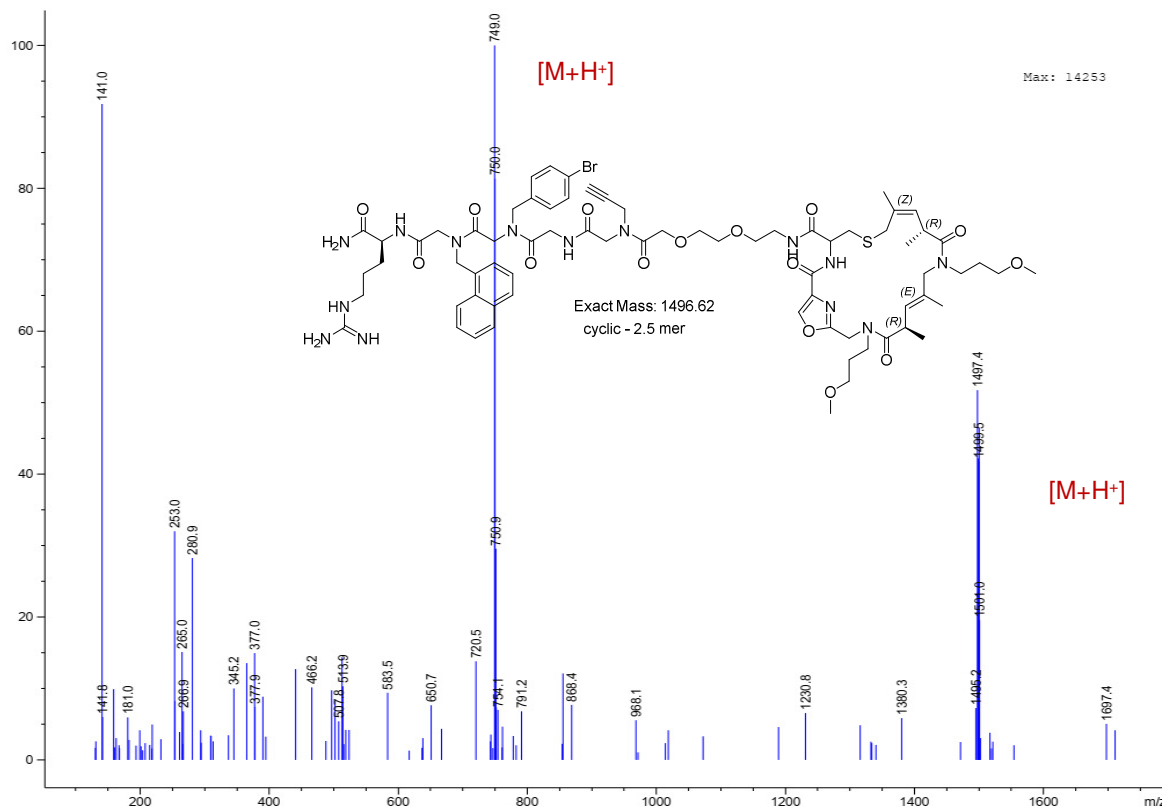




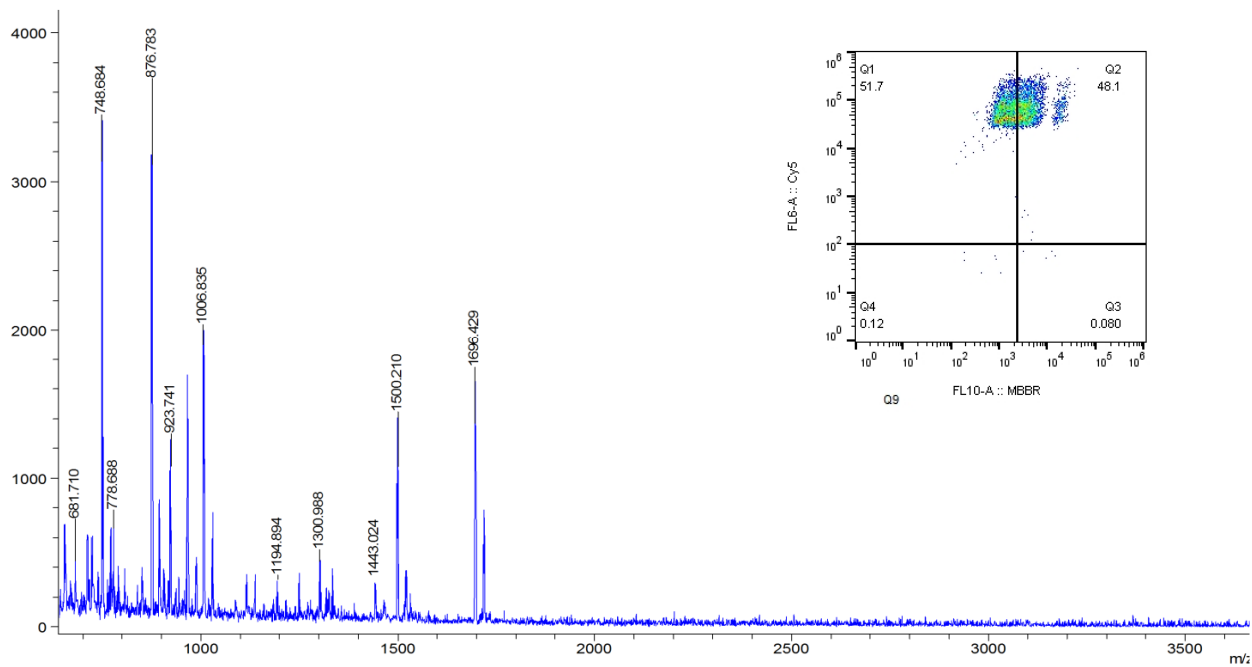
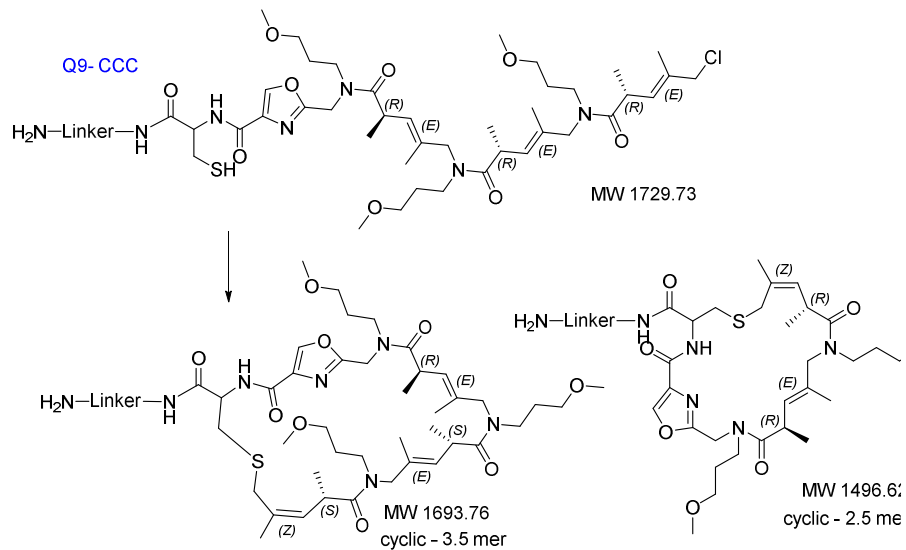
Q8-[CBC]: Cyclization was complete on both 10um & 160um. Dead beads could be due to 1.5mer linear fragments (MW 1300).

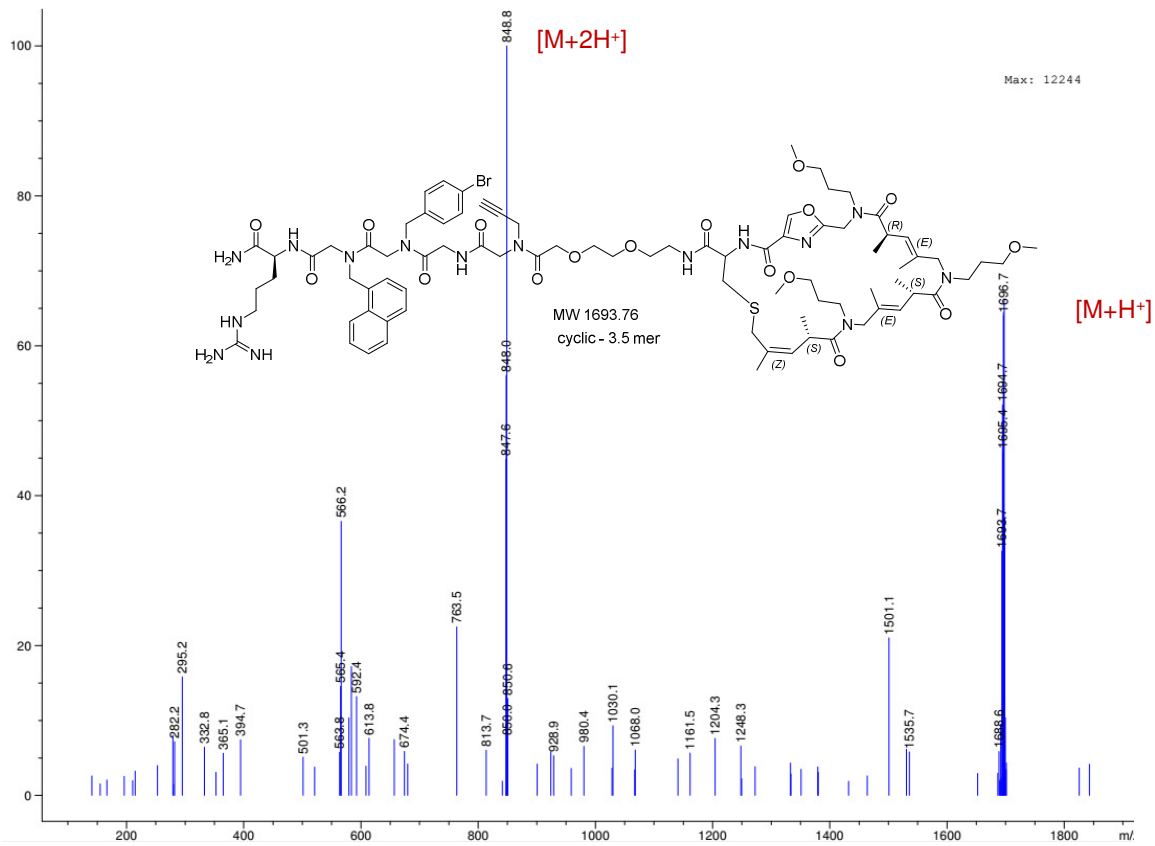
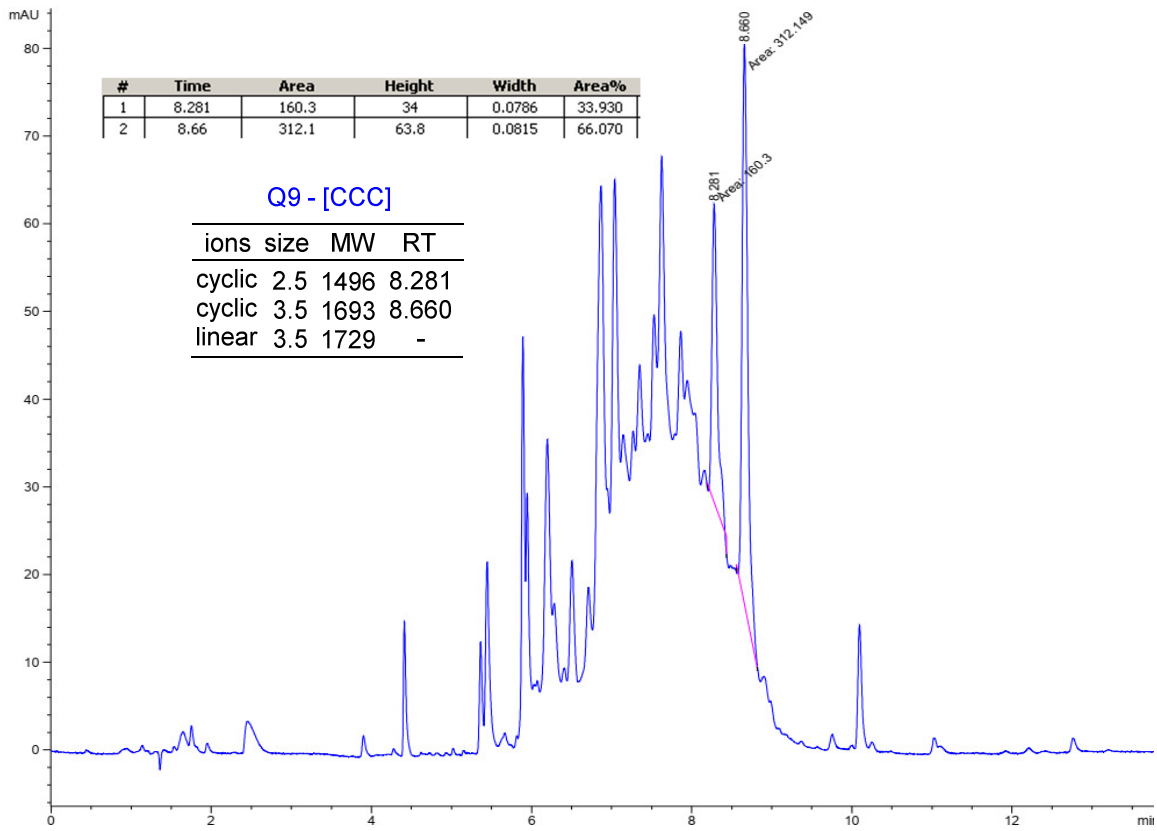


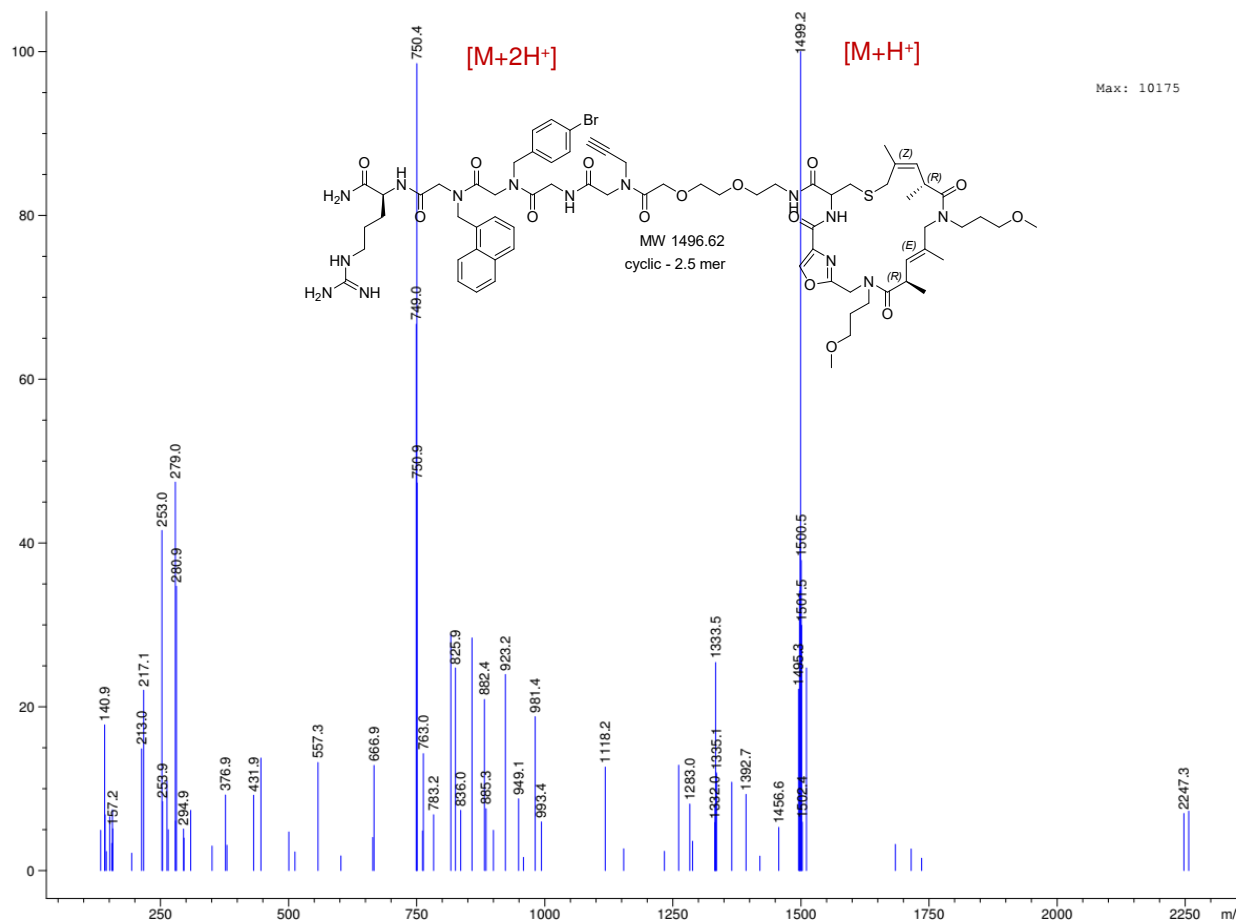




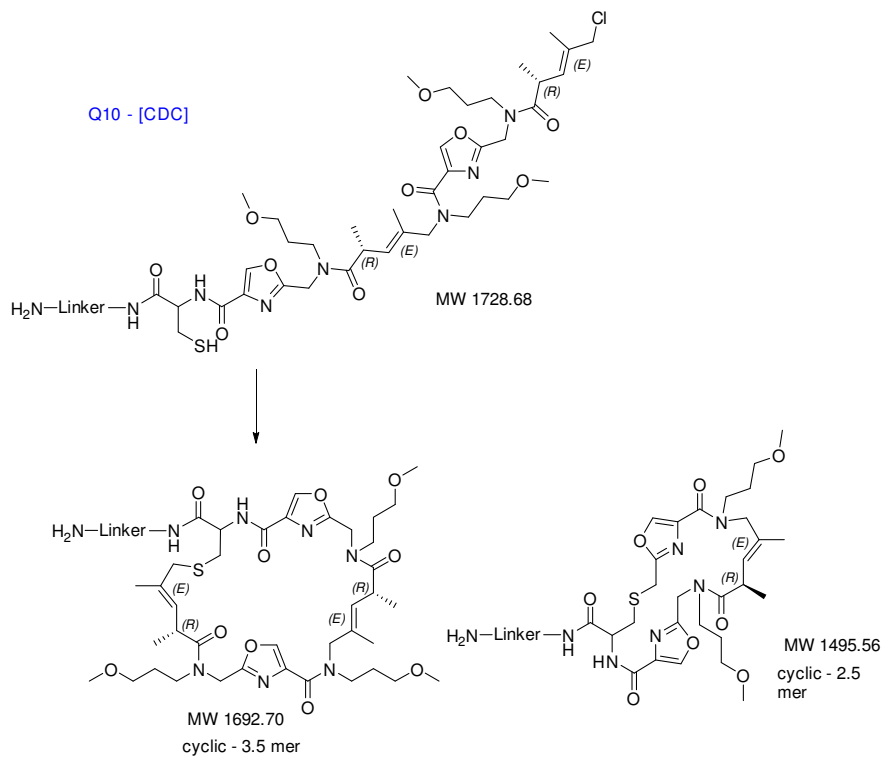
Q9-[CCC]: Incomplete cyclization was detected on 10um but was complete on 160um.

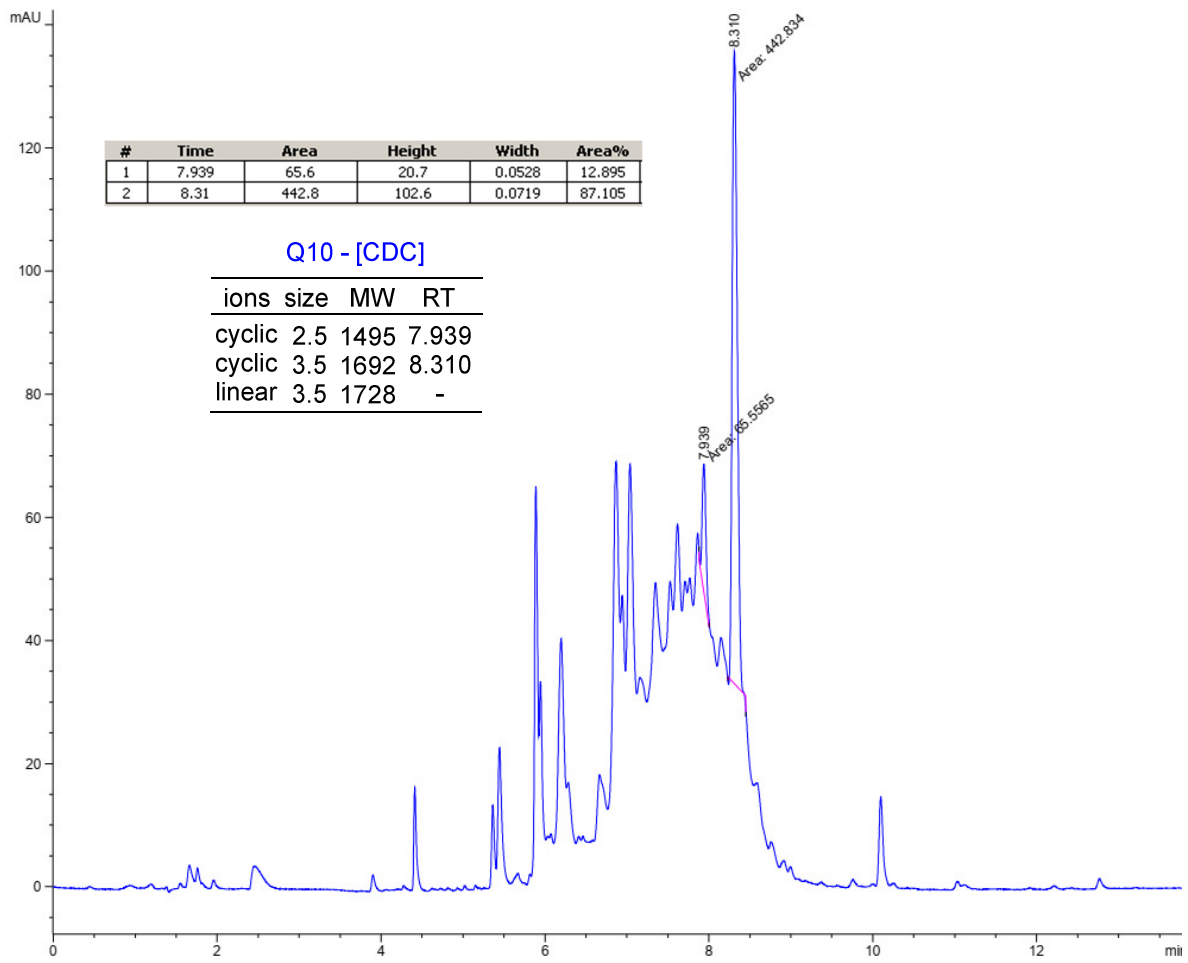
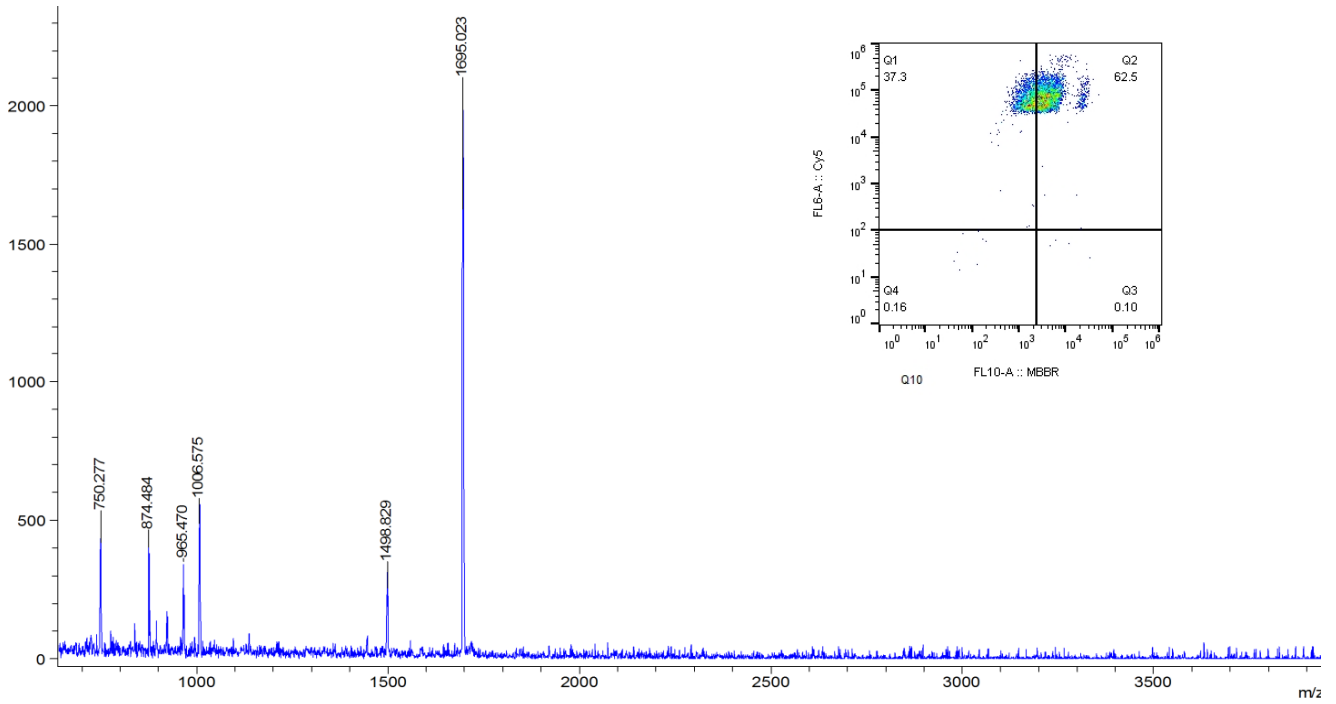


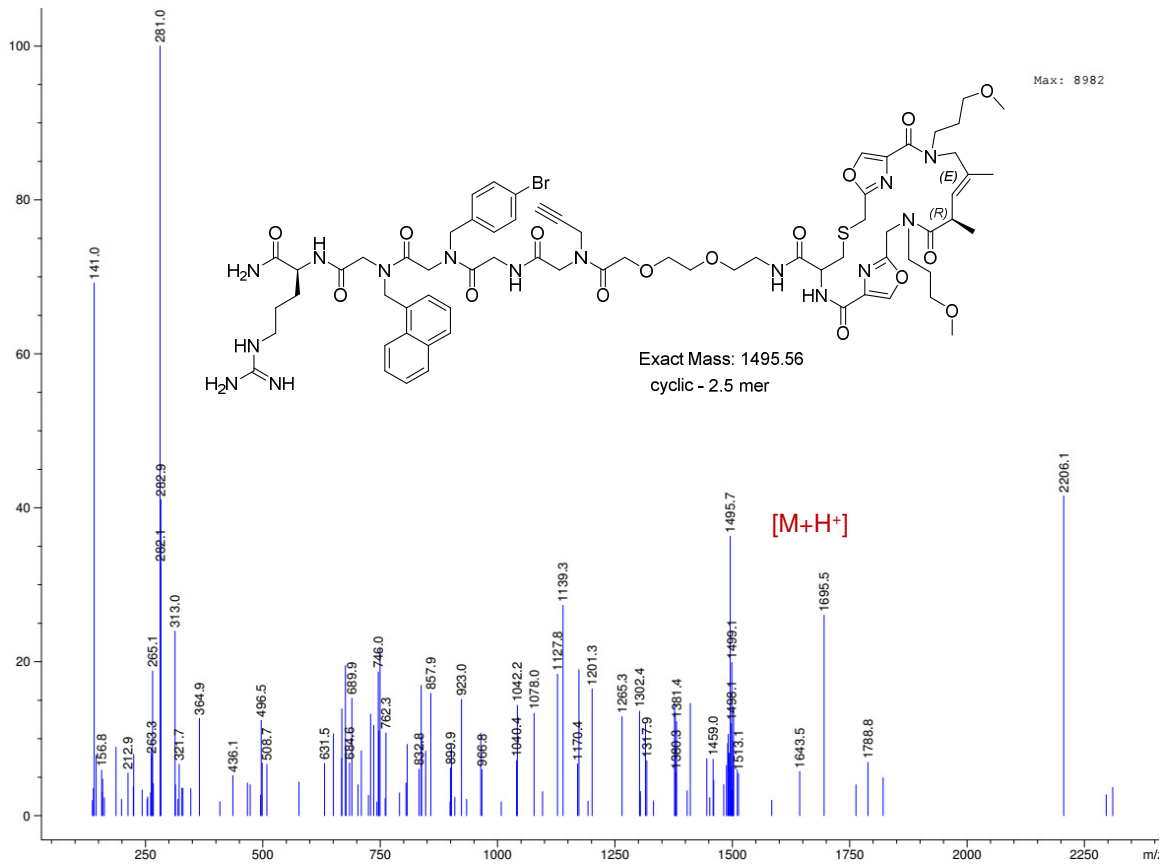
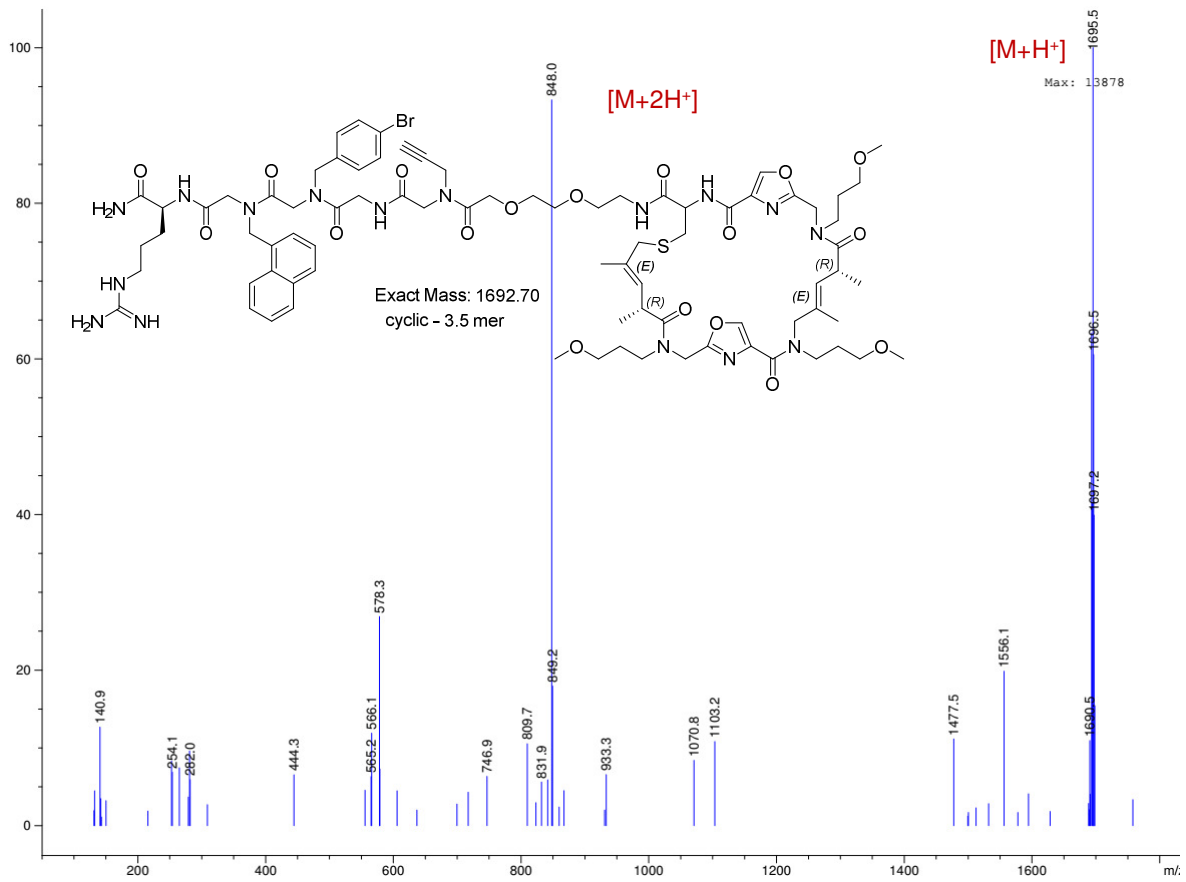




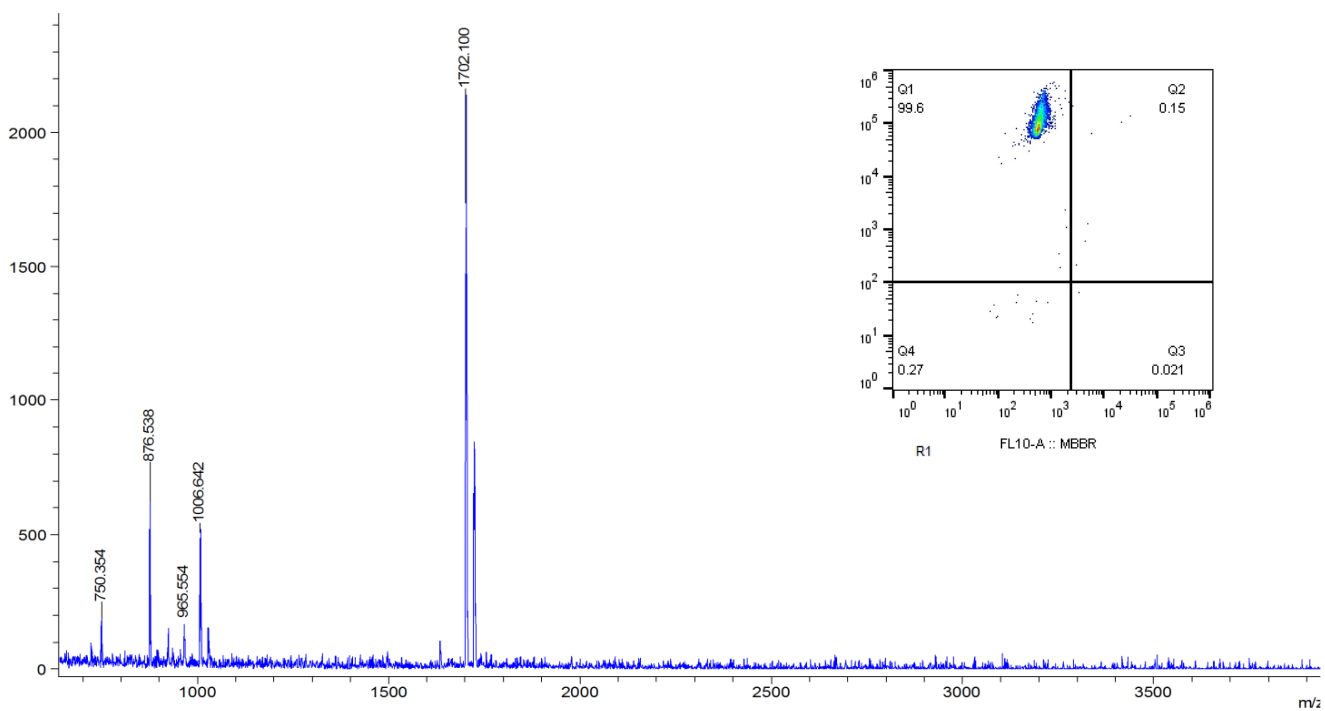
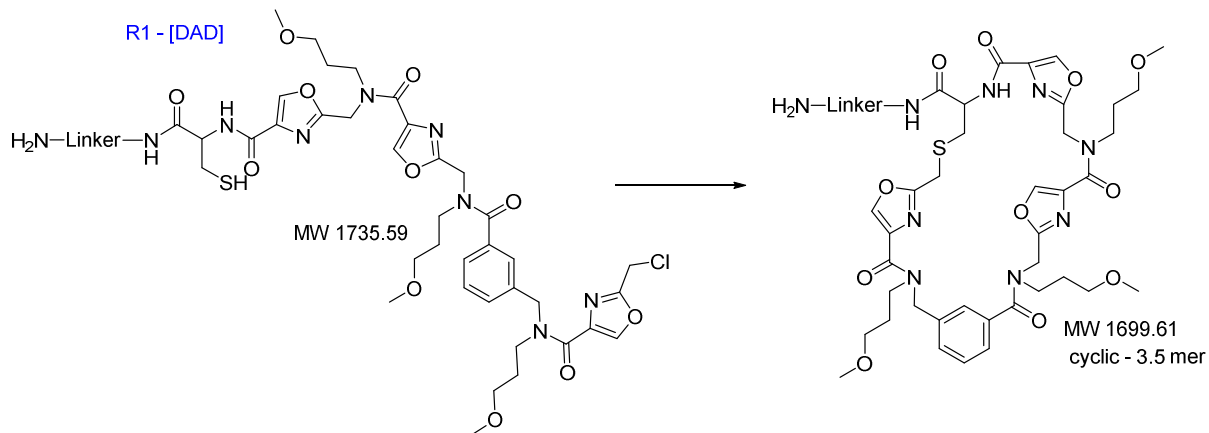
Q10-[CDC]: Incomplete cyclization was detected on 10um but was complete on 160um.

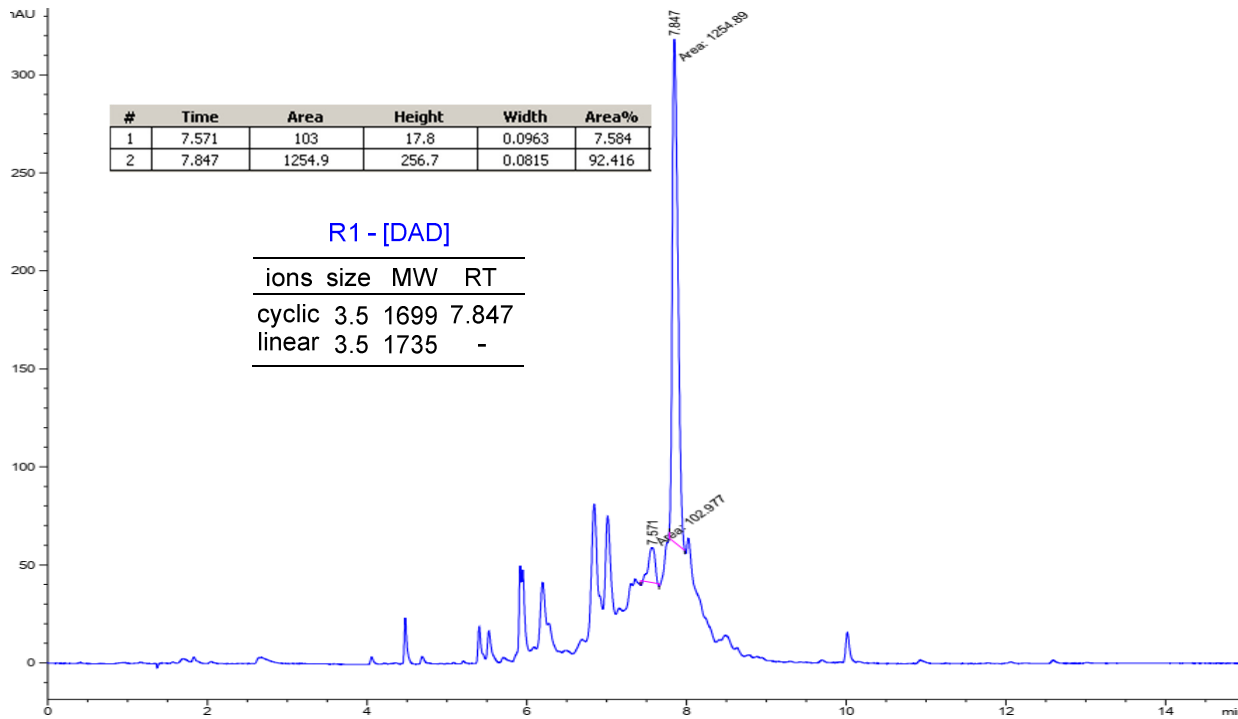






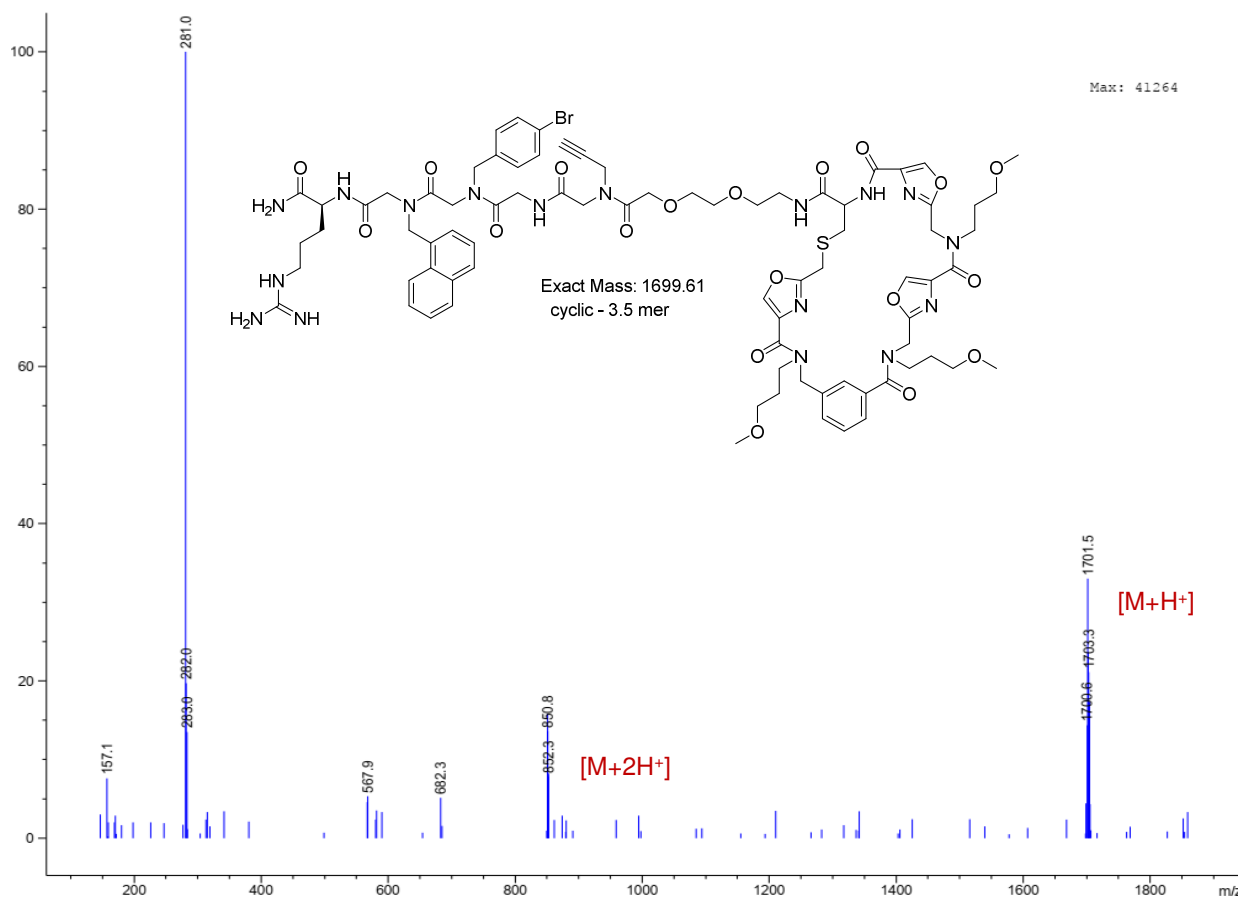
R1-[DAD]: Cyclization was complete on both 10um & 160um.

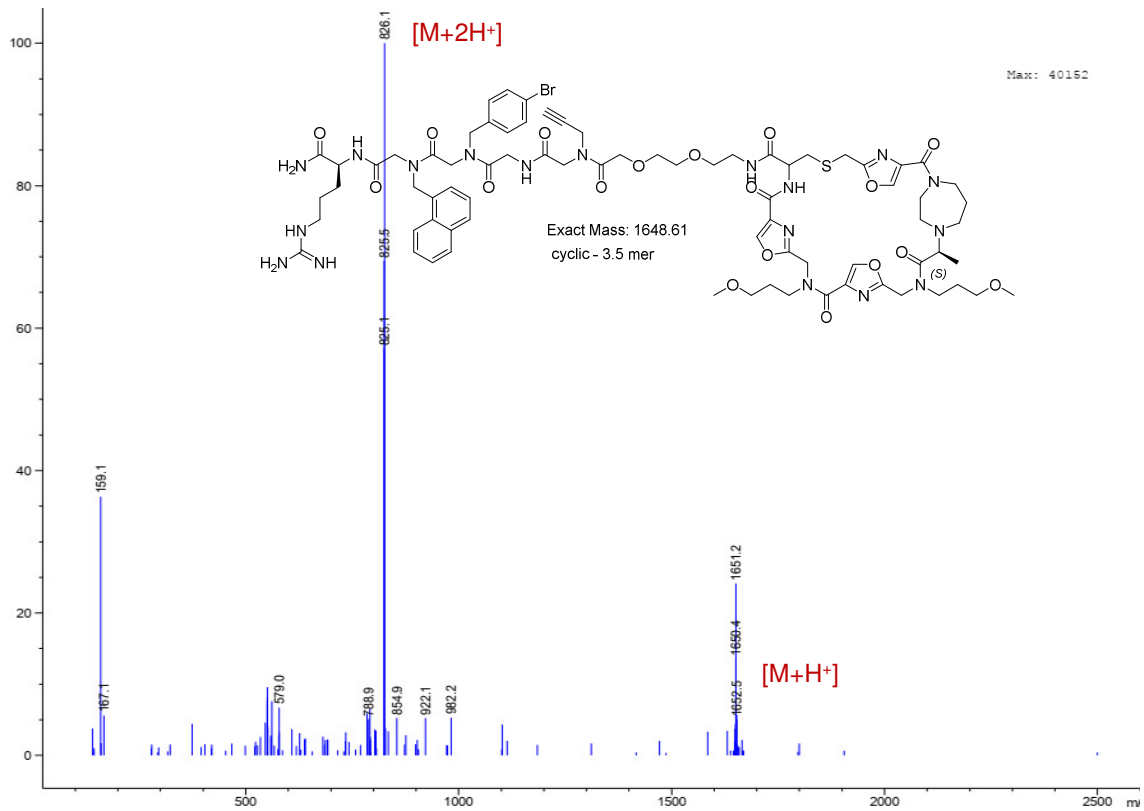
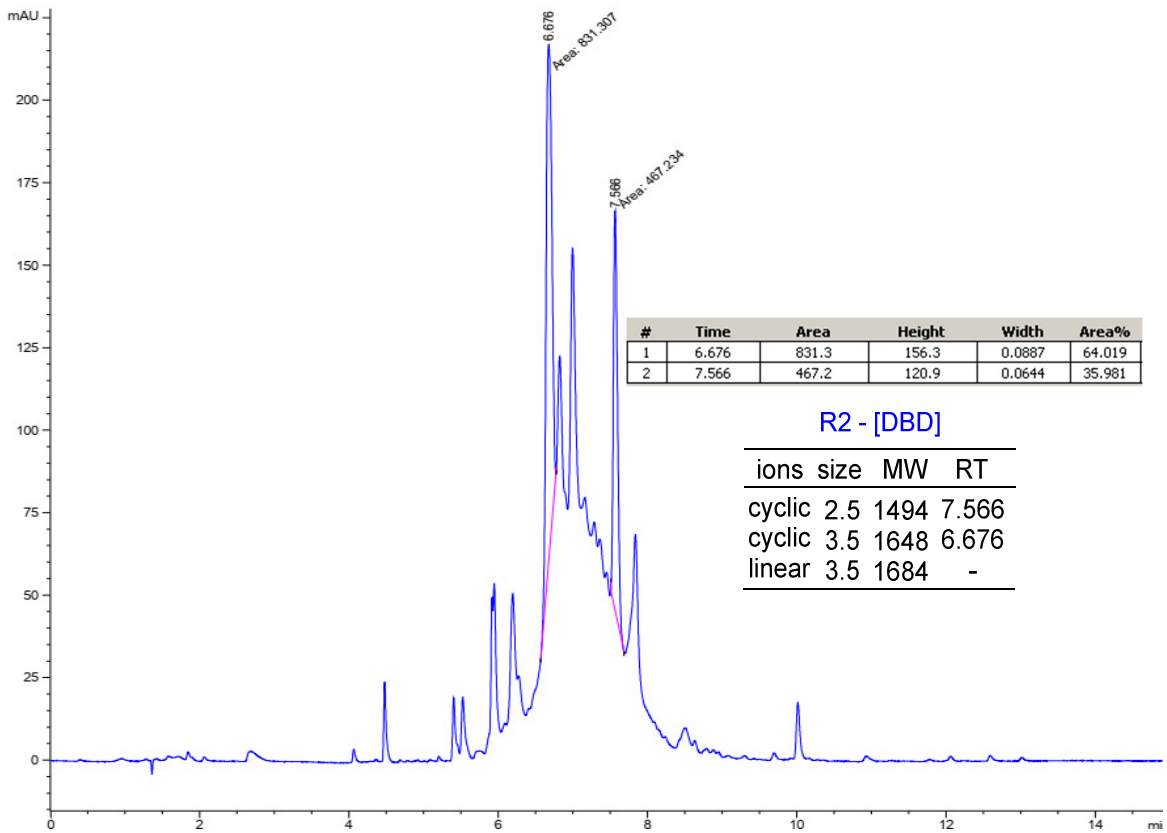


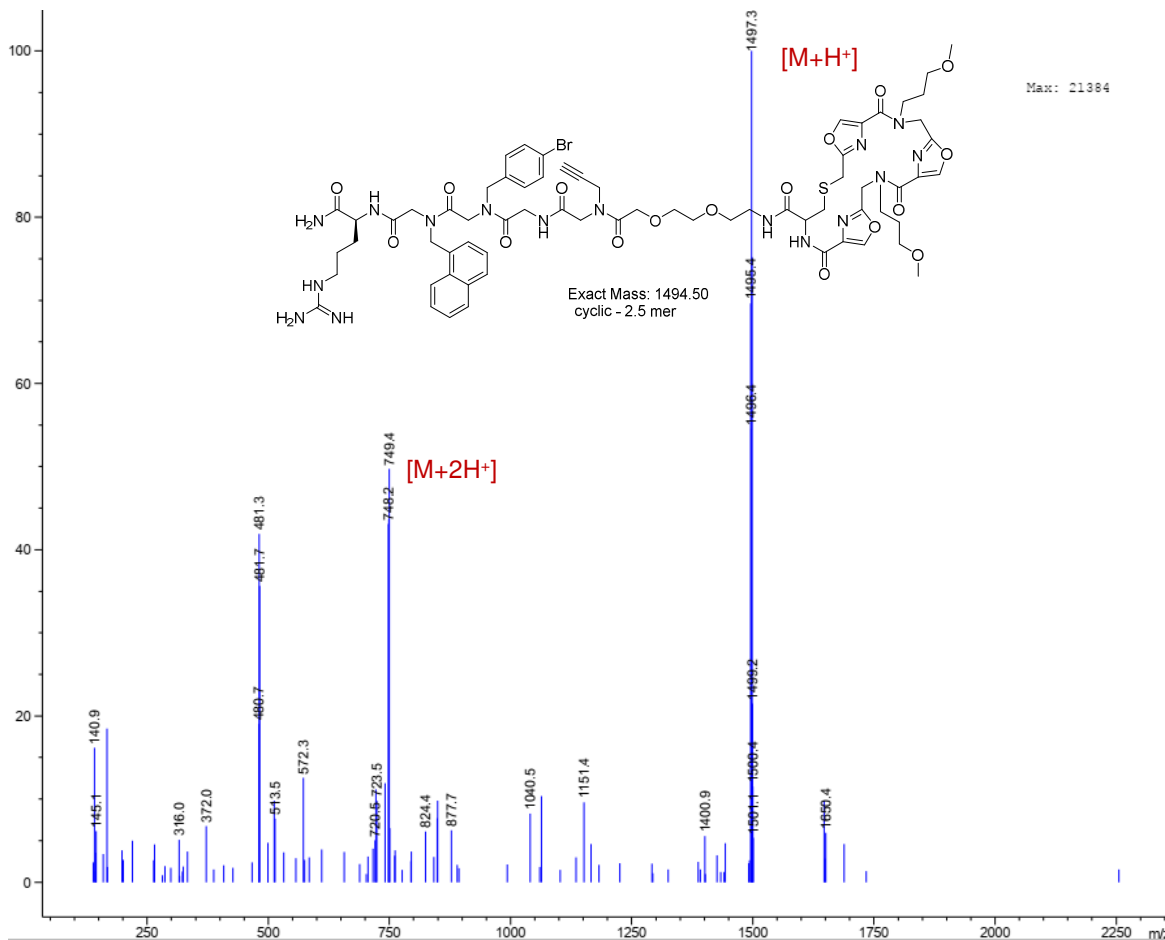


R1 - [DAD]

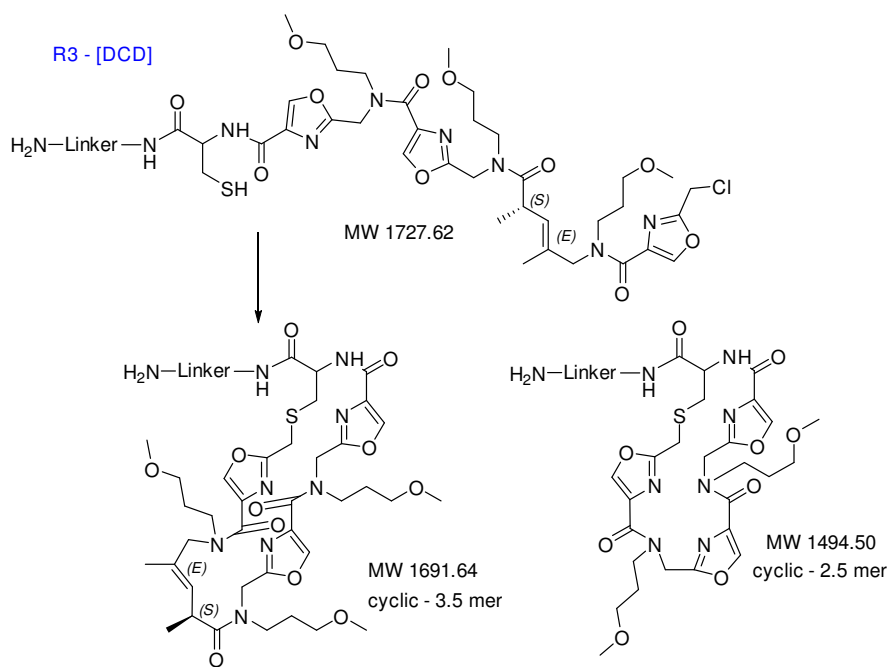
ions	size	MW	RT
cyclic	3.5	1699	7.847
linear	3.5	1735	-

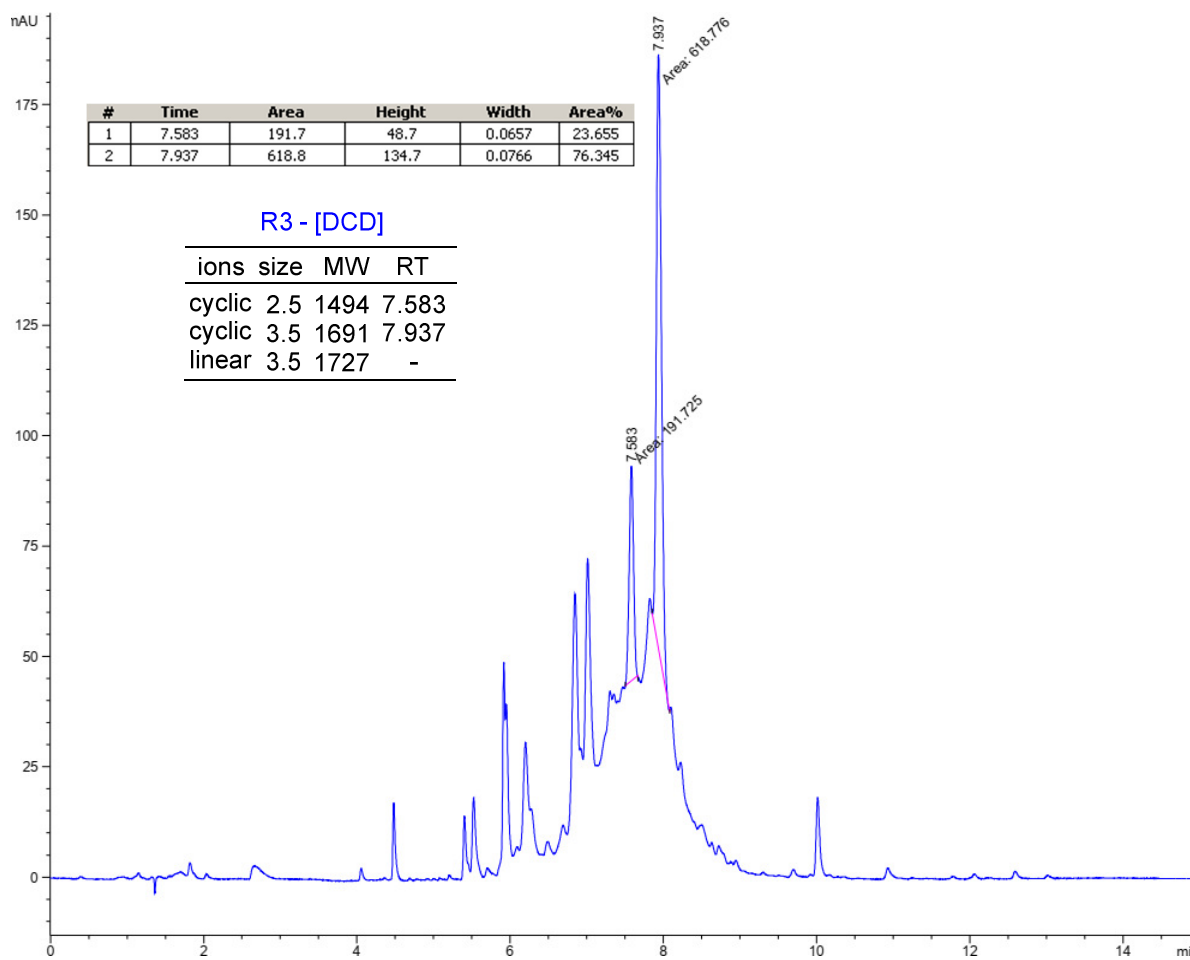
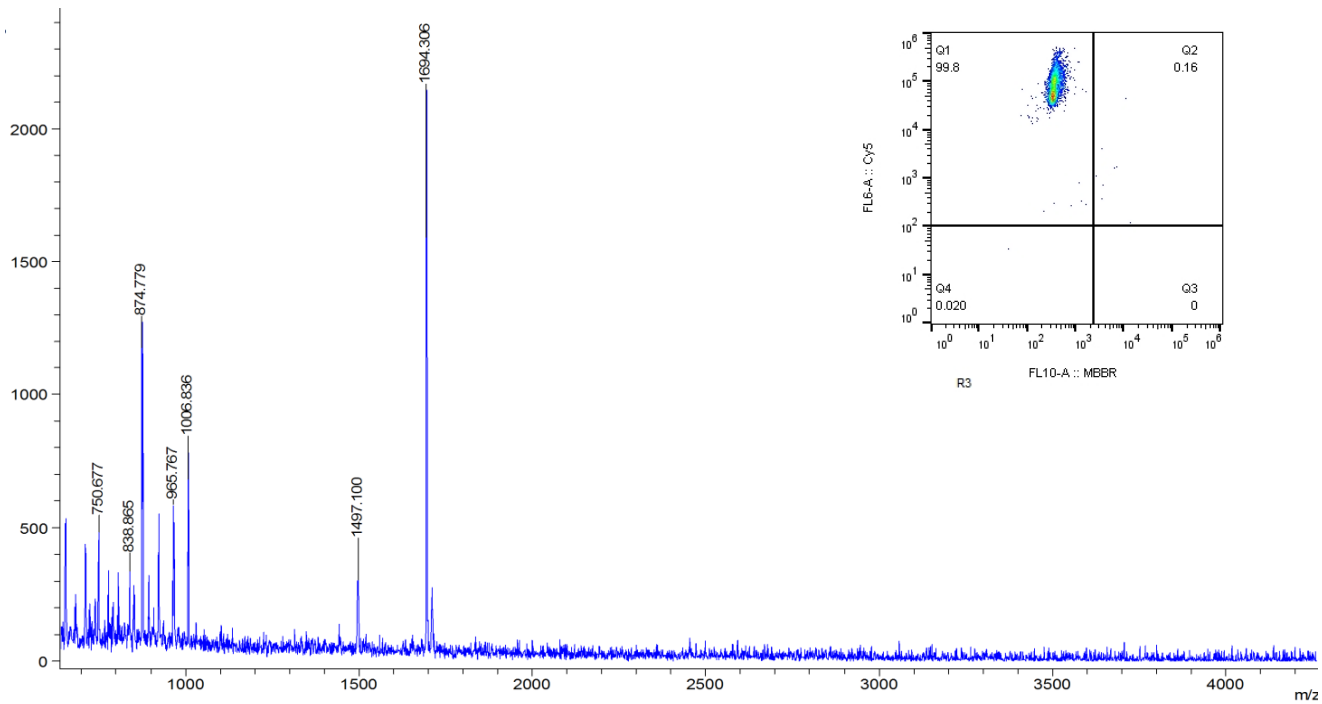


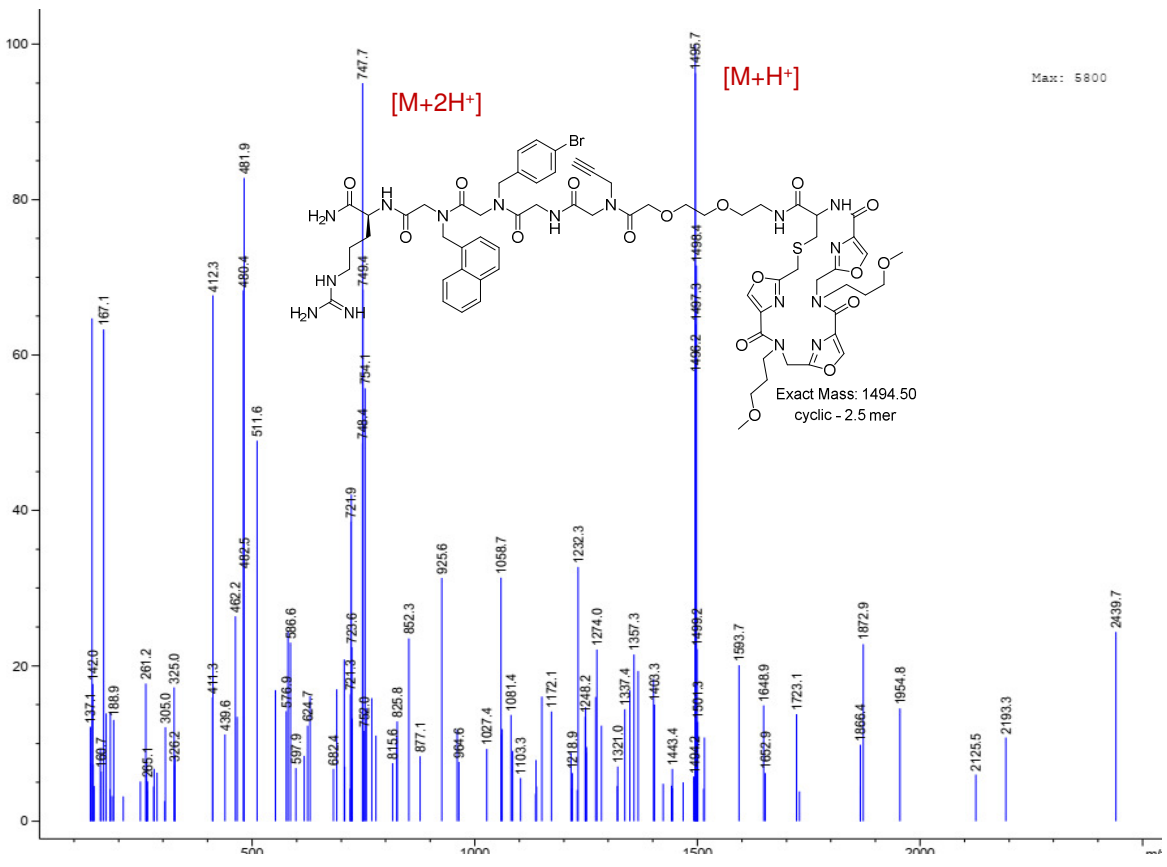
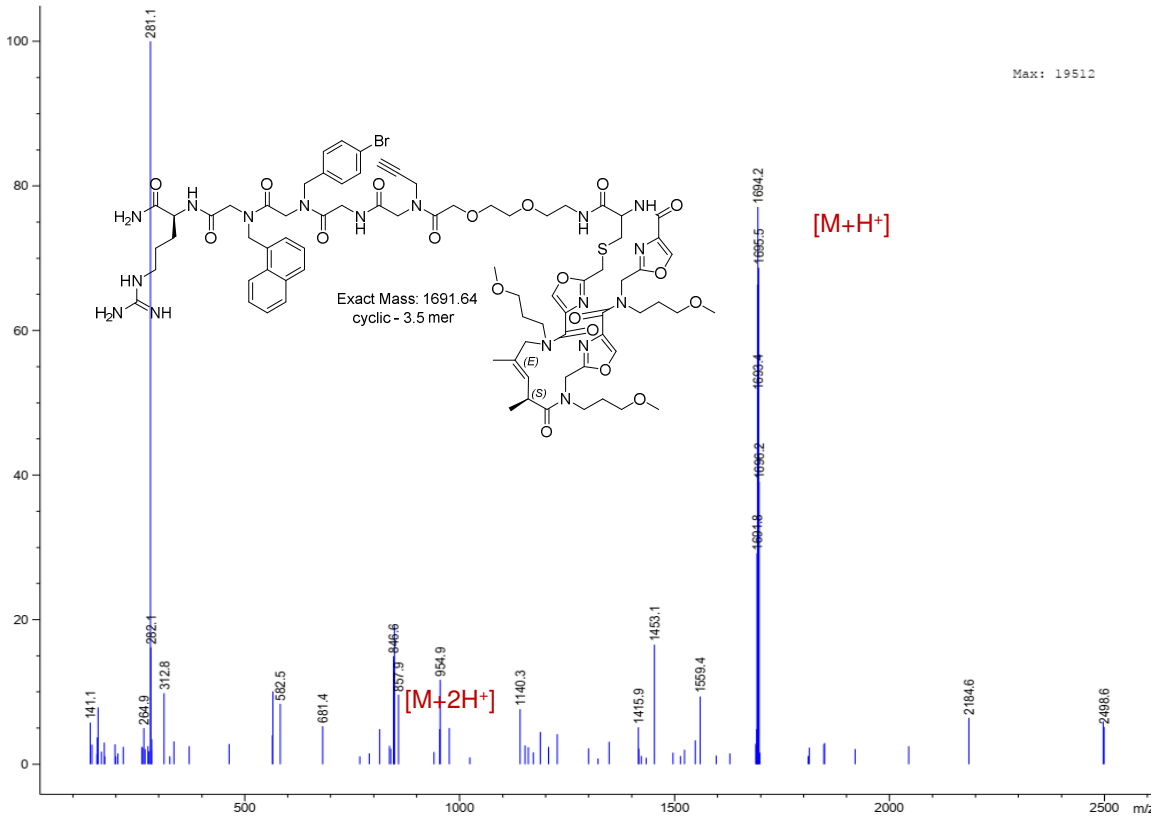




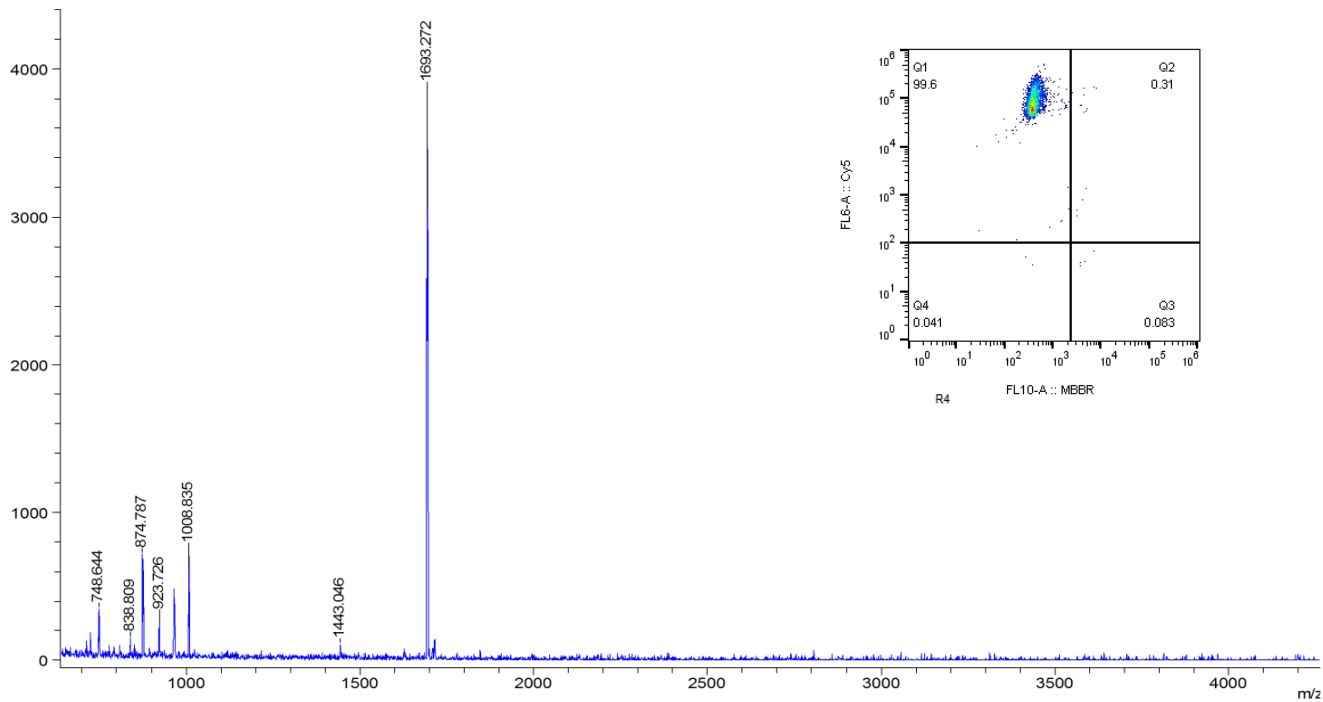
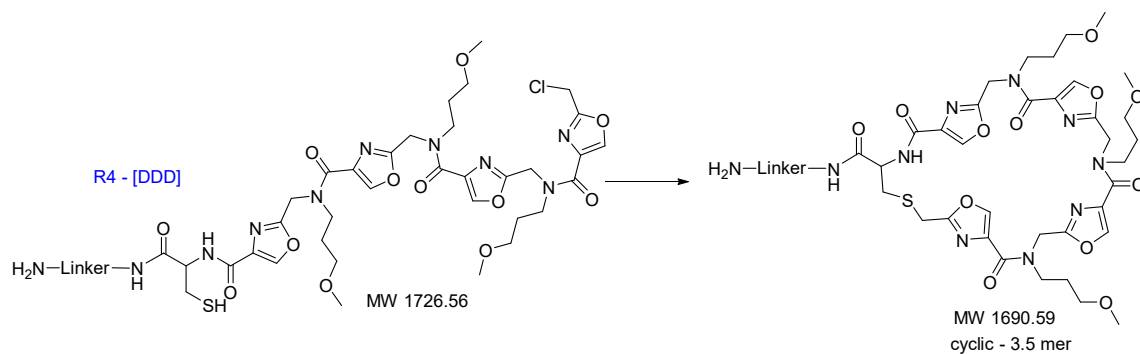
R3-[DCD]: Cyclization was complete on both 10um & 160um.

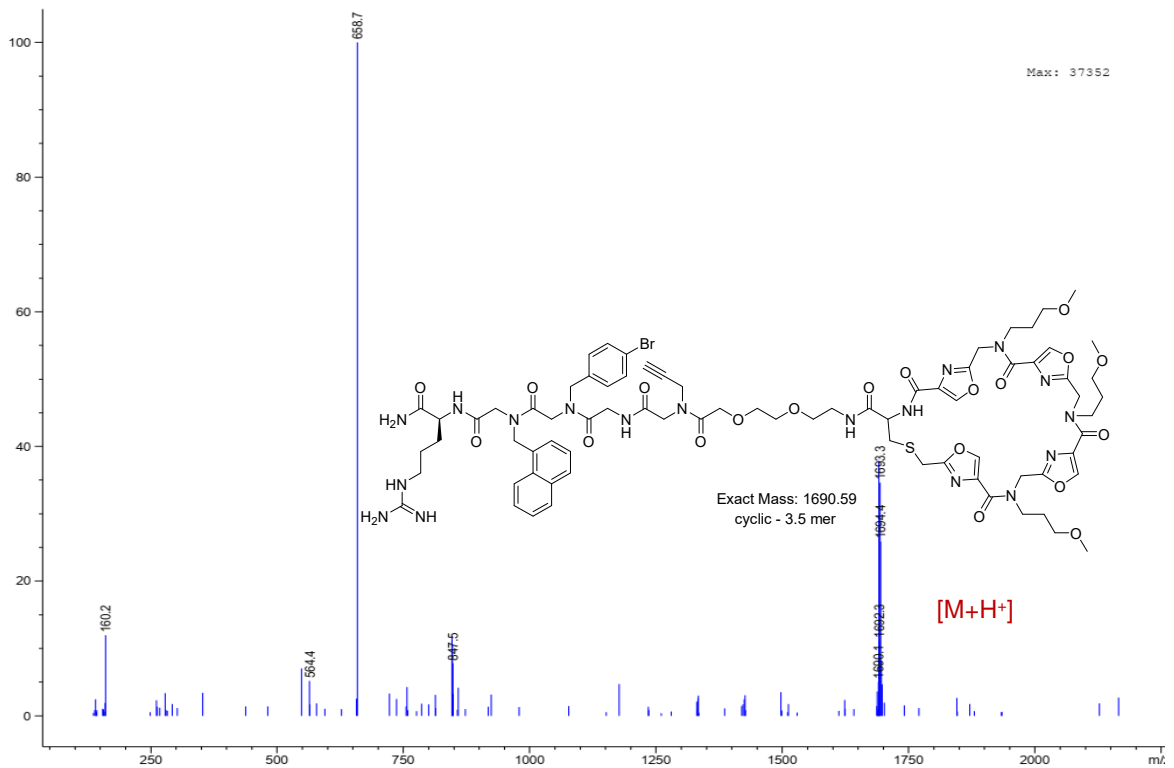
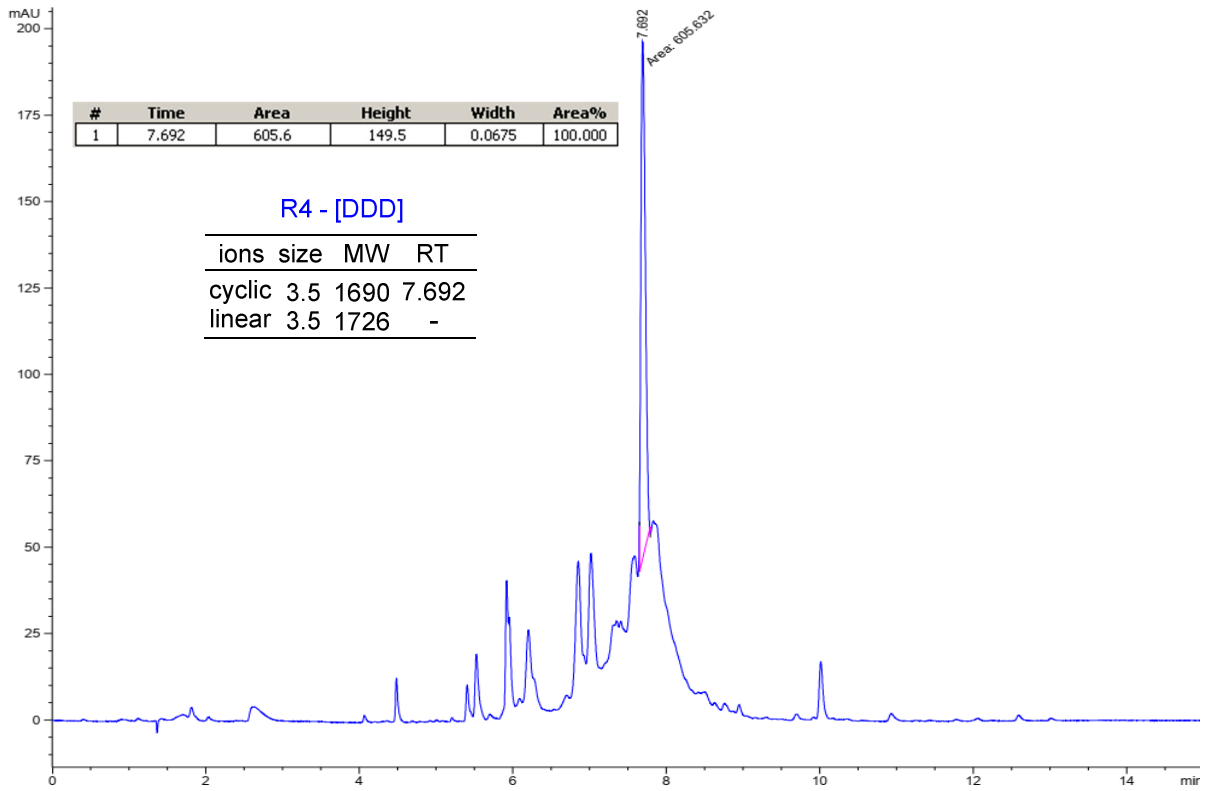




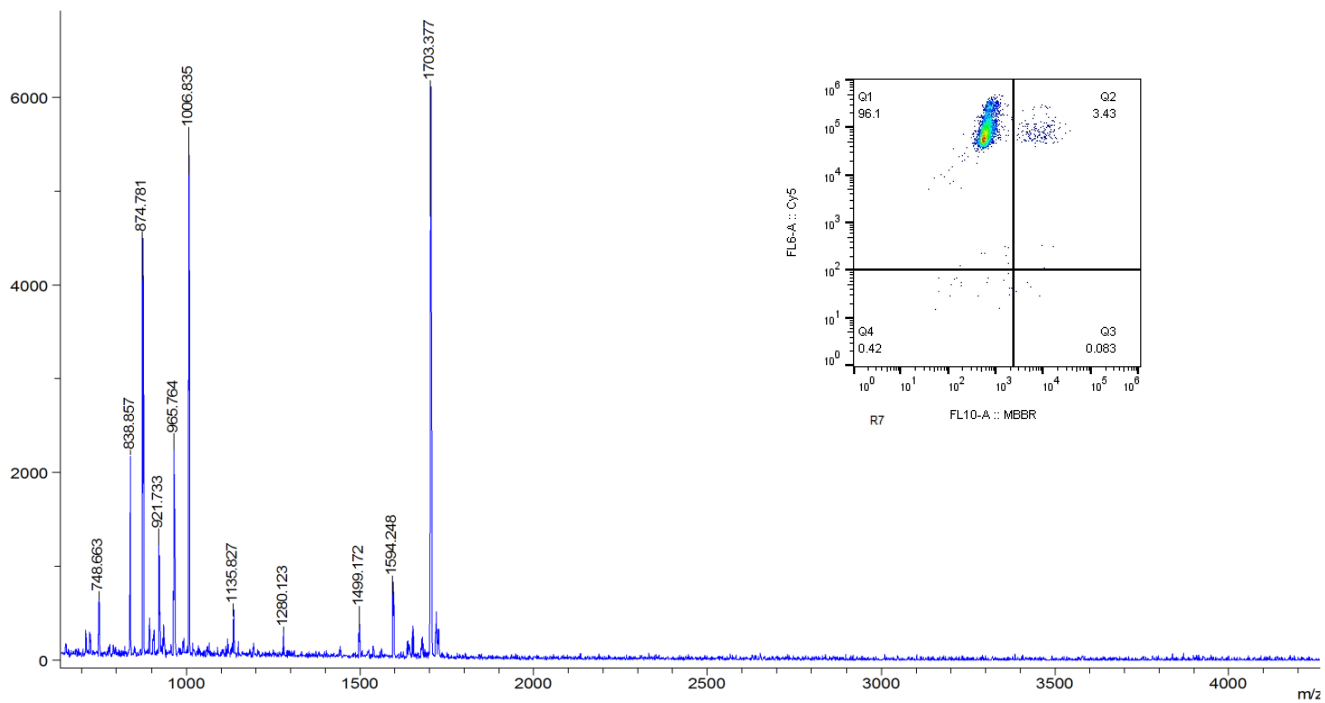
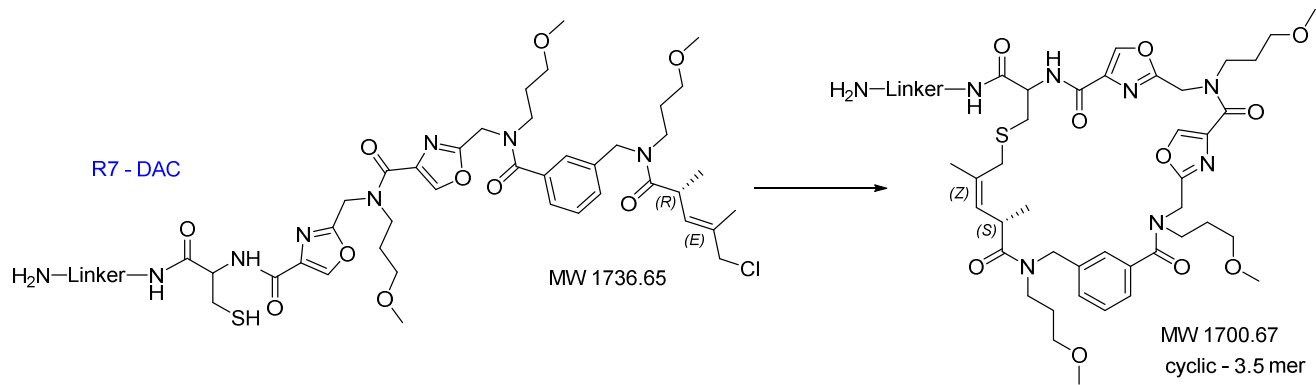


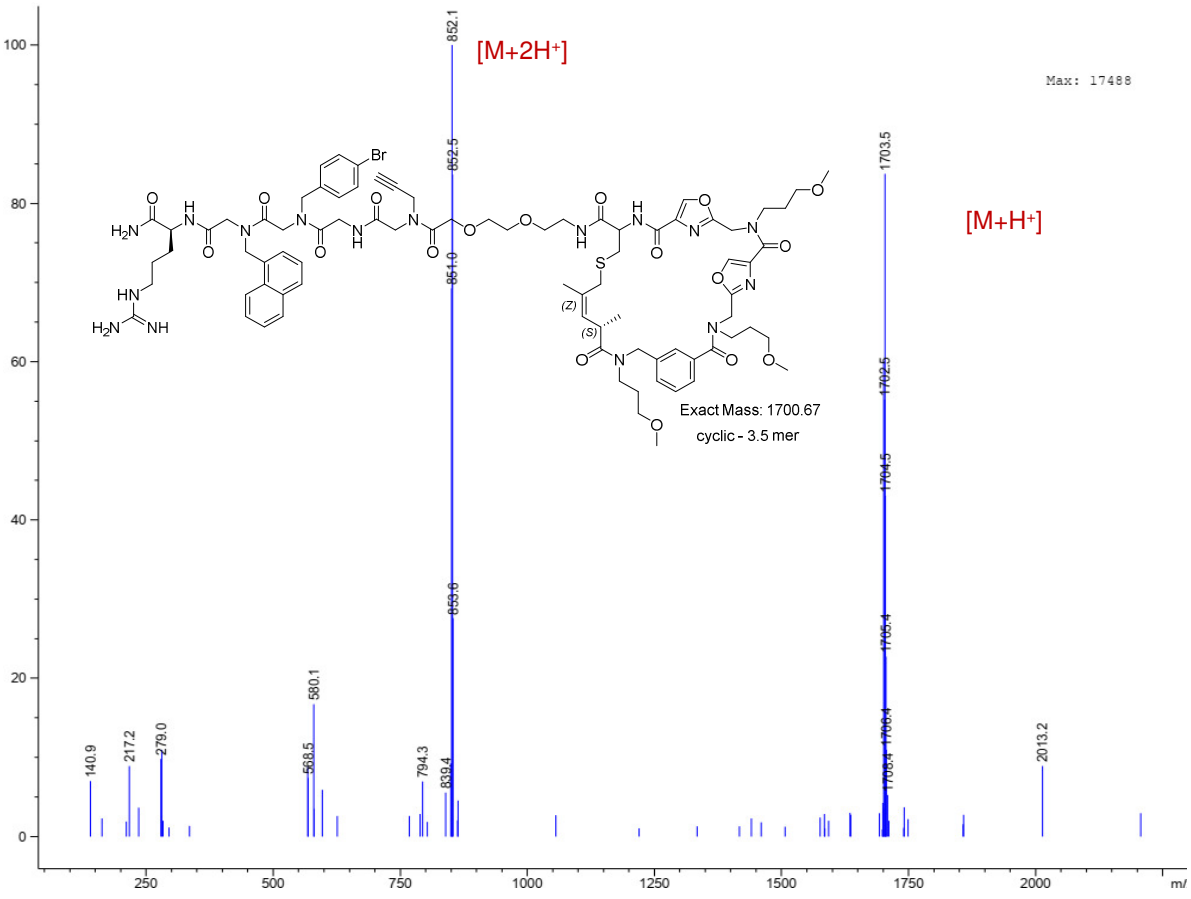
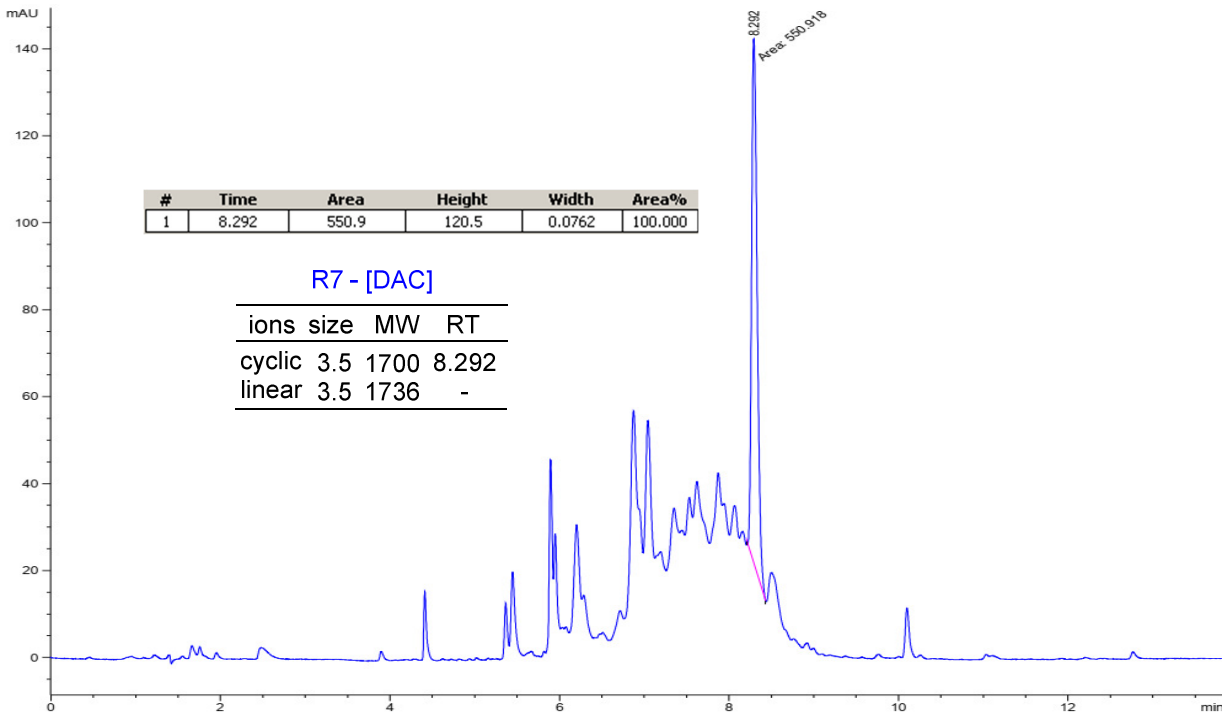
R4-[DDD]: Cyclization was complete on both 10um & 160um.



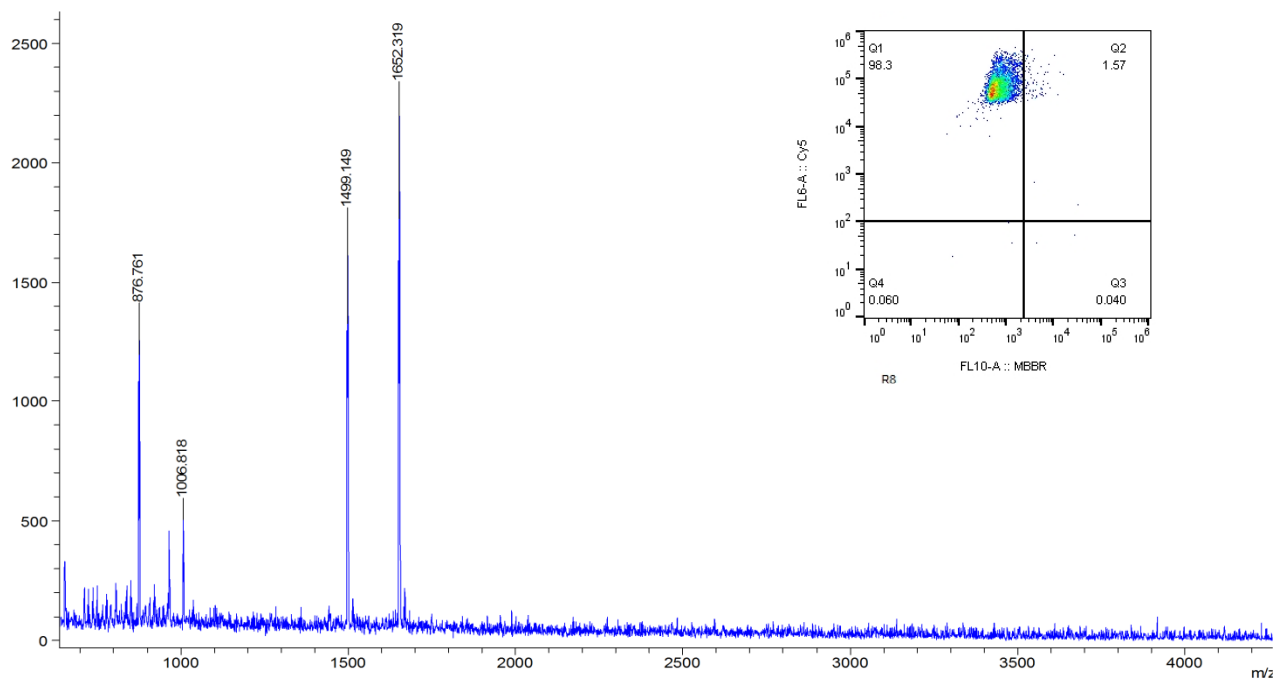
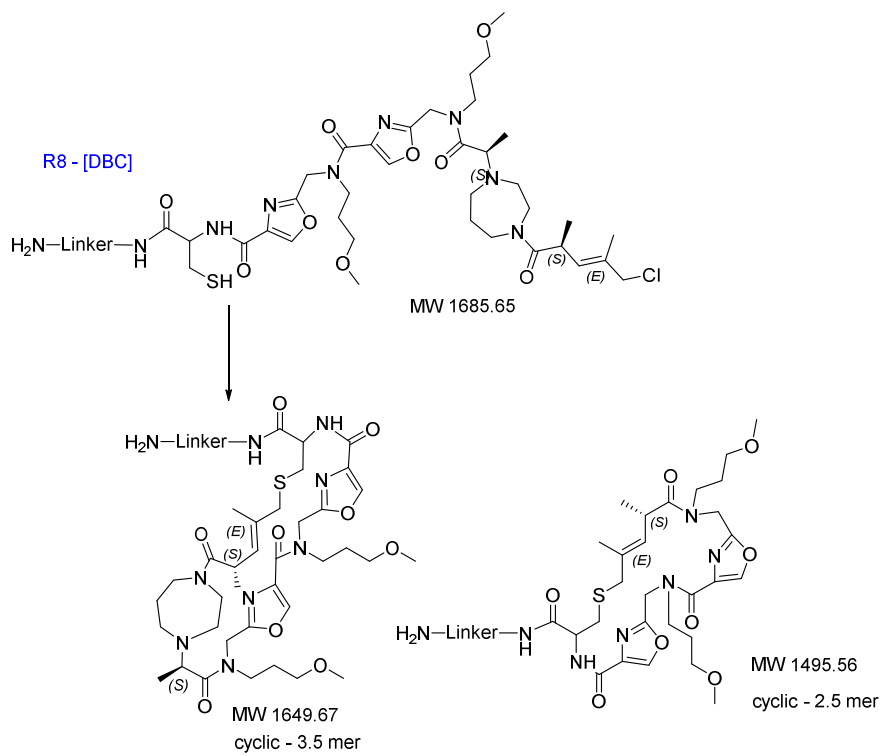


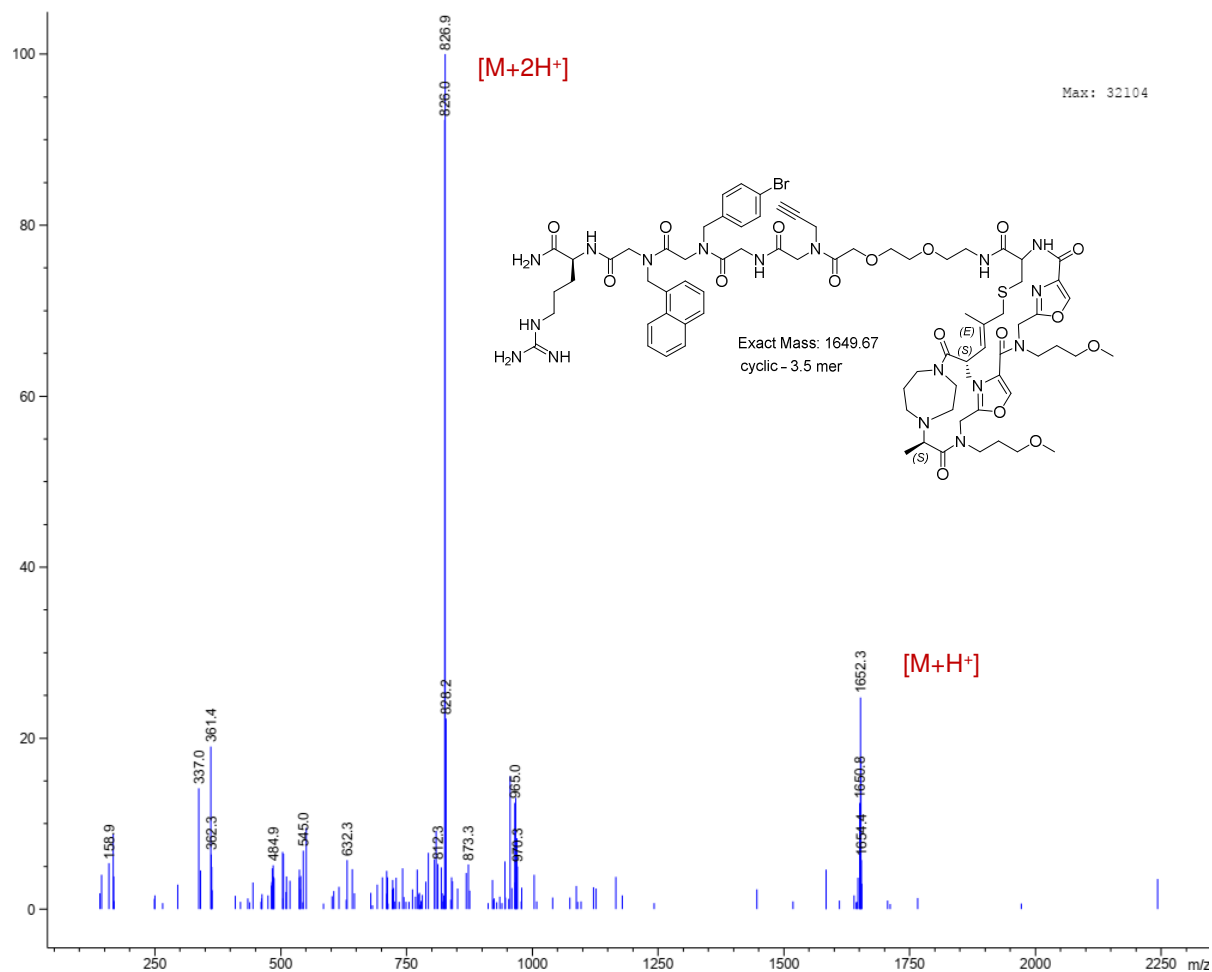
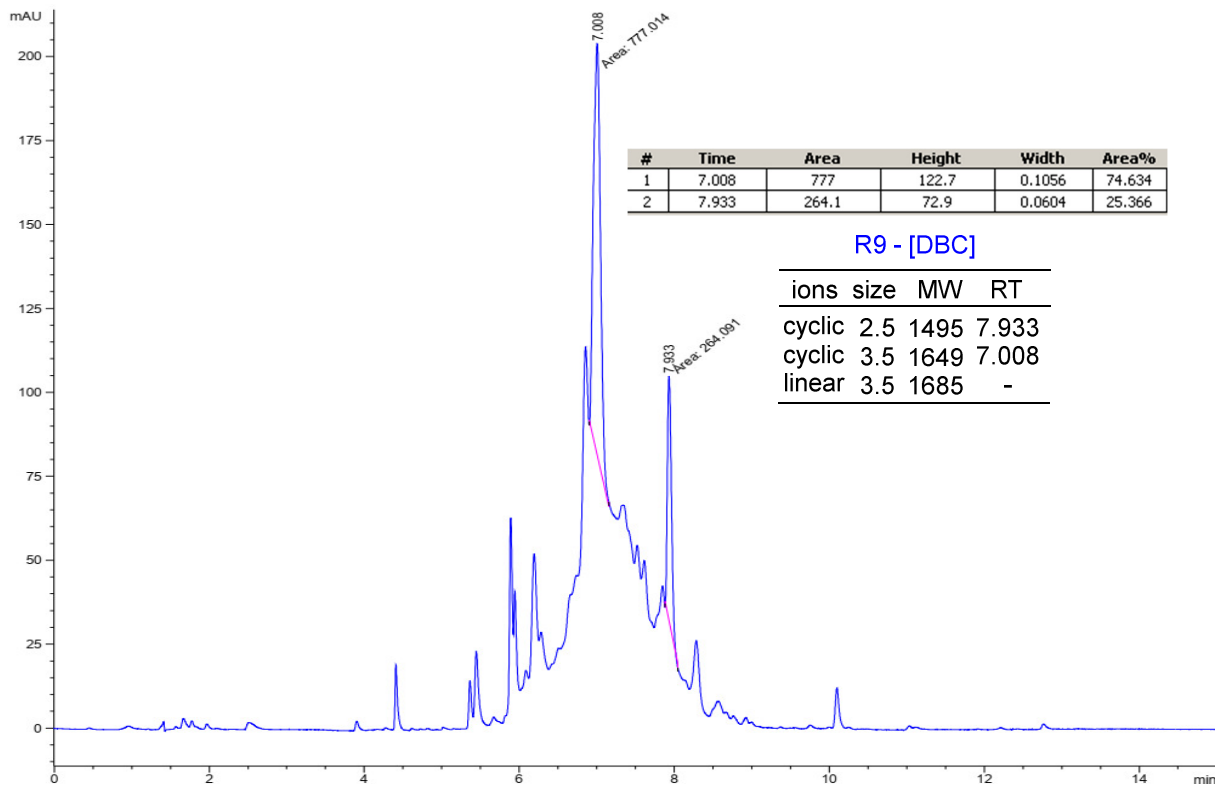
R7-[DAC]: Cyclization was complete on both 10um & 160um.

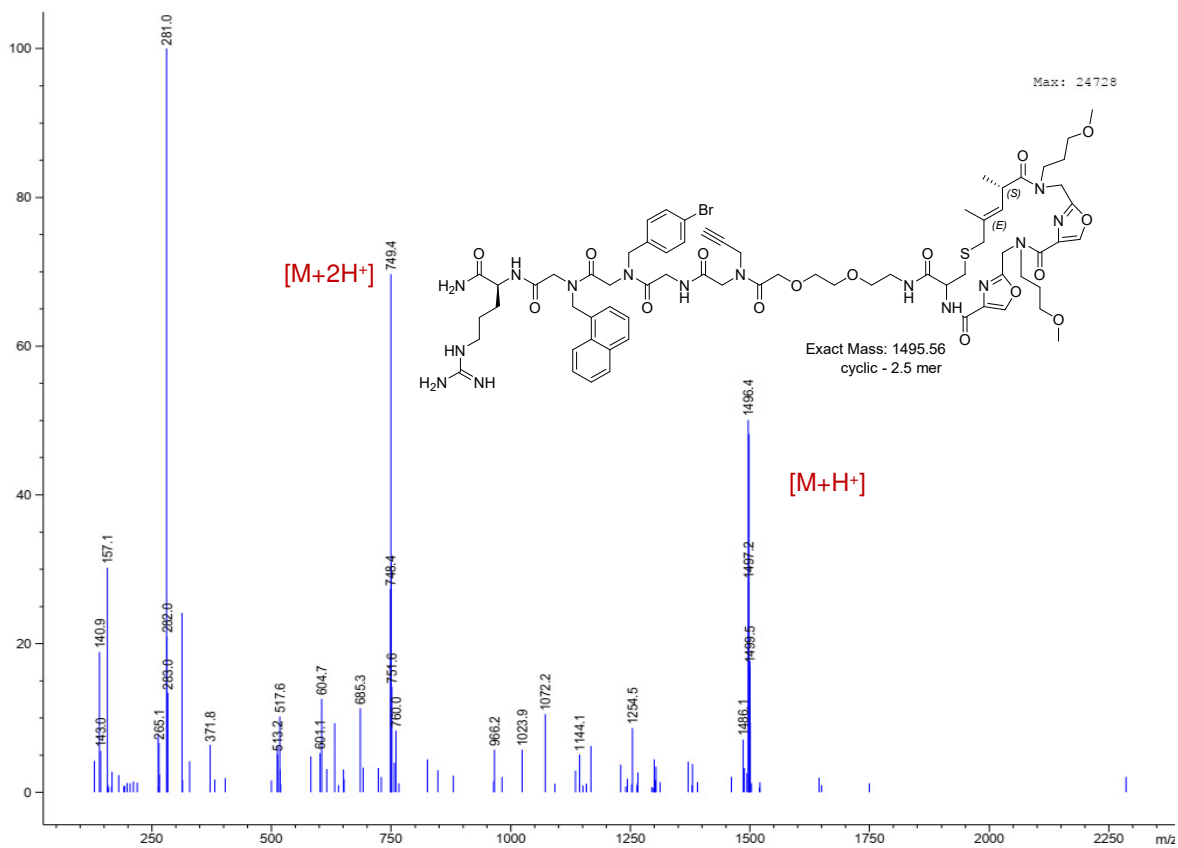




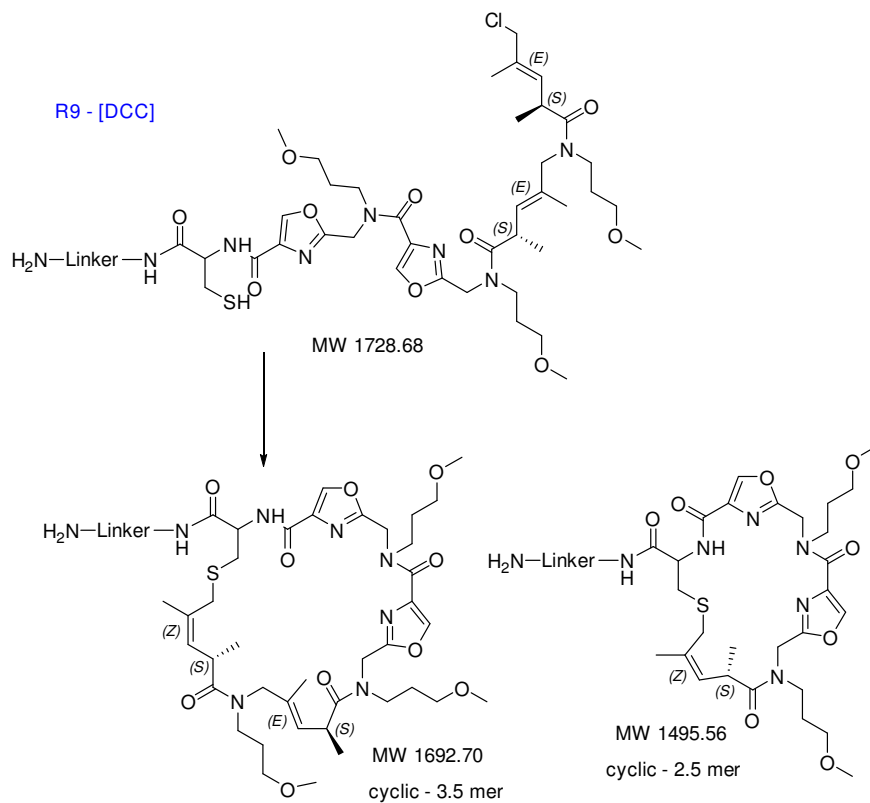
R8-[DBC]: Cyclization was complete on both 10um & 160um.

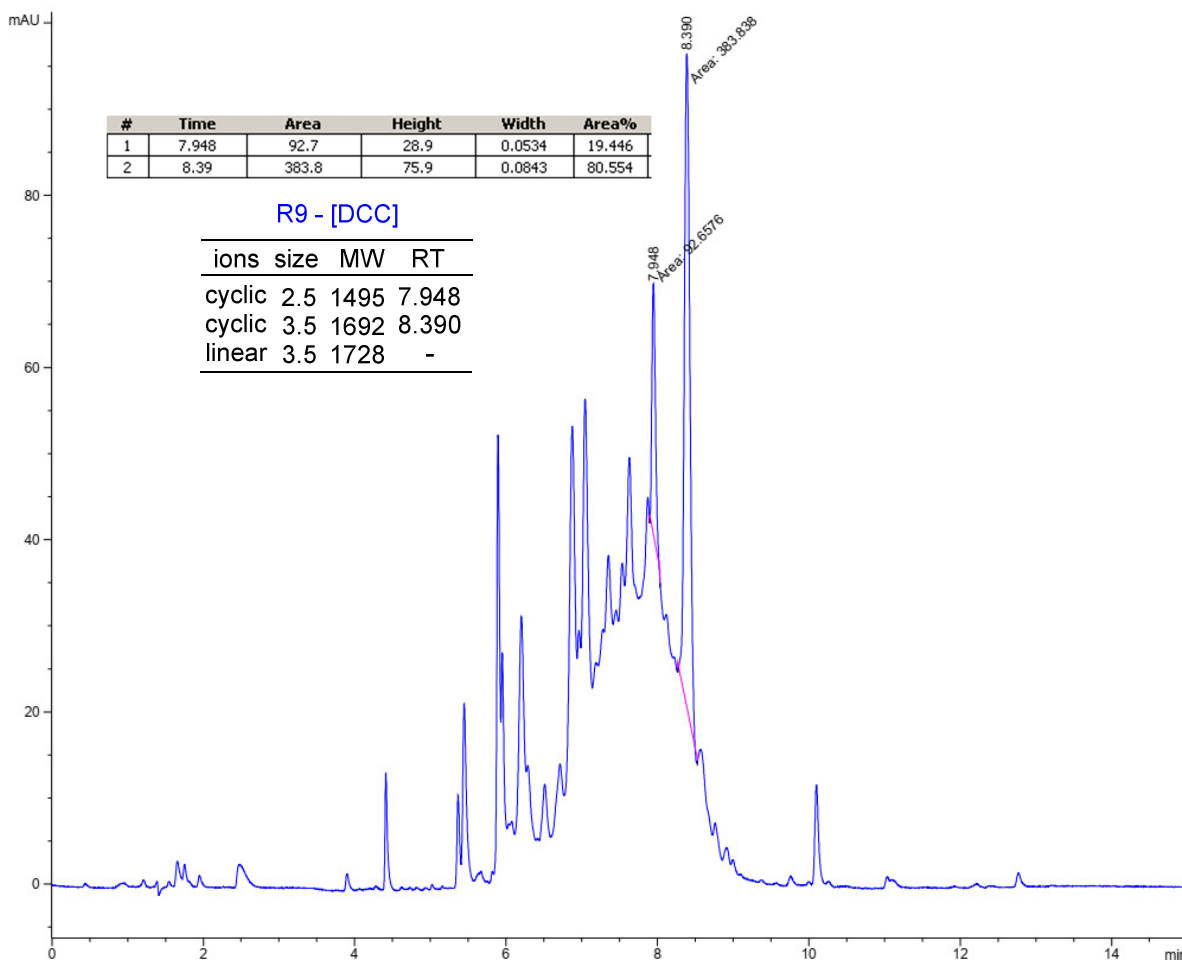
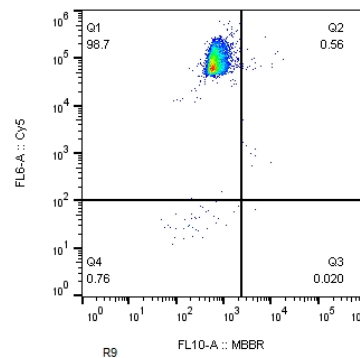
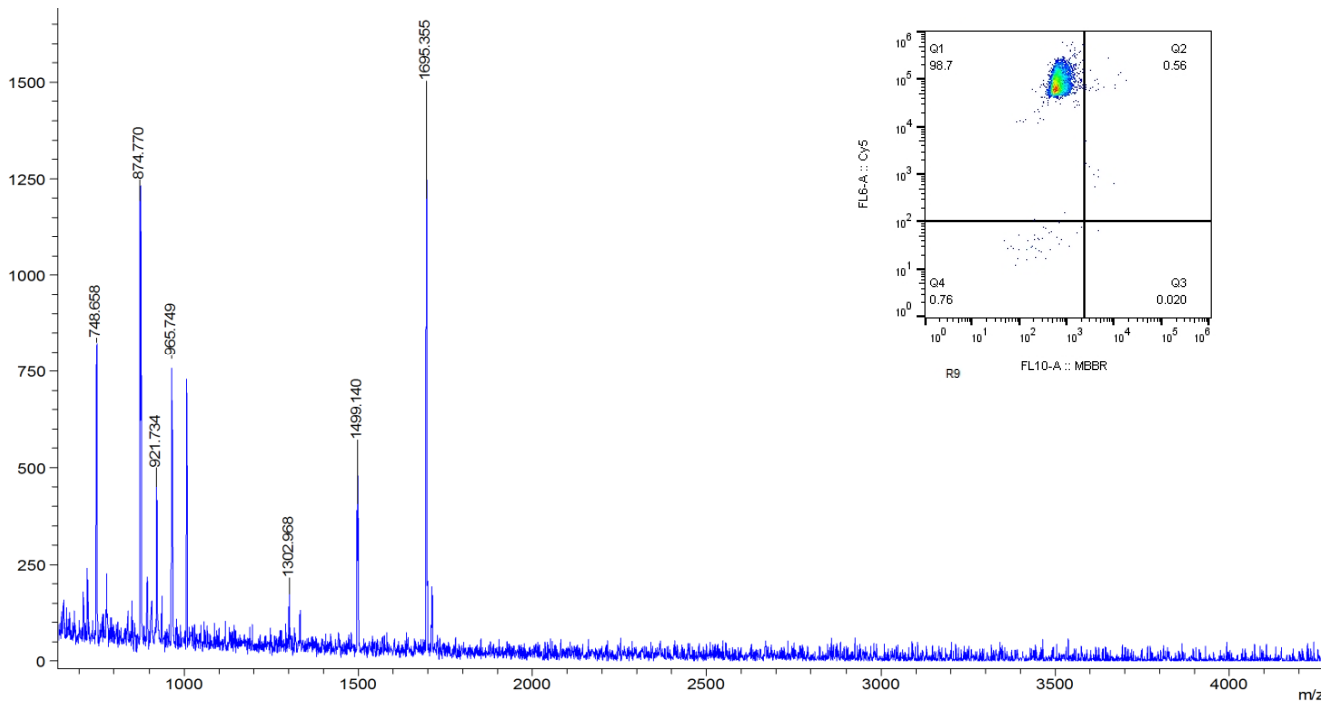


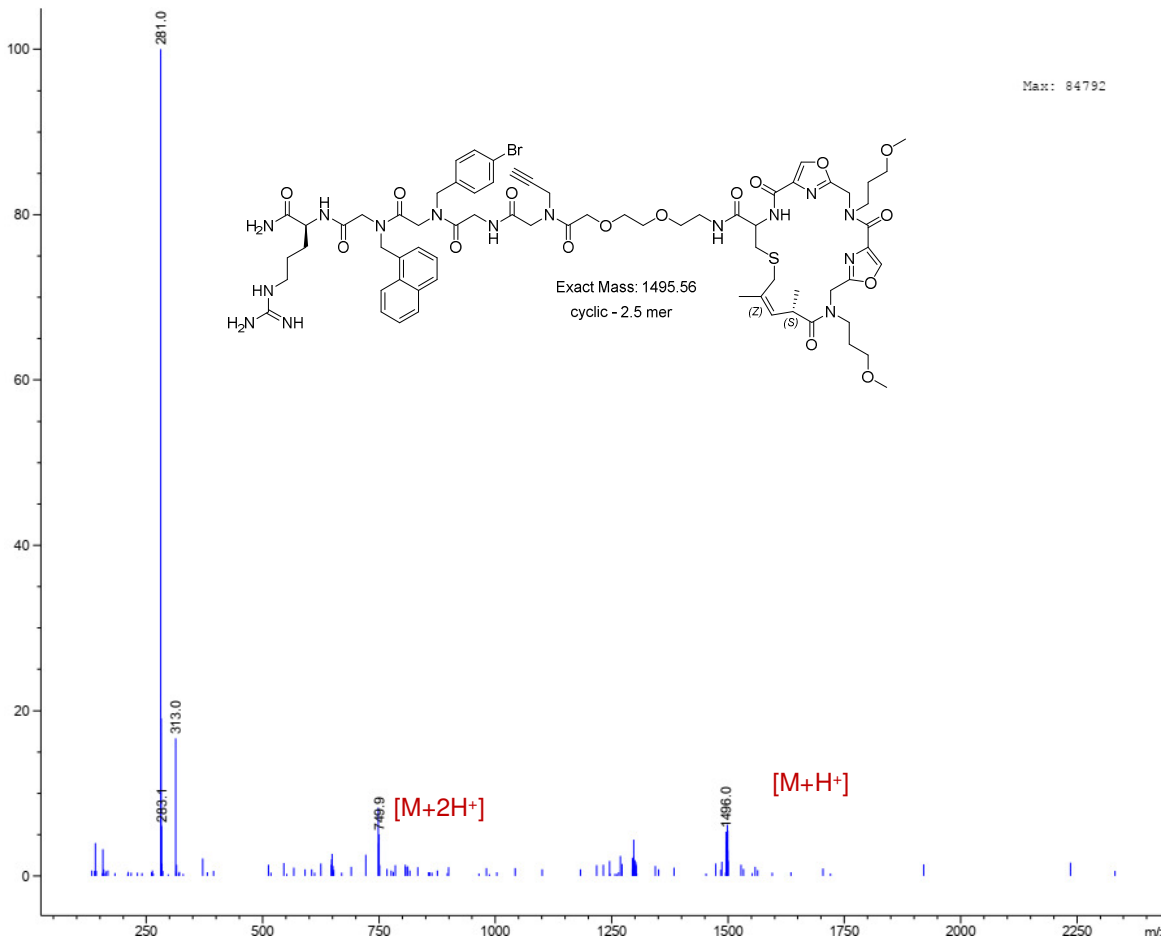
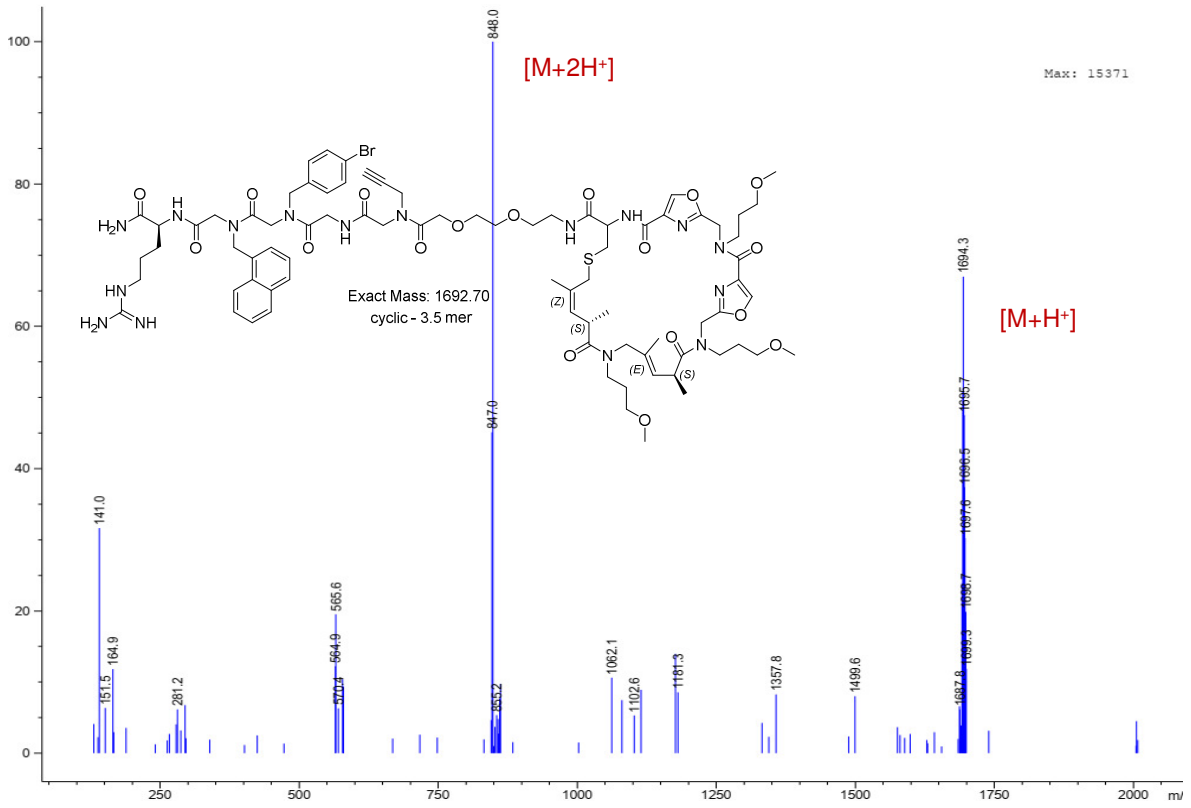




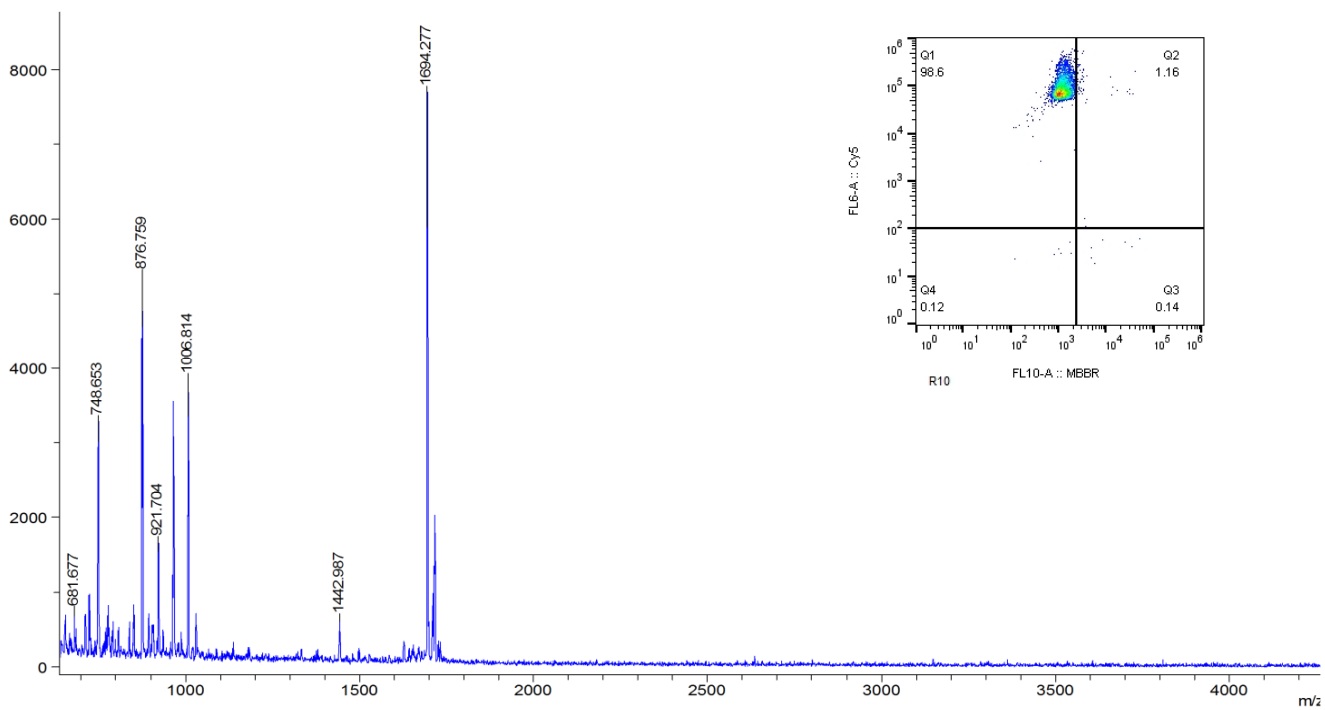
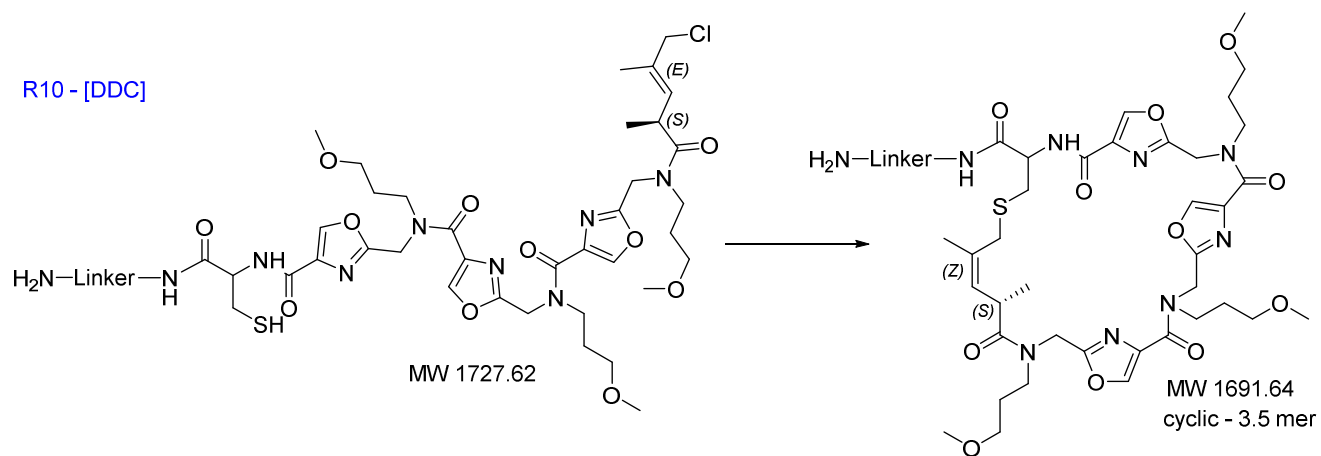
R9-[DCC]: Cyclization was complete on both 10um & 160um.







R10-[DDC]: Cyclization was complete on both 10um & 160um.



Entry	Molecular ID	Copies	Amines (X1)	Amines (X1) smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
228	13042431502306171023062	3		NCCOC		OC(=O)C(Cl)C(O)C		NCC1=CC=C(C)C(F)F=C1		OC(=O)C(Cl)C(O)C		NCCO		OC(=O)C(Cl)C(O)C
227	13042431502306171023062	3		NCCOC		OC(=O)C(Cl)C(O)C		OC(=O)C(Cl)C(O)C		OC(=O)C(Cl)C(O)C		NCCO		OC(=O)C(Cl)C(O)C
322	13124101501280171023063	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
333	130124101501280171023063	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
427	130224101501280171023068	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
428	1302241015012810171023069	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
429	1302241015012810171023068	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
430	130224101502290171023062	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCCO		OC(=O)C(Cl)C(O)C
431	130224101502290171023063	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
432	130224101502290171023063	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
433	130224101502290171023068	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
434	130224101502290171023062	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCCO		OC(=O)C(Cl)C(O)C
435	130224101502290171023064	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
436	1302241015022901710230610	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
517	130224101502290171023064	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
566	130424101501280171023064	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
567	130424101501280171023069	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
568	130424101501280171023063	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
569	130424101502290171023063	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
560	130424101503290171023067	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
561	130424101503290171023063	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
562	130424101504290171023064	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
563	130424101504290171023067	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
564	130424101510290171023064	2		C1CN(C)N1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
327	130124081501280171023063	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
328	130124081502290171023063	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
329	130124081502290171023064	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
330	130124081504290171023064	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
331	130124081504290171023063	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
420	130224081501280171023061	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
421	130224081504290171023063	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
511	130324081502290171023063	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
512	130324081504290171023068	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
513	130324081504290171023064	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
514	130324081504290171023062	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCCO		OC(=O)C(Cl)C(O)C
547	130424081504290171023063	2		N1CCN(C)C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
518	131024031502290171023063	2		NCC1=CC=C(F)C=C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
519	131024031504290171023064	2		NCC1=CC=C(F)C=C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
520	131024031504290171023063	2		NCC1=CC=C(F)C=C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
521	131024031506290171023063	2		NCC1=CC=C(F)C=C1		OC(=O)C(Cl)C(O)C				OC(=O)C(Cl)C(O)C		NCC1=CC=C(N)C=C1		OC(=O)C(Cl)C(O)C
283	130124071501280171023068	2		NCC1=CC=C(Cl)C=C1		OC(=O)C(Cl)C(O)C								

Section-11: Analysis of Naive bead population: These beads are deep sequenced after DEL synthesis

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1): smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
1	130424081501260117022808	47		N1CCNCCC1		ClC(C)C=C(C)C(O)=O		NCCOC		OC(C)=COC(C)N=O		BrC1=CC=C(C)C=C1		OC(C)C(O)C(O)=S
2	130124071501260717022810	44		NCC1=CC=C(C)C=C1		OC(C)=COC(C)N=O		NCC1=CC=C(N)C=C1		OC(C)=CSC(C)N=O		NCC1=CC=C(C)C(C)C=C1		OC(C)C(C)C(O)=CC=C1
4	1302241015032603171022804	37		C1CNCCN1		ClC(C)=C(C)C(O)=O=CC=C1		NCC1=CC=C(S1)C=C1		OC(C)=COC(C)N=O		N(C)C(C)C1=CC=CC=C1 [R]		O=C(O)C1=C(C)C(O)C=C1
3	130224031504260517022802	37		NCCOC		ClC(C)=C(C)C(O)=O=CC=C1		NCC(C)C(O)		OC(C)=C=C(C)C(C)C=C1=O		NCCO		OC(C)C(C)C(O)=S
5	130324041504260417022804	33		NCC=C		OC(C)=CSC(C)N=O		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		N(C)C(C)C1=CC=CC=C1 [R]		CCC(O)=O
6	130424071502260917022805	31		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(O)=O		NCC1=CC(F)=C(C)C(F)F=C1		OC(C)=CSC(C)N=O		NCC1COC(C)=CC=C2=C2O1		OC(C)C(C)C(O)=S
7	130424061502260517022802	25		NCC1=CC=C(O)1		ClC(C)C=C(C)C(O)=O		NCC(C)C(O)		OC(C)=C=C(C)C(C)C=C1=O		NCCO		OC(C)C(C)C(O)=S
8	131024021502261017022809	23		NCC1=CC(F)=C(F)C=C1		ClC(C)=C(C)C(O)=O=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(O)=O		NCC1CCOCC1		ClC(C)C(C)C(O)=O=CC=C1
9	130224091506260317022803	19		NCCCN1C=CN=C1		ClC(C)=C(C)C(O)=O=CC=C1		NCC1=CC=CC(C)C(F)F=C1		ClC(C)C=C(C)C(O)=O		NCCCN1C=CN=C1		OC(C)C(C)C(O)=S
11	1309240315092602171022804	18		NCC1C(C)C(C)1		OC(C)=CSC(C)N=O		NCC1=CC=CC(C)C(F)F=C1		ClC(C)C=C(C)C(O)=O		N(C)C(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
10	130124041506260317022804	18		NCC=C		OC(C)=COC(C)N=O		NCC1=CC=CC(C)C(F)F=C1		ClC(C)C=C(C)C(O)=O		NCC1=CC=C(O)1		ClC(C)C(C)C(O)=O=CC=C1
12	1301240715012604171022804	17		NCC1=CC=C(C)C=C1		OC(C)=COC(C)N=O		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		N(C)C(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
13	130224031503260417022804	16		NCCOC		ClC(C)=C(C)C(O)=O=CC=C1		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		N(C)C(C)C1=CC=CC=C1 [R]		CCC(O)=O
14	1310240215012604171022804	16		NCC1=CC(F)=C(F)C=C1		ClC(C)=C(C)C(O)=O=CC=C1		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		N(C)C(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
15	1301240615092601171022804	15		NCC1=CC=C(O)1		OC(C)=COC(C)N=O		NCC1=CC=CC(C)C(F)F=C1		ClC(C)C=C(C)C(O)=O		N(C)C(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
16	130124071510260417022803	16		NCC1=CC=C(C)C=C1		OC(C)=COC(C)N=O		CC(C)CN		ClC(C)C=C(C)C(O)=O		NCCCN1C=CN=C1		OC(C)C(C)C(O)=S
17	13012401510260317022804	14		C1CNCCN1		OC(C)=C(C)C(C)N=O		CC(C)CN		ClC(C)C=C(C)C(O)=O		N(C)C(C)C1=CC=CC=C1 [R]		CCC(O)=O
18	13022401510260317022803	14		C1CNCCN1		ClC(C)=C(C)C(O)=O=CC=C1		CC(C)CN		ClC(C)C=C(C)C(O)=O		NCCCN1C=CN=C1		OC(C)C(C)C(O)=S
19	1302240215012604170422806	13		NCC1=CC=CN=C1		ClC(C)=C(C)C(O)=O=CC=C1		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		N(C)C(C)C1=CC=CC=C1		OC(C)C(C)C(O)=O [R]
23	130224031510260417022804	12		NCCOC		ClC(C)=C(C)C(O)=O=CC=C1		CC(C)CN		ClC(C)C=C(C)C(O)=O		N(C)C(C)C1=CC=CC=C1 [R]		CCC(O)=O
22	1301240615042604171022804	12		N1CCNCCC1		OC(C)=COC(C)N=O		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		N(C)C(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
26	130424031510260317022803	12		NCCOC		ClC(C)C=C(C)C(O)=O		CC(C)CN		ClC(C)C=C(C)C(O)=O		NCCCN1C=CN=C1		OC(C)C(C)C(O)=S
21	130124001502261017042603	12		N1CCNCCC1		OC(C)=COC(C)N=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(O)=O		NCCCN1C=CN=C1		OC(C)C(C)C(O)=O [R]
20	130124051502260417042803	12		NCC1=CC=C(C)C(C)C=C1		OC(C)=COC(C)N=O		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		NCCCN1C=CN=C1		OC(C)C(C)C(O)=O [R]
24	130324101501260417022803	12		C1CNCCN1		OC(C)=CSC(C)N=O		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		NCCCN1C=CN=C1		ClC(C)C(C)C(O)=O=CC=C1
25	130424011503260517022802	12		NCC1=CC=C(Br)C=C1		ClC(C)C=C(C)C(O)=O		NCC(C)C(O)		OC(C)=C=C(C)C(C)C=C1=O		NCCO		OC(C)C(C)C(O)=S
29	130424031506260317022804	11		NCCOC		ClC(C)C=C(C)C(O)=O		NCC1=CC=CC(C)C(F)F=C1		ClC(C)C=C(C)C(O)=O		N(C)C(C)C1=CC=CC=C1 [R]		CCC(O)=O
28	130424031504260817022803	11		NCCOC		ClC(C)C=C(C)C(O)=O		N(C)C(C)C1=CC=CC=C1		OC(C)=CSC(C)N=O		NCCCN1C=CN=C1		ClC(C)C(C)C(O)=O=CC=C1
27	130124031504260417022803	11		NCCOC		OC(C)=COC(C)N=O		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		NCCCN1C=CN=C1		OC(C)C(C)C(O)=S
30	1310240215012602170122806	11		NCC1=CC(F)=C(F)C=C1		ClC(C)=C(C)C(O)=O=CC=C1		NCC1=CC=C(Br)C(C)C=C1		OC(C)=COC(C)N=O		BrC1=CC=C(C)C=C1		OC(C)=CSC(C)N=O
32	130124051506260317022807	10		NCC1=CC=C(C)C(C)C=C1		OC(C)=COC(C)N=O		NCC1=CC=CC(C)C(F)F=C1		ClC(C)C=C(C)C(O)=O		NCC1=CC(C)C(C)C=C1		OC(C)C(C)C(O)=S
33	130124071502260417022803	10		NCC1=CC=C(C)C=C1		OC(C)=COC(C)N=O		NCCNC(O)=O		OC(C)=C=C(C)C(C)C=C1=O		N(C)C(C)C1=CC=CC=C1 [R]		OC(C)C(C)C(O)=S
34	1303240315062602171022804	10		NCCOC		OC(C)=CSC(C)N=O		NCC1=CC=CC(C)C(F)F=C1		ClC(C)C=C(C)C(O)=O		N(C)C(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
36	130324101502260217022803	10		C1CNCCN1		OC(C)=CSC(C)N=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=COC(C)N=O		NCCCN1C=CN=C1		ClC(C)C(C)C(O)=O=CC=C1

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1): smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
35	130324051503260117022803	10		<chem>NCC1=CC=C(C)OC(O)C2=C1</chem>		<chem>OC(C1=CSC(C(C)N)N)=O</chem>		<chem>NCCOC</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
37	1304240515042609417022804	10		<chem>NCC1=CC=C(C)OC(O)C2=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC(F)=C(C(F)F)F=C1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>NCC1=CC=C(O)C=C1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
31	130124051502260417022804	10		<chem>NCC1=CC=C(C)OC(O)C2=C1</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCCNG(C)=O</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>NCC1=CC=C(O)C=C1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
38	130124031502261017022803	9		<chem>NCCOC</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [R]</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
45	130924031504260417022804	9		<chem>NCC1CCOCC1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>NCCNC(O)=O</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [R]</chem>		<chem>CC(O)C=O</chem>
40	1302240150109260171022804	9		<chem>C1CNCCN1</chem>		<chem>ClC(C)C=C(C)C(O)=O=CC=C1</chem>		<chem>NCC1=CC=C(C(F)F)F=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [S]</chem>		<chem>O=C(O)C1=C(C)OC=C1</chem>
41	1303240151022603171022804	9		<chem>C1CNCCN1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>CC(C)CN</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [S]</chem>		<chem>O=C(O)C1=C(C)OC=C1</chem>
42	130424031509260217022803	9		<chem>NCCOC</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=C(C(F)F)F=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
43	130424081503260717022803	9		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=C(N)C=C1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
44	1309240315012609117022804	9		<chem>NCC1CCOCC1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>NCC1=CC(F)=C(C(F)F)F=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=C(O)C=C1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
39	130124091501261017022802	9		<chem>NCCCN1C=CN=C1</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCO</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
46	130124031503260417022804	8		<chem>NCCOC</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCCNC(O)=O</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [R]</chem>		<chem>CC(O)C=O</chem>
49	130124051503260617022804	8		<chem>NCC1=CC=C(C)OC(O)C2=C1</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [R]</chem>		<chem>CC(O)C=O</chem>
59	1304240815092603171022804	8		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=CC(C(F)F)F=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [S]</chem>		<chem>O=C(O)C1=C(C)OC=C1</chem>
48	1301240515012610171022804	8		<chem>NCC1=CC=C(C)OC(O)C2=C1</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [R]</chem>		<chem>O=C(O)C1=C(C)OC=C1</chem>
63	1309240714912605171022804	8		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>NCC(C)C(O)C</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [S]</chem>		<chem>O=C(O)C1=C(C)OC=C1</chem>
55	130424031504260617022803	8		<chem>NCCOC</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
58	130424071502260217022803	8		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=C(S(=O)(=O)C)C=C1</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
60	130424091504260617022803	8		<chem>NCCCN1C=CN=C1</chem>		<chem>OC(C)C=C(C)C(O)C(O)=O</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
57	130424051502260417022803	8		<chem>NCC1=CC=C(C)OC(O)C2=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCNC(O)=O</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
52	130224041504260717022803	8		<chem>NCC=C</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>		<chem>NCC1=CC=C(N)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
50	130124051509260317022803	8		<chem>NCC1=CC=C(C)OC(O)C2=C1</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCC1=CC=C(C(F)F)F=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
61	13042401501260517022809	8		<chem>C1CNCCN1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=C(O)C=C1</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>NCC1CCOCC1</chem>		<chem>OCC(C@H)C(C)C(O)=O [R]</chem>
56	130424031504260917022809	8		<chem>NCCOC</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC(F)=C(C(F)F)F=C1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>NCC1CCOCC1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
47	130124031504260817022809	8		<chem>NCCOC</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>NCC1CCOCC1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
54	130424031504260517022802	8		<chem>NCCOC</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC(C)C(O)C</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>NCCO</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
51	130224031502260817022802	8		<chem>NCCOC</chem>		<chem>ClC(C)C=C(C)C(O)=O=CC=C1</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1</chem>		<chem>OC(C1=CSC(C)N)N)=O</chem>		<chem>NCCO</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
66	130424071502260317022805	7		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=CS1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1COCC(C=C=C2)C2=O1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
70	130924041501260417022804	7		<chem>NCC1CCOCC1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCNC(O)=O</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [R]</chem>		<chem>CC(O)C=O</chem>
63	130124071502260917022804	7		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCC1=CC=C(O)C=C1</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [R]</chem>		<chem>CC(O)C=O</chem>
71	1310240215032604171022804	7		<chem>NCC1=CC(F)=C(C(F)F)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)=O=CC=C1</chem>		<chem>NCCNC(O)=O</chem>		<chem>OC(C1=CC=C(C)C)C=C1=O</chem>		<chem>N(C@H)C(C)C1=CC=CC=C1 [S]</chem>		<chem>O=C(O)C1=C(C)OC=C1</chem>
65	130424031501261017022803	7		<chem>NCCOC</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC1=CC(C(O)=O)=CC=C1</chem>
67	130424071509260417022803	7		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=C(C(F)F)F=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>
68	130424091502260317022803	7		<chem>NCCCN1C=CN=C1</chem>		<chem>ClC(C)C=C(C)C(O)C(O)=O</chem>		<chem>NCC1=CC=CS1</chem>		<chem>OC(C1=COG(C(C)N)N)=O</chem>		<chem>NCCCN1C=CN=C1</chem>		<chem>OCC(C@H)C(C)C(O)=O [S]</chem>

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1)- smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
62	130124031502260217032803	7		NCCCO		OC(C1=CC(C(=O)N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
66	139824011501260717042803	7		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
64	130324051504260817032803	7		NCC1=CC=C(C(=O)C2=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(=O)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
84	130424031503260517032804	6		NCCCO		ClC(C)C=C([C@H](C)C)C(=O)O		NCC(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CC=C(C(=O)C)C=C1		CC(C)C(=O)O
85	130424051506260217032804	6		NCC1=CC=C(C(=O)C2=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(F)F)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(=O)C)C=C1		CC(C)C(=O)O
75	130124071502260317032804	6		NCC1=CC=C(C)C=C1		OC(C1=CC(C(=O)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(C(=O)N1)=O		NCC1=CC=C(C(=O)C)C=C1		CC(C)C(=O)O
81	130324061503260417032804	6		NCC1=CC=C(O1)		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CC=C(C(=O)C)C=C1		CC(C)C(=O)O
77	130224041501260517102804	6		NCC=C		ClC(C)C=C(C(=O)O)=CC=C1		NCC(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
79	130224081503260417102804	6		N1CCNCCC1		ClC(C)C=C(C(=O)O)=CC=C1		NCCN(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
76	130124071504260217102804	6		NCC1=CC=C(C)C=C1		OC(C1=CC(C(=O)N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C(=O)N1)=O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
82	130324081506260217102804	6		N1CCNCCC1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(F)F)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
88	130924021503261017102804	6		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
83	130424031502260217032803	6		NCCCO		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
78	130224081502260717032803	6		N1CCNCCC1		ClC(C)C=C(C(=O)O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
87	130924021501260317032803	6		NCC1CCOCC1		ClC(C)C=C(C(=O)O)=CC=C1		NCC1=CC=C(S1)		OC(C1=CC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
73	130124041501261017032803	6		NCC=C		OC(C1=CC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCCCN1C=CN=C1		ClC(C)C=C(C(=O)O)=CC=C1
72	130124031502261017032803	6		NCCCO		OC(C1=CC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
74	13012405150260317032803	6		NCC1=CC=C(C(=O)C2=C1		OC(C1=CC(C(=O)N1)=O		CC(C)CN		ClC(C)C=C([C@H](C)C)C(=O)O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
80	130324041502260417042803	6		NCC=C		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
89	130924031503261017032803	6		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S
90	131024011504260917042809	6		NCC1=C(F)C(F)C=C1		OC(C1=CC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1CCOCC1		OC([C@H](C)C)C(=O)S
86	1304241501509260217022804	6		C1CNCCN1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(F)F)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(O1)		ClC(C)C=C(C(=O)O)=CC=C1
91	131024031504260517032602	6		NCC1=C(F)C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCCO		OC([C@H](C)C)C(=O)S
125	130424031502260417022805	5		NCCCO		ClC(C)C=C([C@H](C)C)C(=O)O		NCCN(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1CCOCC1		ClC(C)C=C(C(=O)O)=CC=C1
122	130324101502260417032801	5		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CNC2=CC=CC=C21		OC([C@H](C)C)C(=O)S
113	130224101502261017032804	5		C1CNCCN1		ClC(C)C=C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(=O)C)C=C1		CC(C)C(=O)O
126	130424031504260417102803	5		NCCCO		ClC(C)C=C([C@H](C)C)C(=O)O		NCCN(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CC=C(C(=O)C)C=C1		OC([C@H](C)C)C(=O)S
128	130424051504261017102804	5		NCC1=CC=C(C(=O)C2=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
110	13022408150260317102804	5		N1CCNCCC1		ClC(C)C=C(C(=O)O)=CC=C1		CC(C)CN		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
111	130224091504260017102804	5		NCCCN1C=CN=C1		ClC(C)C=C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
134	131024021501261017102804	5		NCC1=CC(F)C(F)C=C1		ClC(C)C=C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
135	131024021502260617102804	5		NCC1=CC(F)C(F)C=C1		ClC(C)C=C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
99	130124071504260417102804	5		NCC1=CC=C(C)C=C1		OC(C1=CC(C(=O)N1)=O		NCCN(C)C(=O)O		OC(C1=CC=C(C(=O)C)C=C1)=O		NCC1=CC=C(C(=O)C)C=C1		O=C(O)C1=C(C)OC=C1
131	130424101504260317032803	5		C1CNCCN1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(S1)		OC(C1=CC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@H](C)C)C(=O)S

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1): smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
130	130424091502260817032803	5		NCCN1C=CN=C1		ClC(C)(C)(Cl)C(O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
112	130224101509260417032803	5		C1CNCCN1		ClC(C)(C)(O)=O		NCC1=CC=CC=C1		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		OC(C)=C(C)C(O)=O
114	130224101509260317032803	5		C1CNCCN1		ClC(C)(C)(O)=O		NCC1=CC=CC(F)F=C1		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
108	130224031502260717032803	5		NCCOC		ClC(C)(C)(O)=O		NCC1=CC=CC(N)C=C1		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		OC(C)=C(C)C(O)=O
109	130224031502260717032803	5		NCCOC		ClC(C)(C)(O)=O		NCC1=CC=CC(N)C=C1		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
132	130924021509260417022803	5		NCC1CCOCC1		ClC(C)(C)(O)=O		NCC1=CC=CC(F)F=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
106	130124101502260417022803	5		C1CNCCN1		OC(C)=C(C)C(O)=O		NCCN(C)C=O		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [R]
107	130124101503260417022803	5		C1CNCCN1		OC(C)=C(C)C(O)=O		NCCN(C)C=O		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
95	130124071501260417032803	5		NCC1=CC=C(C)C=C1		OC(C)=C(C)C(O)=O		NCCN(C)C=O		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
96	130124071501260617022803	5		NCC1=CC=C(C)C=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
98	130124071501261017042803	5		NCC1=CC=C(C)C=C1		OC(C)=C(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [R]
101	130124071509260417022803	5		NCC1=CC=C(C)C=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC(F)F=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
103	130124091501260617022803	5		NCCN1C=CN=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC=C1		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
104	130124091501260717032803	5		NCCN1C=CN=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC(N)C=C1		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
92	130124051503261017042803	5		NCC1=CC=C(C)C(O)C2=C1		OC(C)=C(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [R]
93	130124061509260117012803	6		NCC1=CC=C(C)C(O)C2=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC(F)F=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
94	130124051509260417032803	5		NCC1=CC=C(C)C(O)C2=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC(F)F=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
123	130324101503260417022803	5		C1CNCCN1		OC(C)=C(C)C(O)=O		NCCN(C)C=O		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
115	130324031503260417022803	5		NCCOC		OC(C)=C(C)C(O)=O		NCCN(C)C=O		OC(C)=C(C)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
120	130324071503261017022803	5		NCC1=CC=C(C)C=C1		OC(C)=C(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		ClC(C)(C)(O)=O=CC=C1
121	130324091510260317032803	5		NCCN1C=CN=C1		OC(C)=C(C)C(O)=O		CC(C)CN		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
117	130324051502261017042803	5		NCC1=CC=C(C)C(O)C2=C1		OC(C)=C(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [R]
110	130324051504260917012803	5		NCC1=CC=C(C)C(O)C2=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC(F)F=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		OC(C)=C(C)C(O)=O
119	130324051509260417042803	5		NCC1=CC=C(C)C(O)C2=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC(F)F=C1		ClC(C)(C)(Cl)C(O)=O		NCCN1C=CN=C1		OC(C@H)(C)C(O)=O [R]
124	130424031502260317032809	5		NCCOC		ClC(C)(C)(Cl)C(O)=O		NCC1=CC=CC1		OC(C)=C(C)C(O)=O		NCC1CCOCC1		OC(C@H)(C)C(O)=O [S]
127	130424031504260617032809	5		NCCOC		ClC(C)(C)(Cl)C(O)=O		NCC1=CC=CC1		OC(C)=C(C)C(O)=O		NCC1CCOCC1		OC(C@H)(C)C(O)=O [S]
102	130124081502260417022809	5		N1CNCCC1		OC(C)=C(C)C(O)=O		NCCN(C)C=O		OC(C)=C(C)C(O)=O		NCC1CCOCC1		ClC(C)(C)(O)=O=CC=C1
100	130124071509260117022809	5		NCC1=CC=C(C)C=C1		OC(C)=C(C)C(O)=O		NCC1=CC=CC(F)F=C1		ClC(C)(C)(Cl)C(O)=O		NCC1CCOCC1		ClC(C)(C)(O)=O=CC=C1
105	130124091504260217022809	5		NCCN1C=CN=C1		OC(C)=C(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=C(C)C(O)=O		NCC1CCOCC1		ClC(C)(C)(O)=O=CC=C1
133	130924031501260217032809	0		NCC1CCOCC1		OC(C)=C(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=C(C)C(O)=O		NCC1CCOCC1		OC(C@H)(C)C(O)=O [S]
97	130124071501260817032804	5		NCC1=CC=C(C)C=C1		OC(C)=C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C)=C(C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C(O)=O [S]
116	130324041509260317022804	5		NCC=C		OC(C)=C(C)C(O)=O		NCC1=CC=CC(F)F=C1		ClC(C)(C)(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)(C)(O)=O=CC=C1
129	130424091502260217032802	5		NCCN1C=CN=C1		ClC(C)(C)(Cl)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=C(C)C(O)=O		NCCO		OC(C@H)(C)C(O)=O [S]
181	130224101501260417022810	4		C1CNCCN1		ClC(C)(C)(O)=O		NCCN(C)C=O		OC(C)=C(C)C(O)=O		NCC1=CC=C(C)C(O)C2=C1		ClC(C)(C)(O)=O=CC=C1

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1): smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
138	130124031509260117032810	4		NCCCOCC		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
161	130124081509261017032810	4		N1CCNCCC1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
204	130324101509260217042810	4		C1CNCCN1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
223	131024031501260417032810	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CC=C(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
227	131024031504260817032810	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
207	13042401502260517032805	4		NCC=C		ClC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1COC(C1=CC=C2)C=C2O1		OC(C1=CC=C(C(=O)N1)=O
206	130424031504260817032805	4		NCCCOCC		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1COC(C1=CC=C2)C=C2O1		OC(C1=CC=C(C(=O)N1)=O
211	130424051509260217032805	4		NCC1=CC=C(C(=O)N1)=O		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1COC(C1=CC=C2)C=C2O1		OC(C1=CC=C(C(=O)N1)=O
187	130224101504260817032805	4		C1CNCCN1		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1COC(C1=CC=C2)C=C2O1		OC(C1=CC=C(C(=O)N1)=O
188	130224101509260117032801	4		C1CNCCN1		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
170	13022401501260217032801	4		NCC1=CC=C(C(=O)N1)=O		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
142	130124051501260417032801	4		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
221	13042410150226017022807	4		C1CNCCN1		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O
209	130424051501260517032804	4		NCC1=CC=C(C(=O)N1)=O		ClC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		CC(C)O=O
182	130224101501260717032804	4		C1CNCCN1		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		CC(C)O=O
183	13022410160260417032802	4		C1CNCCN1		ClC(C1=CC=C(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		ClC(C1=CC=C(C(=O)N1)=O
177	130224081504260417032804	4		NCC1=CC=C(C(=O)N1)=O		ClC(C1=CC=C(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		CC(C)O=O
222	131024021502260417032804	4		NCC1=CC(F)=C(F)C=C1		ClC(C1=CC=C(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		CC(C)O=O
164	130124091503260617032804	4		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		CC(C)O=O
200	130324081509260117032804	4		N1CCNCCC1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		CC(C)O=O
208	130424041503260717102804	4		NCC=C		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
216	130424081504260517102804	4		NCC1=CC=C(C(=O)N1)=O		ClC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
164	130224101502260517102804	4		C1CNCCN1		ClC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
185	130224101503260517102804	4		C1CNCCN1		ClC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
186	130224101503261017102804	4		C1CNCCN1		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
176	130224081510260417102804	4		N1CCNCCC1		ClC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
174	130224071509260417102803	4		NCC1=CC=C(C(=O)N1)=O		ClC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O
169	130224051501260417102801	4		NCC1=CC=C(C(=O)N1)=O		ClC(C1=CC=C(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O
162	130124081509260117102804	4		N1CCNCCC1		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
130	130124021509260317102804	4		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
159	130124071509260417102804	4		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
145	130124051502260517102804	4		NCC1=CC=C(C(=O)N1)=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
202	130324101502260417102804	4		C1CNCCN1		OC(C1=CC=C(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		O=C(O)C1=CC=C(C(=O)N1)=O
191	130324031501260417102803	4		NCCCOCC		OC(C1=CC=C(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N1)=O		NCC(C)C(O)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N1)=O

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1): smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
224	131024031503260317032806	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(S1)		OC(C1=CC(C)C)N1=O		NC[C@H](C)C1=CC=CC=C1		OC(C[C@H](C)C)N1=O [S]
166	130324051501260417032806	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCCNC(C)=O		OC(C1=CC(C)C)C=C1=O		NC[C@H](C)C1=CC=CC=C1		OC(C[C@H](C)C)N1=O [S]
219	130424101502260217032803	4		C1CNCCN1		ClC(C)C=C(C[C@H](C)C)O=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
214	130424091501260317032803	4		NCCCN1C=CN=C1		ClC(C)C=C(C[C@H](C)C)O=O		NCC1=CC=C(S1)		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
215	130424091501260417032803	4		NCCCN1C=CN=C1		ClC(C)C=C(C[C@H](C)C)O=O		NCCNC(C)=O		OC(C1=CC(C)C)C=C1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
217	130424091504261017022803	4		NCCCN1C=CN=C1		ClC(C)C=C(C[C@H](C)C)O=O		NCC1=CC=C(C)C=C1		OC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
218	130424091509260217022803	4		NCCCN1C=CN=C1		ClC(C)C=C(C[C@H](C)C)O=O		NCC1=CC=CC(C(F)(F)F)C=C1		OC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
189	130224101510260417022803	4		C1CNCCN1		ClC(C)C(C)O=O=CC=C1		CC(C)CCN		ClC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
190	130224101510260417022803	4		C1CNCCN1		ClC(C)C(C)O=O=CC=C1		CC(C)CCN		ClC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
167	130224031504260617032803	4		NCCOC		ClC(C)C(C)O=O=CC=C1		NCC1=CC=CC=C1		OC(C1=CC(C)C)C=C1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
175	130224081504260317032803	4		N1CCNCC1		ClC(C)C(C)O=O=CC=C1		NCC1=CC=C(S1)		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
171	130224071501260817042803	4		NCC1=CC=C(C)C=C1		ClC(C)C(C)O=O=CC=C1		NCC1=CC=CC=C1		OC(C1=CC(C)C)C=C1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [R]
172	130224071502260317042803	4		NCC1=CC=C(C)C=C1		ClC(C)C(C)O=O=CC=C1		NCC1=CC=C(S1)		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [R]
178	130224091504260817012803	4		NCCCN1C=CN=C1		ClC(C)C(C)O=O=CC=C1		NC[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C1=CSC(C)N1)O
180	130224081510260317022803	4		NCCCN1C=CN=C1		ClC(C)C(C)O=O=CC=C1		CC(C)CCN		ClC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
168	130224061601260217022803	4		NCC1=CC=C(C)C=C1		ClC(C)C(C)O=O=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
139	130124041502260417032803	4		NCC=C		OC(C1=CC(C)C)N1=O		NCCNC(C)=O		OC(C1=CC(C)C)C=C1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
141	130124041510260217032803	4		NCC=C		OC(C1=CC(C)C)N1=O		CC(C)CCN		ClC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
160	130124081502260217012803	4		N1CCNCC1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C1=CSC(C)N1)O
152	130124071501260817042803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NC[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [R]
154	130124071502260317032803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(S1)		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
155	130124071503260317032803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(S1)		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
156	130124071503260717012803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C1=CC(C)C)N1=O
157	130124071504260917022803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC(F)C(C(F)(F)F)C=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
158	130124071504260917042803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC(F)C(C(F)(F)F)C=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [R]
144	130124051502260417032803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCCNC(C)=O		OC(C1=CC(C)C)C=C1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
148	130124051504260317042803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(S1)		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [R]
151	130124051509260217022803	4		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=CC(C(F)(F)F)C=C1		ClC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
194	130324041502260217032803	4		NCC=C		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
203	130324101504261017032803	4		C1CNCCN1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
192	130324031501260717032803	4		NCCOC		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
193	130324031509260417032803	4		NCCOC		OC(C1=CSC(C)C)N1=O		NCC1=CC=CC(C(F)(F)F)C=C1		ClC(C)C=C(C[C@H](C)C)O=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]
199	130324081502260617022803	4		N1CCNCC1		OC(C1=CSC(C)C)N1=O		NCC1=CC=CC=C1		OC(C1=CC(C)C)C=C1=O		NCCCN1C=CN=C1		ClC(C1=CC(C)O)C=C1
201	130324091504260217032803	4		NCCCN1C=CN=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC(C[C@H](C)C)N1=O [S]

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1)- smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
226	131024031503260417042803	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C)N1=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		OC([C@H](C)C)B=O [R]
196	130324051509260117032803	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		OC([C@H](C)C)B=O [S]
209	130424031502260617012809	4		NCCOC		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCC1CCOC=C1		OC(C1=CSC(C)C)N1=O
212	130424071501260617022809	4		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCC1CCOC=C1		ClC(C1=CC(C)C)O=C=C1
166	130224031502260717012809	4		NCCOC		ClC(C)C=C(O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1CCOC=C1		OC(C1=CSC(C)C)N1=O
173	130224071503260317032809	4		NCC1=CC=C(C)C=C1		ClC(C)C=C(O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)N1=O		NCC1CCOC=C1		OC([C@H](C)C)C(O)=O [S]
146	130124051502260817042809	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1CCOC=C1		OC([C@H](C)C)B=O [R]
197	130324051510260417032809	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		CC(C)CN		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1CCOC=C1		OC([C@H](C)C)C(O)=O [S]
220	130424101502260817022804	4		C1CNCCN1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C1		ClC(C1=CC(C)C)O=C=C1
165	130224031501260417032804	4		NCCOC		ClC(C)C=C(C)C(O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C1		OC([C@H](C)C)C(O)=O [S]
179	130224091509260317032804	4		NCCCN1C=CN=C1		ClC(C)C=C(O)=CC=C1		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=C1		OC([C@H](C)C)C(O)=O [S]
153	130124071501261017032804	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=C1		OC([C@H](C)C)C(O)=O [S]
163	130124091502260617032804	4		NCCCN1C=CN=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C1		OC([C@H](C)C)C(O)=O [S]
143	130124051501260817032804	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C1		OC([C@H](C)C)C(O)=O [S]
150	130124051504260817032804	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C1		OC([C@H](C)C)C(O)=O [S]
226	131024031503260417042803	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C)N1=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C1		OC([C@H](C)C)C(O)=O [S]
213	130424071509260217032802	4		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCCO		OC([C@H](C)C)C(O)=O [S]
210	130424051504260517032802	4		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC(C)C(O)C		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC([C@H](C)C)C(O)=O [S]
140	130124041504260517032802	4		NCC=C		OC(C1=CSC(C)C)N1=O		NCC(C)C(O)C		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC([C@H](C)C)C(O)=O [S]
137	130124031504260517032802	4		NCCOC		OC(C1=CSC(C)C)N1=O		NCC(C)C(O)C		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC([C@H](C)C)C(O)=O [S]
147	130124051503260817022802	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCCO		ClC(C1=CC(C)C)O=C=C1
149	130124051504260517032802	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC(C)C(O)C		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC([C@H](C)C)C(O)=O [S]
190	130924071504260517032602	4		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCC(C)C(O)C		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC([C@H](C)C)C(O)=O [S]
408	130424091509260417022810	3		NCCCN1C=CN=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCCCN1C=CC(C)C(C)C=C1		ClC(C1=CC(C)C)O=C=C1
318	130224101501260617022810	3		C1CNCCN1		ClC(C)C=C(O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CC(C)C(C)C=C1		ClC(C1=CC(C)C)O=C=C1
296	130224031509260417032810	3		NCCOC		ClC(C)C=C(O)=CC=C1		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCCCN1C=CC(C)C(C)C=C1		OC([C@H](C)C)C(O)=O [S]
305	130224051504260417032810	3		NCC1=CC=C(C)C=C1		ClC(C)C=C(O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CC(C)C(C)C=C1		OC([C@H](C)C)C(O)=O [S]
231	130124031502260317032810	3		NCCOC		OC(C1=CSC(C)C)N1=O		NCC1=CC=CC=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CC(C)C(C)C=C1		OC([C@H](C)C)C(O)=O [S]
325	130324031502260817022810	3		NCCOC		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CC(C)C(C)C=C1		ClC(C1=CC(C)C)O=C=C1
329	130324031504260817022810	3		NCCOC		OC(C1=CSC(C)C)N1=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CC(C)C(C)C=C1		ClC(C1=CC(C)C)O=C=C1
417	130424101504260617032805	3		C1CNCCN1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCC1CC(C)C=CC=C2=C2O1		OC([C@H](C)C)C(O)=O [S]
388	130424081510260417022805	3		N1CCNCC1		ClC(C)C=C([C@H](C)C)C(O)=O		CC(C)CN		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1CC(C)C=CC=C2=C2O1		ClC(C1=CC(C)C)O=C=C1
407	130424091509260317032805	3		NCCCN1C=CN=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C([C@H](C)C)C(O)=O		NCC1CC(C)C=CC=C2=C2O1		OC([C@H](C)C)C(O)=O [S]
292	130224031501260617022805	3		NCCOC		ClC(C)C=C(O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCC1CC(C)C=CC=C2=C2O1		ClC(C1=CC(C)C)O=C=C1

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1)- smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
311	130224071501261017032805	3		NCC1=CC=C(C)C=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1COC(C=C=C2)=C2O1		OC(C@H)(C)C(O)=O [S]
316	130224081501260717032805	3		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1COC(C=C=C2)=C2O1		OC(C@H)(C)C(O)=O [S]
286	130124101304281017012805	3		C1CNCCN1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC1=CC=C(C)C=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1COC(C=C=C2)=C2O1		OC(C1=CC(C(O)=O)=CC=C1)=O
267	130124081501260517032805	3		N1CCNCCC1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC(C)C(O)		ClC1=CC(C(O)=O)=CC=C1		NCC1COC(C=C=C2)=C2O1		OC(C@H)(C)C(O)=O [S]
243	130124051501260917022805	3		NCC1=CC=C(OC(=O)C2=C1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1COC(C=C=C2)=C2O1		ClCC1=CC(C(O)=O)=CC=C1
365	130324101504260617032805	3		C1CNCCN1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC1=CC=C(C)C=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1COC(C=C=C2)=C2O1		OC(C@H)(C)C(O)=O [S]
397	130424081504260417032801	3		N1CCNCCC1		ClC(C)C=C(C@H)(C)C(O)=O		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		NCC1=CNC2=CC=CC=C21		OC(C@H)(C)C(O)=O [S]
323	130224101510260317032801	3		C1CNCCN1		ClC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CNC2=CC=CC=C21		OC(C@H)(C)C(O)=O [S]
233	130124031503260817032801	3		NCCCO		OC(C1=CC(C(O)=O)=CC=C1)=O		N(C@H)(C)C1=CC=CC=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1=CNC2=CC=CC=C21		OC(C@H)(C)C(O)=O [S]
254	13012407150126061017032801	3		NCC1=CC=C(C)C=C1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC1=CC=CC=C1		ClC1=CC=C(C)C=C1		NCC1=CNC2=CC=CC=C21		OC(C@H)(C)C(O)=O [S]
349	130324071506260417032801	3		NCC1=CC=C(C)C=C1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC1=CC=CC(C(F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CNC2=CC=CC=C21		OC(C@H)(C)C(O)=O [S]
302	130224051503260417032807	3		NCC1=CC=C(OC(=O)C2=C1		ClC1=CC(C(O)=O)=CC=C1		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		NCC1=CC(O)C=C(O)C=C1		OC(C@H)(C)C(O)=O [S]
382	130424041503260417092803	3		NCC=C		ClC(C)C=C(C@H)(C)C(O)=O		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		OC(C@H)(C)C(O)=O [S]
372	130424031501260417092804	3		NCCCO		ClC(C)C=C(C@H)(C)C(O)=O		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
373	130424031501261017092804	3		NCCCO		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
277	130424031603261017092803	3		NCCCO		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		OC(C@H)(C)C(O)=O [S]
390	130424081503260417092804	3		N1CCNCCC1		ClC(C)C=C(C@H)(C)C(O)=O		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
435	130924041510260117092804	3		NCC1CCOCC1		ClC(C)C=C(C@H)(C)C(O)=O		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
403	130424091502260517092804	3		NCCCN1C=CN=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
447	131024041503260417092804	3		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
360	130424051506260117092803	3		NCC1=CC=C(OC(=O)C2=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=CC(C(F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		OC(C@H)(C)C(O)=O [S]
297	130224041504260417092804	3		NCC=C		ClC1=CC(C(O)=O)=CC=C1		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
290	130224041509260217092804	3		NCC=C		ClC1=CC(C(O)=O)=CC=C1		NCC1=CC=CC(C(F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
324	130224101510260317092804	3		C1CNCCN1		ClC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
308	130224061503260817092804	3		NCC1=CC=C(O)C=C1		ClC1=CC(C(O)=O)=CC=C1		N(C@H)(C)C1=CC=CC=C1		ClC1=CC(C(O)=O)=CC=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
310	130224071501260517092804	3		NCC1=CC=C(C)C=C1		ClC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
423	130924021504260717092804	3		NCC1CCOCC1		ClC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		ClC1=CC(C(O)=O)=CC=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
425	130924021509260417092804	3		NCC1CCOCC1		ClC1=CC(C(O)=O)=CC=C1		NCC1=CC=CC(C(F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
240	130124041504260417092804	3		NCC=C		OC(C1=CC(C(O)=O)=CC=C1)=O		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
230	130124031501260417092804	3		NCCCO		OC(C1=CC(C(O)=O)=CC=C1)=O		NCCN(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
270	130124081503260517092804	3		N1CCNCCC1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC(C)C(O)		ClC1=CC=C(C)C=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
258	130124071501260917092804	3		NCC1=CC=C(C)C=C1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		ClC1=CC(C(O)=O)=CC=C1		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
260	130124071502261017092804	3		NCC1=CC=C(C)C=C1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)C(O)=O
228	130124011502260917092802	3		NCC1=CC=C(Br)C=C1		OC(C1=CC(C(O)=O)=CC=C1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		ClC1=CC(C(O)=O)=CC=C1		N(C@H)(C)C1=CC=CC=C1 [R]		ClCC1=CC(C(O)=O)=CC=C1

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1)- smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
272	130124091501260517092802	3		NCCN1C=CN=C1		OC(C)=COC(C)(Cl)N1=O		NCC(C)(Cl)O		OC(C)=CC=C(C)(Cl)C1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)=C(C)(Cl)O
276	130124091502260717092804	3		NCCN1C=CN=C1		OC(C)=COC(C)(Cl)N1=O		NCC1=CC=C(N(C)C)C=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
361	130324101302260517092804	3		C1CNCCN1		OC(C)=C(C)(Cl)N1=O		NCC(C)(Cl)O		OC(C)=CC=C(C)(Cl)C1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
347	130324071503260317092804	3		NCC1=CC=C(C)C=C1		OC(C)=C(C)(Cl)N1=O		NCC1=CC=C(S1)		OC(C)=COC(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
350	130324071509260417092804	3		NCC1=CC=C(C)C=C1		OC(C)=C(C)(Cl)N1=O		NCC1=CC=CC(F)F=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
356	130324091502260317092804	3		NCCN1C=CN=C1		OC(C)=C(C)(Cl)N1=O		NCC1=CC=C(S1)		OC(C)=COC(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
338	130324051504260617092804	3		NCC1=CC=C(OC2=C2)C=C1		OC(C)=C(C)(Cl)N1=O		NCC1=CC=CC=C1		OC(C)=CC=C(C)(Cl)C1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
342	130324051510260417092804	3		NCC1=CC=C(OC2=C2)C=C1		OC(C)=C(C)(Cl)N1=O		CC(C)CN		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
383	130424041504260317102804	3		NCC=C		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(S1)		OC(C)=COC(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
384	130424041504260717102804	3		NCC=C		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
371	130424031501260117102804	3		NCCOC		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCCOC		OC(C)=COC(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
378	130424031504260917102804	3		NCCOC		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC(F)=CC(C)(F)F=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
381	130424031510260317102802	3		NCCOC		ClC(C)C=C(C)[C@@H](C)C(O)=O		CC(C)CN		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
392	130424061502260317102804	3		NCC1=CC=C(O)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(S1)		OC(C)=COC(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
399	130424091501260417102804	3		NCCN1C=CN=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCCN(C)=O		OC(C)=CC=C(C)(Cl)C1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
400	130424091501260917102803	3		NCCN1C=CN=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC(F)=CC(C)(F)F=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
380	130424051501260617102804	3		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C)=CC=C(C)(Cl)C1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
389	130424051503261017102803	3		NCC1=CC=C(OC2=C2)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
293	130224031503260817102804	3		NCCOC		ClC(C)C=C(C)(O)=CC=C1		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
420	130924021502260717102804	3		NCC1CCOCC1		ClC(C)C=C(C)(O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
424	130924021504260817102804	3		NCC1CCOCC1		ClC(C)C=C(C)(O)=CC=C1		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
317	130224091503260317102804	3		NCCN1C=CN=C1		ClC(C)C=C(C)(O)=CC=C1		NCC1=CC=C(S1)		OC(C)=COC(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
430	131024021501260317102804	3		NCC1=CC(F)=CC(C)F=C1		ClC(C)C=C(C)(O)=CC=C1		NCC1=CC=C(S1)		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
306	130224051509260317102804	3		NCC1=CC=C(OC2=C2)C=C1		ClC(C)C=C(C)(O)=CC=C1		NCC1=CC=C(C)(F)F=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
307	130224051510260217102804	3		NCC1=CC=C(OC2=C2)C=C1		ClC(C)C=C(C)(O)=CC=C1		CC(C)CN		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
238	130124041502260417102803	3		NCC=C		OC(C)=COC(C)(Cl)N1=O		NCCN(C)=O		OC(C)=CC=C(C)(Cl)C1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
241	130124041510260317102803	3		NCC=C		OC(C)=COC(C)(Cl)N1=O		CC(C)CN		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
284	130124101503260717102804	3		C1CNCCN1		OC(C)=COC(C)(Cl)N1=O		NCC1=CC=C(N(C)C)C=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
251	130124081510260317102804	3		NCC1=CC=C(O)C=C1		OC(C)=C(C)(Cl)N1=O		CC(C)CN		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
222	130124071501260117102804	3		NCC1=CC=C(C)C=C1		OC(C)=COC(C)(Cl)N1=O		NCCOC		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
264	130124071509260117102803	3		NCC1=CC=C(C)C=C1		OC(C)=COC(C)(Cl)N1=O		NCC1=CC=C(C)(F)F=C1		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
437	131024011510260317102804	3		NCC1=CC(F)=CC(C)F=C1		OC(C)=C(C)(Cl)N1=O		CC(C)CN		OC(C)=C(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
360	130324101502260217102804	3		C1CNCCN1		OC(C)=C(C)(Cl)N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=COC(C)(Cl)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O
327	130324031503260517102804	3		NCCOC		OC(C)=C(C)(Cl)N1=O		NCC(C)(Cl)O		OC(C)=CC=C(C)(Cl)C1=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C)O

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1): smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
352	130324081503261017102804	3		N1CCNCCC1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		OC(C)C=C(C)C(C)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
353	130324081503261017102804	3		N1CCNCCC1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
355	130324081510280417102802	3		N1CCNCCC1		OC(C1=CSC(C(=O)N1)=O		CC(C)CCN		OC(C)C=C(C)C(C)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(C1=CC(C)O)CC=C1
343	130324081509260217102804	3		NCC1=CC=C(O1)		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(F)F)C=C1		OC(C)C=C(C)C(C)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
429	130924031503260817102804	3		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
430	130924031504260317102804	3		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C)C)N1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
433	130924031510280317102802	3		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O		CC(C)CCN		OC(C)C=C(C)C(C)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(C1=CC(C)O)CC=C1
446	131024031510280417102803	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		CC(C)CCN		OC(C)C=C(C)C(C)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(C=C)C(C)C(O) [S]
332	130324051501260417102804	3		NCC1=CC=C(OC)C2=C2=C1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
333	130324051502260617102801	3		NCC1=CC=C(OC)C2=C2=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[S]		OC(C1=CSC(C(=O)N1)=O
336	130324051503260817102804	3		NCC1=CC=C(OC)C2=C2=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
414	130424101502260417012806	3		C1CNCCN1		O=C(C)C=C(C)C(C)C(O)=O		NCCN(C)=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1		O=C(C1=CSC(C(=O)N1)=O
380	130424031509260217032806	3		NCCOC		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(C(F)F)C=C1		OC(C)C=C(C)C(C)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1		O=C(C=C)C(C)C(O) [S]
387	130424051502260717012806	3		NCC1=CC=C(OC)C2=C2=C1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		O=C(C1=CSC(C(=O)N1)=O
312	130224071503260417012806	3		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(O)=CC=C1		NCCN(C)=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1		O=C(C1=CSC(C(=O)N1)=O
247	130124061603260417032806	3		NCC1=CC=C(OC)C2=C2=C1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1		O=C(C=C)C(C)C(O) [S]
363	130324101504260617022806	3		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1		O=C(C1=CC(C)O)CC=C1
415	130424101503260817012803	3		C1CNCCN1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		O=C(C1=CSC(C(=O)N1)=O
374	130424031503260217032803	3		NCCOC		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
379	130424031509260117042803	3		NCCOC		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(C(F)F)C=C1		OC(C)C=C(C)C(C)C(C)C(O)=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [R]
368	130424021501260517012803	3		NCC1=CC=CN=C1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
370	130424021504260717032803	3		NCC1=CC=CN=C1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
303	130424071501260517012803	3		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(C)C(O)=O		NCC(O)C(O)C		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		O=C(C1=CSC(C(=O)N1)=O
434	130924041503260317032803	3		NCC1CCOCC1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
401	130424091502260217032803	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
402	130424091502260317022803	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		O=C(C1=CC(C)O)CC=C1
448	131024041504260817032803	3		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
386	130424051502260817022803	3		NCC1=CC=C(OC)C2=C2=C1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		O=C(C1=C(C)O)CC=C1
388	130424051503260217032803	3		NCC1=CC=C(OC)C2=C2=C1		ClC(C)C=C(C)C(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
299	130224041509260417032803	3		NCC=C		ClC(C)C=C(C)C(O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		OC(C)C=C(C)C(C)C(C)C(O)=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
320	130224101502260717032803	3		C1CNCCN1		ClC(C)C=C(C)C(O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
284	130224031504260817032803	3		NCCOC		ClC(C)C=C(C)C(O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		O=C(C=C)C(C)C(O) [S]
295	130224031504261017012803	3		NCCOC		ClC(C)C=C(C)C(O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C)C=C(C)C(C)C(C)C(O)=O		NCCCN1C=CN=C1		O=C(C1=CSC(C(=O)N1)=O
309	130224071501260217012803	3		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		O=C(C1=CSC(C(=O)N1)=O

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1)- smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
289	130224011503260717032803	3		NCC1=CC=C(C(Br)=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
422	139924021401260417032803	3		NCCC1CCOCC1		ClC1=CC(C(O)=O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
313	130224091301260417032803	3		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
314	130224091501260517032803	3		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
439	131024021503260417032803	3		NCC1=CC(F)=C(F)C=C1		ClC1=CC(C(O)=O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
300	130224051501260517022803	3		NCC1=CC=C(OCOC2=C2=C1		ClC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1
301	130224051501260917042803	3		NCC1=CC=C(OCOC2=C2=C1		ClC1=CC(C(O)=O)=CC=C1		NCC1=CC(F)=CC(C(F)F)F=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
237	130124041501261017042803	3		NCC=C		OC(C1=CC(C)C)N1=O		NCC1=CC=C(C)C=C1		ClC(C)=C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
283	130124101503260717032803	3		C1CNCCN1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
285	130124101503260817032803	3		C1CNCCN1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
286	130124101503260817042803	3		C1CNCCN1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
287	130124101504260917032803	3		C1CNCCN1		OC(C1=CC(C)C)N1=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
232	130124031502260717032803	3		NCCOC		OC(C1=CC(C)C)N1=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
234	130124031503260917032803	3		NCCOC		OC(C1=CC(C)C)N1=O		NCC1=CC(F)=CC(C(F)F)F=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
265	130124081501260217022803	3		N1CCNCC1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1
271	130124081606260317042803	3		N1CCNCC1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
229	130124021502260317032803	3		NCC1=CC=C(N)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(S1)		ClC1=CC(C)C)N1=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
253	130124071501260417022803	3		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCCNC(C)=O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1
256	130124071501260817032803	3		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
273	130124091501260617042803	3		NCCCN1C=CN=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
275	130124091502260417042803	3		NCCCN1C=CN=C1		OC(C1=CC(C)C)N1=O		NCCNC(C)=O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
278	130124091503260517032803	3		NCCCN1C=CN=C1		OC(C1=CC(C)C)N1=O		NCC(C)C(O)O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
279	130124091504260517022803	3		NCCCN1C=CN=C1		OC(C1=CC(C)C)N1=O		NCC(C)C(O)O		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1
280	130124091504260917042803	3		NCCCN1C=CN=C1		OC(C1=CC(C)C)N1=O		NCC1=CC(F)=CC(C(F)F)F=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
281	130124091509260217032803	3		NCCCN1C=CN=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C([C@@H](C)C)O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
436	131024011504260717042803	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
244	130124051502260317022803	3		NCC1=CC=C(OCOC2=C2=C1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(S1)		OC(C1=CC(C)C)N1=O		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1
362	130324101503260817022803	3		C1CNCCN1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(C)C)C=C1)=O		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1
366	130324101509260417042803	3		C1CNCCN1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C([C@@H](C)C)O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
354	130324061509260417032803	3		N1CCNCC1		OC(C1=CC(C)C)N1=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C([C@@H](C)C)O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[S]
345	130324071501260817012803	3		NCC1=CC=C(C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		ClC1=CSC(C(C)=N1)=O
348	130324071503260817042803	3		NCC1=CC=C(C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
428	130924031501260817042803	3		NCCC1CCOCC1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)O=[R]
432	130924031504260817022803	3		NCCC1CCOCC1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=C(N(C)C)C=C1		ClC1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1)- smiles	Acids (X1)	Acids (X1)- smiles	Amines (X2)	Amines (X2)- smiles	Acids (X2)	Acids (X2)- smiles	Amines (X3)	Amines (X3)- smiles	Acids (X3)	Acids (X3)- smiles
359	130324091503260817022803	3		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N1)=O
442	131024031509260817012803	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N1)=O
444	131024031509260817012803	3		NCC1=C(C(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CC(C(F)(F)F)=C1		OC(C)C=C[C@@H](C)C(=O)O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N1)=O
335	130324051503260817022803	3		NCC1=CC(C)OC(=O)C2=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)C(=O) [S]
340	130324051509260817012803	3		NCC1=CC(C)OC(=O)C2=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CC(C(F)F)=C1		OC(C)C=C[C@@H](C)C(=O)O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N1)=O
416	130424101504260817022808	3		C1CNCCN1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C(=O)N1)=O		BrC1=CC=C(C)C=C1		OC(C1=CC(C)C(=O)N1)=O
396	130424081503260917022808	3		N1CCNCC1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1=CC(F)=CC(C(F)F)=C1		OC(C1=CSC(C(=O)N1)=O		BrC1=CC=C(C)C=C1		OC([C@@H](C)C)C(=O) [S]
259	130124071502261017022808	3		NCC1=CC=C(C)C=C1		OC(C1=COC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)C)C(=O)O		BrC1=CC=C(C)C=C1		OC(C1=CC(C)C(=O)N1)=O
246	130124051503260417012808	3		NCC1=CC(C)OC(=O)C2=C1		OC(C1=COC(C(=O)N1)=O		NCCN(C)=O		OC(C1=CC=C(C)C(=O)N1)=O		BrC1=CC=C(C)C=C1		OC(C1=CSC(C(=O)N1)=O
356	130324091503260717012808	3		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC(N)C(C)C=C1		OC(C1=CSC(C(=O)N1)=O		BrC1=CC=C(C)C=C1		OC(C1=CSC(C(=O)N1)=O
412	130424101501261017032809	3		C1CNCCN1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1=CC=C(C)C=C1		OC(C)C=C[C@@H](C)C(=O)O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [S]
413	130424101502260217042809	3		C1CNCCN1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=COC(C(=O)N1)=O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [R]
369	13042401502260817022809	3		NCC1=CC=CN=C1		ClC(C)C=C([C@@H](C)C)C(=O)O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
394	130424071501290517032809	3		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC(C)C(O)		OC(C1=CC=C(C)C(=O)N1)=O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [S]
391	130424051509260317022809	3		NCC1=CC(C)OC(=O)C2=C1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1=CC=CC(C(F)F)=C1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
321	130224101603260217032800	3		C1CNCCN1		ClC(C)C=C(C)C(=O)N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=COC(C(=O)N1)=O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [S]
322	130224101503260717042809	3		C1CNCCN1		ClC(C)C=C(C)C(=O)N1=O		NCC1=CC(N)C(C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [R]
291	130224031501260417022809	3		NCCOCC		ClC(C)C=C(C)C(=O)N1=O		NCCN(C)=O		OC(C1=CC=C(C)C(=O)N1)=O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
290	130224011504260817032809	3		NCC1=CC=C(Br)C=C1		ClC(C)C=C(C)C(=O)N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [S]
315	130224091502260217012809	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=COC(C(=O)N1)=O		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O
304	130224051504260317022809	3		NCC1=CC(C)OC(=O)C2=C1		ClC(C)C=C(C)C(=O)N1=O		NCC1=CC=CC1		OC(C1=COC(C(=O)N1)=O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
236	130124041501261017022809	3		NCC=C		OC(C1=COC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
235	130124031509260217012809	3		NCCOCC		OC(C1=COC(C(=O)N1)=O		NCC1=CC=CC(C(F)F)=C1		ClC(C)C=C[C@@H](C)C(=O)O		NCC1CCOCC1		OC(C1=COC(C(=O)N1)=O
268	130124081502261017022809	3		N1CCNCC1		OC(C1=COC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O
269	130124081503260517022809	3		N1CCNCC1		OC(C1=COC(C(=O)N1)=O		NCC(C)C(O)		OC(C1=CC=C(C)C(=O)N1)=O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
255	130124071501260717012809	3		NCC1=CC=C(C)C=C1		OC(C1=COC(C(=O)N1)=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O
257	130124071501260817032809	3		NCC1=CC=C(C)C=C1		OC(C1=COC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [S]
274	130124091502260317022809	3		NCCCN1C=CN=C1		OC(C1=COC(C(=O)N1)=O		NCC1=CC=CC1		OC(C1=COC(C(=O)N1)=O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
277	130124091503260917022809	3		NCCCN1C=CN=C1		OC(C1=COC(C(=O)N1)=O		NCC1=CC(F)=CC(C(F)F)=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
248	130124051503261017012809	3		NCC1=CC(C)OC(=O)C2=C1		OC(C1=COC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)C)C(=O)O		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O
249	130124051504260817022809	3		NCC1=CC(C)OC(=O)C2=C1		OC(C1=COC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [S]
250	130124051504260917012809	3		NCC1=CC(C)OC(=O)C2=C1		OC(C1=COC(C(=O)N1)=O		NCC1=CC(F)=CC(C(F)F)=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O
331	130324041503260617022809	3		NCC=C		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C(=O)N1)=O		NCC1CCOCC1		OC(C1=CC(C)C(=O)N1)=O
334	130324051503260717032809	3		NCC1=CC(C)OC(=O)C2=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCOCC1		OC([C@@H](C)C)C(=O) [S]

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1)- smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
411	130424101501260817032804	3		C1CNCCN1		ClC(C)C=C(C)[C@H](C)C(O)=O		N[C@H](C)C1=CC=CC=C1		OC(C)=CSC(C)N1=O		NCC1=CC=C1		OC(C)[C@H](C)C(O)=O [S]
405	130424091504260417032804	3		NCCCN1C=CN=C1		ClC(C)C=C(C)[C@H](C)C(O)=O		NCCNC(C)=O		OC(C)=CC(C)C(C)C=C1=O		NCC1=CC=C1		OC(C)[C@H](C)C(O)=O [S]
421	130924021302281017042804	3		NCCC1CCOCC1		ClC(C)C=C(C)O=C=C1		NCC1=CC=C(C)C=C1		OC(C)C=C(C)[C@H](C)C(O)=O		NCC1=CC=C1		OC(C)[C@H](C)C(O)=O [R]
239	130124041504260417032804	3		NCC=C		OC(C1=CC=C(C)C)N1=O		NCCNC(C)=O		OC(C)=CC(C)C(C)C=C1=O		NCC1=CC=C1		OC(C)[C@H](C)C(O)=O [S]
263	130124071504260517032804	3		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)N)N1=O		NCC1=CC=CC=C1		OC(C)=CC=C(C)C(C)C=C1=O		NCC1=CC=C1		ClCC1=CC(C)O=C=CC=C1
282	130124091509260317022804	3		NCCCN1C=CN=C1		OC(C1=CC=C(C)N)N1=O		NCC1=CC=C(C)(F)F=C1		ClC(C)C=C(C)[C@H](C)C(O)=O		NCC1=CC=C1		ClCC1=CC(C)O=C=CC=C1
245	130124051502260417012804	3		NCC1=CC=C(C)OC2=C2=C1		OC(C1=CC=C(C)N)N1=O		NCCNC(C)=O		OC(C)=CC(C)C(C)C=C1=O		NCC1=CC=C1		OC(C1=CSC(C)N)N1=O
367	130324101510260317042804	3		C1CNCCN1		OC(C1=CSC(C)N)N1=O		CC(C)CN		ClC(C)C=C(C)[C@H](C)C(O)=O		NCC1=CC=C1		OC(C)[C@H](C)C(O)=O [R]
351	130924071510260317032804	3		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)N)N1=O		CC(C)CN		ClC(C)C=C(C)[C@H](C)C(O)=O		NCC1=CC=C1		OC(C)[C@H](C)C(O)=O [S]
427	130924031501260717022804	3		NCCC1CCOCC1		OC(C1=CSC(C)N)N1=O		NCC1=CC=C(N)C(C)C=C1		ClC(C)=CSC(C)N1=O		NCC1=CC=C1		ClCC1=CC(C)O=C=CC=C1
443	131024031504260917022804	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)N)N1=O		NCC1=CC(F)=C(C)C(F)F=C1		OC(C1=CSC(C)N)N1=O		NCC1=CC=C1		ClCC1=CC(C)O=C=CC=C1
339	130324051509260117032804	3		NCC1=CC=C(C)OC2=C2=C1		OC(C1=CSC(C)N)N1=O		NCC1=CC=CC(C)F)F=C1		ClC(C)C=C(C)[C@H](C)C(O)=O		NCC1=CC=C1		OC(C)[C@H](C)C(O)=O [S]
418	130424101504260817032802	3		C1CNCCN1		ClC(C)C=C(C)[C@H](C)C(O)=O		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C)N)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
375	130424031503260617022802	3		NCCOCC		ClC(C)C=C(C)[C@H](C)C(O)=O		NCC1=CC=CC=C1		OC(C)=CC=C(C)C(C)C=C1=O		NCCO		ClCC1=CC(C)O=C=CC=C1
376	130424031503260717032802	3		NCCOCC		ClC(C)C=C(C)[C@H](C)C(O)=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C)N)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
404	130424091502260817032802	3		NCCCN1C=CN=C1		ClC(C)C=C(C)[C@H](C)C(O)=O		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C)N)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
406	130424091504260517032802	3		NCCCN1C=CN=C1		ClC(C)C=C(C)[C@H](C)C(O)=O		NCC(C)C(O)C		ClC(C)=CC(C)C(C)C=C1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
409	130424091510260317032802	3		NCCCN1C=CN=C1		ClC(C)C=C(C)[C@H](C)C(O)=O		CC(C)CN		ClC(C)C=C(C)[C@H](C)C(O)=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
410	130424091510260417032802	3		NCCCN1C=CN=C1		ClC(C)C=C(C)[C@H](C)C(O)=O		CC(C)CN		ClC(C)C=C(C)[C@H](C)C(O)=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
319	130224101501260617032802	3		C1CNCCN1		ClCC(C)C(O)=O=C=C1		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
419	130924021502260717032802	3		NCCC1CCOCC1		ClCC1=CC(C)O=C=CC=C1		NCC1=CC=C(N)C(C)C=C1		ClC(C)=CSC(C)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
303	130224051503260817032802	3		NCC1=CC=C(C)OC2=C2=C1		ClCC1=CC(C)O=C=CC=C1		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C)N)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
266	130124001501260217032802	3		N1CCNCC1		OC(C1=CC=C(C)N)N1=O		NCC1=CC=C(S)O(C)C=C1		OC(C1=CC=C(C)N)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [R]
261	130124071503260617032802	3		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)N)N1=O		NCC1=CC=CC=C1		OC(C)=CC=C(C)C(C)C=C1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
262	130124071504260517032802	3		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)N)N1=O		NCC(C)C(O)C		OC(C)=CC=C(C)C(C)C=C1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
242	130124051501260317032802	3		NCC1=CC=C(C)OC2=C2=C1		OC(C1=CC=C(C)N)N1=O		NCC1=CC=CS1		OC(C1=CC=C(C)N)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
330	130324041502260217032802	3		NCC=C		OC(C1=CSC(C)N)N1=O		NCC1=CC=C(S)O(C)C=C1		OC(C1=CC=C(C)N)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
364	130324101504260817032802	3		C1CNCCN1		OC(C1=CSC(C)N)N1=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
326	130324031502260817032802	3		NCCOCC		OC(C1=CSC(C)N)N1=O		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C)N)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
329	130324031504260517032802	3		NCCOCC		OC(C1=CSC(C)N)N1=O		NCC(C)C(O)C		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
344	130324071501260417032802	3		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)N)N1=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
346	130324071502260317032802	3		NCC1=CC=C(C)C=C1		OC(C1=CSC(C)N)N1=O		NCC1=CC=CS1		ClC(C)=CC(C)C(C)N1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]
426	130924031501260717022802	3		NCCC1CCOCC1		OC(C1=CSC(C)N)N1=O		NCC1=CC=C(N)C(C)C=C1		ClC(C)=CSC(C)N1=O		NCCO		ClCC1=CC(C)O=C=CC=C1
431	130924031504260517032802	3		NCCC1CCOCC1		OC(C1=CSC(C)N)N1=O		NCC(C)C(O)C		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC(C)[C@H](C)C(O)=O [S]

Entry	Molecular ID	Copies	Amines (X1)	Amines (X1)- smiles	Acids (X1)	Acids (X1) smiles	Amines (X2)	Amines (X2) smiles	Acids (X2)	Acids (X2) smiles	Amines (X3)	Amines (X3) smiles	Acids (X3)	Acids (X3) smiles
357	130324091503260417032802	3		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCCO		OC([C@H](C)C)C(=O)O [S]
440	131024031501260617032802	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C=C1		OC(C1=CC=C(C(=O)C=C1)=O		NCCO		OC([C@H](C)C)C(=O)O [S]
441	131024031503260717032802	3		NCC1=C(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCO		OC([C@H](C)C)C(=O)O [S]
445	131024031506260317032802	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(F)F)C=C1		OC(C1=C(C(=O)C)C(=O)C(=O)O		NCCO		OC([C@H](C)C)C(=O)O [S]
337	130324051504260517032802	3		NCC1=CC=C(OC)C2=C2C=C1		OC(C1=CSC(C(=O)N1)=O		NCC(O)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCCO		OC([C@H](C)C)C(=O)O [S]
341	130324051506260217032802	3		NCC1=CC=C(OC)C2=C2C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(F)F)C=C1		OC(C1=C(C(=O)C)C(=O)C(=O)O		NCCO		OC([C@H](C)C)C(=O)O [S]
904	130424031502260217032810	2		NCCOCC		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
950	130424071502260517032810	2		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC(O)C=O		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(OC)C(OC)C=C1		ClC1=CC(C)C(=O)O=CC=C1
960	130424071504260817032810	2		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@H](C)C)C(=O)O		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		ClC1=CC(C)C(=O)O=CC=C1
964	130424091502260417032810	2		NCCCN1C=CN=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCCN(C)C=O		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(C)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
985	130424091502260517032810	2		NCCCN1C=CN=C1		ClC(C)C=C([C@H](C)C)C(=O)O		NCC(O)C=O		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
862	130224041510260417032810	2		NCC=C		ClC1=CC(C)C(=O)O=CC=C1		CC(C)CCN		OC(C1=C(C(=O)C)C(=O)C(=O)O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
744	130224101502260917032810	2		C1NCCNC1		ClC1=CC(C)C(=O)O=CC=C1		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
638	130224031501261017032810	2		NCCOCC		ClC1=CC(C)C(=O)O=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=C(C(=O)C)C(=O)C(=O)O		NCC1=CC=C(OC)C(OC)C=C1		ClC1=CC(C)C(=O)O=CC=C1
643	130224031504260417032810	2		NCCOCC		ClC1=CC(C)C(=O)O=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(OC)C(OC)C=C1		ClC1=CC(C)C(=O)O=CC=C1
710	130224081506260317032810	2		N1CCNCC1		ClC1=CC(C)C(=O)O=CC=C1		NCC1=CC=C(C(F)F)C=C1		OC(C1=C(C(=O)C)C(=O)C(=O)O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
888	130224071501260317032810	2		NCC1=CC=C(C)C=C1		ClC1=CC(C)C(=O)O=CC=C1		NCC1=CC=C(S1)		OC(C1=C(C)C(=O)N1)=O		NCC1=CC=C(C)C(OC)C(OC)C=C1		ClC1=CC(C)C(=O)O=CC=C1
624	130224011502260617032810	2		NCC1=CC=C(C)C=C1		ClC1=CC(C)C(=O)O=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
861	130224051504261017032810	2		NCC1=CC=C(OC)C2=C2C=C1		ClC1=CC(C)C(=O)O=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=C(C(=O)C)C(=O)C(=O)O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
483	13012401503260617042810	2		NCC=C		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(OC)C(OC)C=C1		BrC1=CC=C(C)C(=O)C=C1
468	130124031504260417032810	2		NCCOCC		OC(C1=CC(C)C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(OC)C(OC)C=C1		ClC1=CC(C)C(=O)O=CC=C1
517	130124071501260317012810	2		NCC1=CC=C(C)C=C1		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC(C1=CSC(C(=O)N1)=O
564	130124091501260917032810	2		NCCCN1C=CN=C1		OC(C1=CC(C)C(=O)N1)=O		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		ClC1=CC(C)C(=O)O=CC=C1
591	130124091502260717032810	2		NCCCN1C=CN=C1		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
564	130124091504260417032810	2		NCCCN1C=CN=C1		OC(C1=CC(C)C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
489	130124051501260917032810	2		NCC1=CC=C(OC)C2=C2C=C1		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
510	130124051510260417042810	2		NCC1=CC=C(OC)C2=C2C=C1		OC(C1=CC(C)C(=O)N1)=O		CC(C)CCN		OC(C1=C(C(=O)C)C(=O)C(=O)O		NCC1=CC=C(OC)C(OC)C=C1		BrC1=CC=C(C)C(=O)C=C1
794	130324041503260917042810	2		NCC=C		OC(C1=CSC(C(=O)N1)=O		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		BrC1=CC=C(C)C(=O)C=C1
823	130324071501260717032810	2		NCC1=CC=C(C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
1111	131024031501260317042810	2		NCC1=C(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		BrC1=CC=C(C)C(=O)C=C1
1120	131024031502260417032810	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C(=O)C=C1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
807	130324051501260817032810	2		NCC1=CC=C(OC)C2=C2C=C1		OC(C1=CSC(C(=O)N1)=O		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [S]
923	130424041501260317012805	2		NCC=C		ClC(C)C=C([C@H](C)C)C(=O)O		NCC1=CC=C(S1)		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC=C(C)C(OC)C(OC)C=C1		OC(C1=CSC(C(=O)N1)=O
922	130424031510260417042805	2		NCCOCC		ClC(C)C=C([C@H](C)C)C(=O)O		CC(C)CCN		OC(C1=C(C(=O)C)C(=O)C(=O)O		NCC1=CC=C(C)C(OC)C(OC)C=C1		OC([C@H](C)C)C(=O)O [R]

Section-10: Analysis of Naive bead population: These beads are deep sequenced after DEL synthesis (upto 2 copies)

observation	full_mol.code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
1	130424081501260117032808	47		N1CNCCN1		ClC(C)C=C(C)C(O)C(=O)O		NCCOC		OC(C)=COC(C)C(=O)O		BC1=CC=C(C)C(N)C=C1		OC(C)C(=O)C(=O)O
2	130124071501260717022810	44		NCC1=CC=C(C)C=C1		OC(C)C=COC(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(C)=COC(C)C(=O)O		NCC1=CC=C(C)C(O)C=C1		ClC1=CC(C)C(O)=CC=C1
3	130224031504260517032802	37		NCCOC		ClC1=CC(C)C(O)=CC=C1		NCC(C)C(O)		OC(C)=CC(C)C(=O)O		NCCO		OC(C)C(=O)C(=O)O
4	130224101503260317102804	37		C1CNCCN1		ClC1=CC(C)C(O)=CC=C1		NCC1=CC=C(S1)		OC(C)=COC(C)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)C(O)C=C1
5	130324041504260417092804	33		NCC=C		OC(C)=COC(C)C(=O)O		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[R]		CCC(O)=O
6	130424071502260917032805	31		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(O)C(=O)O		NCC1=CC(F)=CC(F)F(F)F=C1		OC(C)=COC(C)C(=O)O		NCC1CC(C)C=C(C)C=C2O1		OC(C)C(=O)C(=O)O
7	130424081502260517032802	25		NCC1=CC=CO1		ClC(C)C=C(C)C(O)C(=O)O		NCC(C)C(O)		OC(C)=CC(C)C(=O)O		NCCO		OC(C)C(=O)C(=O)O
8	131024021502261017022809	23		NCC1=CC(F)=C(F)C=C1		ClC1=CC(C)C(O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(O)C(=O)O		NCC1CCOCC1		ClC1=CC(C)C(O)=CC=C1
9	130224091509260317032803	19		NCCN1C=C(N)C=C1		ClC1=CC(C)C(O)=CC=C1		NCC1=CC=C(C)C(F)F(F)F=C1		ClC(C)C=C(C)C(O)C(=O)O		NCCN1C=C(N)C=C1		OC(C)C(=O)C(=O)O
10	130124041509260317022804	18		NCC=C		OC(C)=COC(C)C(=O)O		NCC1=CC=C(C)C(F)F(F)F=C1		ClC(C)C=C(C)C(O)C(=O)O		NCC1=CC=CO1		ClC1=CC(C)C(O)=CC=C1
11	130924031509260217102804	18		NCC1=CC=CC=C1		OC(C)=COC(C)C(=O)O		NCC1=CC=C(C)C(F)F(F)F=C1		ClC(C)C=C(C)C(O)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)C(O)C=C1
12	130124071501260417102804	17		NCC1=CC=C(C)C=C1		OC(C)=COC(C)C(=O)O		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)C(O)C=C1
13	130224031503260417092804	16		NCCOC		ClC1=CC(C)C(O)=CC=C1		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[R]		CCC(O)=O
14	131024021501260417102804	14		NCC1=CC(F)=C(F)C=C1		ClC1=CC(C)C(O)=CC=C1		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)C(O)C=C1
15	130124061509260117102804	15		NCC1=CC=CO1		OC(C)=COC(C)C(=O)O		NCC1=CC=C(C)C(F)F(F)F=C1		ClC(C)C=C(C)C(O)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)C(O)C=C1
16	130124071510260417032803	15		NCC1=CC=C(C)C=C1		OC(C)=COC(C)C(=O)O		CC(C)CCN		ClC(C)C=C(C)C(O)C(=O)O		NCCN1C=C(N)C=C1		OC(C)C(=O)C(=O)O
17	130124101510260317092804	14		C1CNCCN1		ClC1=CC(C)C(O)=CC=C1		CC(C)CCN		ClC(C)C=C(C)C(O)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[R]		CCC(O)=O
18	130224101510260317032803	14		C1CNCCN1		ClC1=CC(C)C(O)=CC=C1		CC(C)CCN		ClC(C)C=C(C)C(O)C(=O)O		NCCN1C=C(N)C=C1		OC(C)C(=O)C(=O)O
19	130224021501260417042806	13		NCC1=CC=C(N)C=C1		ClC1=CC(C)C(O)=CC=C1		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		N(C)C@H(C)C1=CC=CC=C1		OC(C)C(=O)C(=O)O
20	130124051502260417042803	12		NCC1=CC=C(C)C(O)C=C1		OC(C)=COC(C)C(=O)O		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		NCCN1C=C(N)C=C1		OC(C)C(=O)C(=O)O
21	130124081502261017042803	12		N1CNCCN1		OC(C)=COC(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(O)C(=O)O		NCCN1C=C(N)C=C1		OC(C)C(=O)C(=O)O
22	130124081504260417102804	12		N1CNCCN1		OC(C)=COC(C)C(=O)O		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)C(O)C=C1
23	130224031510260417092804	12		NCCOC		ClC1=CC(C)C(O)=CC=C1		CC(C)CCN		ClC(C)C=C(C)C(O)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[R]		CCC(O)=O
24	130324101501260417022803	12		C1CNCCN1		OC(C)=COC(C)C(=O)O		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		NCCN1C=C(N)C=C1		ClC1=CC(C)C(O)=CC=C1
25	130424011503260517032802	12		NCC1=CC=C(C)C(Br)C=C1		ClC(C)C=C(C)C(O)C(=O)O		NCC(C)C(O)		OC(C)=CC(C)C(=O)O		NCCO		OC(C)C(=O)C(=O)O
26	130424031510260317032803	12		NCCOC		ClC(C)C=C(C)C(O)C(=O)O		CC(C)CCN		ClC(C)C=C(C)C(O)C(=O)O		NCCN1C=C(N)C=C1		OC(C)C(=O)C(=O)O
27	130124031504260417032803	11		NCCOC		OC(C)=COC(C)C(=O)O		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		NCCN1C=C(N)C=C1		OC(C)C(=O)C(=O)O
28	130424031504260817022803	11		NCCOC		ClC(C)C=C(C)C(O)C(=O)O		N(C)C@H(C)C1=CC=CC=C1		OC(C)=COC(C)C(=O)O		NCCN1C=C(N)C=C1		ClC1=CC(C)C(O)=CC=C1
29	130424031509260317092804	11		NCCOC		ClC(C)C=C(C)C(O)C(=O)O		NCC1=CC=C(C)C(F)F(F)F=C1		ClC(C)C=C(C)C(O)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[R]		CCC(O)=O
30	131024021501260217012808	11		NCC1=CC(F)=C(F)C=C1		ClC1=CC(C)C(O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=COC(C)C(=O)O		BC1=CC=C(C)C(N)C=C1		OC(C)=COC(C)C(=O)O
31	130124051502260417022804	10		NCC1=CC=C(C)C(O)C=C1		OC(C)=COC(C)C(=O)O		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		NCC1=CC=CO1		ClC1=CC(C)C(O)=CC=C1
32	130124051509260317032807	10		NCC1=CC=C(C)C(O)C=C1		OC(C)=COC(C)C(=O)O		NCC1=CC=C(C)C(F)F(F)F=C1		ClC(C)C=C(C)C(O)C(=O)O		NCC1=CC(C)C=C(C)C=C1		OC(C)C(=O)C(=O)O
33	130124071502260417092803	10		NCC1=CC=C(C)C=C1		OC(C)=COC(C)C(=O)O		NCCN(C)C(O)		OC(C)=CC(C)C(=O)O		N(C)C@H(C)C1=CC=CC=C1[R]		OC(C)C(=O)C(=O)O

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
34	13032403150260217102804	10		NCCCC		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C(F)(F)F)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
35	130324051503260117022803	10		NCC1=CC=C(C(=O)OC)C=C1		OC(C)=CSC(C)=N1=O		NCCCC		OC(C)=C(C(=O)C)=N1=O		NCCCN1C=CN=C1		ClC1=CC(C)=O=CC=C1
36	13032410150260217022803	10		C1CNCCN1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=C(C(=O)C)=N1=O		NCCCN1C=CN=C1		ClC1=CC(C)=O=CC=C1
37	130424051504260917022804	10		NCC1=CC=C(C(=O)OC)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC(F)=CC(C(F)(F)F)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C01		ClC1=CC(C)=O=CC=C1
38	130124031502261017092803	9		NCCCC		OC(C)=C(C(=O)C)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[R]		OC([C@@H](C)C)=O[S]
39	130124091501261017032802	9		NCCCN1C=CN=C1		OC(C)=C(C(=O)C)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCCO		OC([C@@H](C)C)=O[S]
40	130224101509260117102804	9		C1CNCCN1		ClC(C)=CC(C)=O=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
41	130324101510260317102804	9		C1CNCCN1		OC(C)=CSC(C)=N1=O		CC(C)CCN		ClC(C)=C(C@H)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
42	130424031509260217032803	9		NCCCC		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(C(F)F)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCCCN1C=CN=C1		OC([C@@H](C)C)=O[S]
43	130424081505260717032803	9		N1CCNCCC1		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C)=C(C(=O)C)=N1=O		NCCCN1C=CN=C1		OC([C@@H](C)C)=O[S]
44	130924031501260917032804	9		NCC1CCOCC1		OC(C)=CSC(C)=N1=O		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C01		OC([C@@H](C)C)=O[S]
45	130924031504260417092804	9		NCC1CCOCC1		OC(C)=CSC(C)=N1=O		NCCNC(C)=O		OC(C)=CC(C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(C)=O
46	130124031503260417092804	8		NCCCC		OC(C)=C(C(=O)C)=N1=O		NCCNC(C)=O		OC(C)=CC(C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(C)=O
47	130124031504260817032809	8		NCCCC		OC(C)=C(C(=O)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C)=C(C(=O)C)=N1=O		NCC1CCOCC1		OC([C@@H](C)C)=O[S]
48	130124051501261017102804	8		NCC1=CC=C(C(=O)OC)C=C1		OC(C)=C(C(=O)C)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
49	130124051503260417092804	8		NCC1=CC=C(C(=O)OC)C=C1		OC(C)=C(C(=O)C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CC(C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(C)=O
50	130124051509260317022803	8		NCC1=CC=C(C(=O)OC)C=C1		OC(C)=C(C(=O)C)=N1=O		NCC1=CC=C(C(F)F)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCCCN1C=CN=C1		ClC1=CC(C)=O=CC=C1
51	130224031502260817022802	8		NCCCC		ClC(C)=CC(C)=O=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C)=C(C(=O)C)=N1=O		NCCO		ClC1=CC(C)=O=CC=C1
52	130224041504260717022803	8		NCC=C		ClCC1=CC(C)=O=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C)=C(C(=O)C)=N1=O		NCCCN1C=CN=C1		ClC1=CC(C)=O=CC=C1
53	130324071501260517102804	8		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CC(C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
54	130424031504260517032802	8		NCCCC		ClC(C)=C(C@H)C(C)C(O)=O		NCC(C)C(O)		OC(C)=CC(C)C=C1=O		NCCO		OC([C@@H](C)C)=O[S]
55	130424031504260917032803	8		NCCCC		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C)=CC(C)C=C1=O		NCCCN1C=CN=C1		OC([C@@H](C)C)=O[S]
56	130424031504260917022809	8		NCCCC		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C)=C(C(=O)C)=N1=O		NCC1CCOCC1		ClC1=CC(C)=O=CC=C1
57	130424051502260417032803	8		NCC1=CC=C(C(=O)OC)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCCNC(C)=O		OC(C)=CC(C)C=C1=O		NCCCN1C=CN=C1		OC([C@@H](C)C)=O[S]
58	130424071502260217022803	8		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=C(C(=O)C)=N1=O		NCCCN1C=CN=C1		ClC1=CC(C)=O=CC=C1
59	130424081509260317102804	8		N1CCNCCC1		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
60	130424091504260917022803	8		NCCCN1C=CN=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C)=CC(C)C=C1=O		NCCCN1C=CN=C1		ClC1=CC(C)=O=CC=C1
61	130424101501260817032809	8		C1CNCCN1		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C)=CC(C)C=C1=O		NCC1CCOCC1		OC([C@@H](C)C)=O[S]
62	130124031502260217032803	7		NCCCC		OC(C)=C(C(=O)C)=N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C)=C(C(=O)C)=N1=O		NCCCN1C=CN=C1		OC([C@@H](C)C)=O[S]
63	130124071502260517092804	7		NCC1=CC=C(C)C=C1		OC(C)=C(C(=O)C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CC(C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(C)=O
64	130324051504260817032803	7		NCC1=CC=C(C(=O)OC)C=C1		OC(C)=CSC(C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=CN=C1		OC([C@@H](C)C)=O[S]
65	130424031501261017022803	7		NCCCC		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCCCN1C=CN=C1		ClC1=CC(C)=O=CC=C1
66	130424071502260317032805	7		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)C(C)C(O)=O		NCC1=CC=C(S1)C=C1		OC(C)=C(C(=O)C)=N1=O		NCC1CCO(C=CC=C2)C2O1		OC([C@@H](C)C)=O[S]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
67	130424071502260417032803	7		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
68	130424081502260317032803	7		NCCCN1C=CN=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(S1)C=C1		OC(C1=CC(C)C(=O)N1)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
69	130924031501260717042803	7		NCC1CCOCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=C(C)C(C)N1)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [R]
70	130924041501260417092804	7		NCC1CCOCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C(=O)O		N(C)C(O)C1=CC=CC=C1 [R]		CCC(O)=O
71	131024021503260417102804	7		NCC1=CC(F)=C(F)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C(=O)O		N(C)C(O)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
72	130124031502261017032803	6		NCCOCC		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
73	130124041501261017022803	6		NCC=C		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		ClC(C)C(=O)C(O)=CC=C1
74	130124051502260317032803	6		NCC1=CC=C(OC(=O)C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		CC(C)CCN		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
75	130124071502260317092804	6		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(S1)C=C1		OC(C1=CC(C)C(=O)N1)=O		N(C)C(O)C1=CC=CC=C1 [R]		CCC(O)=O
76	130124071504260517102804	6		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C(=O)N1)=O		N(C)C(O)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
77	130224041501260517102804	6		NCC=C		ClC(C)C(=O)C(Cl)C(O)=O		NCC(C)C(O)O		OC(C1=CC=C(C)C)C(=O)O		N(C)C(O)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
78	130224081502260717032803	6		N1CCNCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=C(C)C(C)N1)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
79	130224081503260417102804	6		N1CCNCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C(=O)O		N(C)C(O)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
80	130324041502260417042803	6		NCC=C		ClC(C)C(=O)C(Cl)C(O)=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C(=O)O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [R]
81	130324061503260417092804	6		NCC1=CC=C(O1)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C(=O)O		N(C)C(O)C1=CC=CC=C1 [R]		CCC(O)=O
82	130324081509260217102804	6		N1CCNCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		N(C)C(O)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
83	130424031502260217032803	6		NCCOCC		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C(=O)N1)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
84	130424031503260517092804	6		NCCOCC		ClC(C)C(=O)C(Cl)C(O)=O		NCC(C)C(O)O		OC(C1=CC=C(C)C)C(=O)O		N(C)C(O)C1=CC=CC=C1 [R]		CCC(O)=O
85	130424051509260217092804	6		NCC1=CC=C(OC(=O)C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		N(C)C(O)C1=CC=CC=C1 [R]		CCC(O)=O
86	130424101509260217022804	6		C1CCNCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(O1)C=C1		ClC(C)C(=O)C(O)=CC=C1
87	130924021501260317032803	6		NCC1CCOCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(S1)C=C1		OC(C1=CC(C)C(=O)N1)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
88	130924031502261017102804	6		NCC1CCOCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		N(C)C(O)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
89	130924031503261017032803	6		NCC1CCOCC1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
90	131024011504260617042809	6		NCC1=CC(F)=C(F)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C)C)C(=O)O		NCC1CCOCC1		OC(Cl)C(O)C(=O)O [R]
91	131024031504260517032802	6		NCC1=CC(F)=C(F)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC(C)C(O)O		OC(C1=CC=C(C)C)C(=O)O		NCCO		OC(Cl)C(O)C(=O)O [S]
92	130124051503261017042803	5		NCC1=CC=C(OC(=O)C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [R]
93	130124051509260117012803	5		NCC1=CC=C(OC(=O)C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		OC(C1=C(C)C(C)N1)=O
94	130124051509260417032803	5		NCC1=CC=C(OC(=O)C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
95	130124071501260417032803	5		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C(=O)O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [S]
96	130124071501260517022803	5		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C)C)C(=O)O		NCCCN1C=CN=C1		ClC(C)C(=O)C(O)=CC=C1
97	130124071501260817032804	5		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		N(C)C(O)C1=CC=CC=C1		OC(C1=C(C)C(C)N1)=O		NCC1=CC=C(O1)C=C1		OC(Cl)C(O)C(=O)O [S]
98	130124071501261017042803	5		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCCN1C=CN=C1		OC(Cl)C(O)C(=O)O [R]
99	130124071504260417102804	5		NCC1=CC=C(C)C=C1		ClC(C)C(=O)C(Cl)C(O)=O		NCCNC(C)=O		OC(C1=CC=C(C)C)C(=O)O		N(C)C(O)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
100	130124071502260117022809	5		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O
101	130124071502260117022803	5		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O
102	130124081502260417022809	5		N1CCNCC1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O
103	130124091502260117022803	5		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O
104	130124091502260117032803	5		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O
105	130124091502260217022809	5		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O
106	130124101502260417042803	5		C1CNCC1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
107	130124101503260417022803	5		C1CNCC1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O
108	130224031502260717012803	5		NCCOOC		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
109	130224031502260717032803	5		NCCOOC		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
110	130224081510260317102804	5		N1CCNCC1		ClC(=O)C(C)C(=O)O		CC(C)CN		ClC(C)C=C(C)C(=O)O		N1C@H(C)C1=CC=CC=C1		O=C(O)C1=C(C)OC=C1
111	13022409150226071702804	5		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		N1C@H(C)C1=CC=CC=C1		O=C(O)C1=C(C)OC=C1
112	13022410150260117012803	5		C1CNCC1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
113	13022410150226101702804	5		C1CNCC1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O		N1C@H(C)C1=CC=CC=C1		CC(O)C=O
114	13022410150260317032803	5		C1CNCC1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
115	130324031502260417022803	5		NCCOOC		ClC(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O
116	130324041502260317022804	5		NCC=C		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O
117	130324051502261017042803	5		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
118	130324051502260817012803	5		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O		N1C@H(C)C1=CC=CC=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O
119	130324051502260417042803	5		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
120	130324071503261017022803	5		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O
121	130324081510260317032803	5		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O		CC(C)CN		ClC(C)C=C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
122	130324101502260417032801	5		C1CNCC1		ClC(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(C)C(=O)O
123	130324101503260417022803	5		C1CNCC1		ClC(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O
124	130424031502260317032809	5		NCCOOC		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(C)C(=O)O
125	130424031502260417022805	5		NCCOOC		ClC(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O
126	130424031502260417102803	5		NCCOOC		ClC(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(=O)C(C)C(=O)O		N1C@H(C)C1=CC=CC=C1		OC(=O)C(C)C(=O)O
127	130424031502260817032809	5		NCCOOC		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(C)C(=O)O
128	130424051504261017102804	5		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O		N1C@H(C)C1=CC=CC=C1		O=C(O)C1=C(C)OC=C1
129	130424091502260217032802	5		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCCO		OC(=O)C(C)C(=O)O
130	130424091502260817032803	5		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O		N1C@H(C)C1=CC=CC=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
131	130424101504260317032803	5		C1CNCC1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		OC(=O)C(=O)C(C)C(=O)O		NCCN1C=CN=C1		OC(=O)C(C)C(=O)O
132	130924021509260417022803	5		NCC1=CC=C(C)C=C1		ClC(=O)C(C)C(=O)O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O		NCCN1C=CN=C1		ClC(=O)C(C)C(=O)O

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
133	130924031501260217032809	5		NCC1COCC1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1COCC1		OC(C)=CSC(C)=N1=O [S]
134	131024021501261017102804	5		NCC1=CC(F)=C(F)C=C1		ClC(C)=C(C)(O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(C)(O)=CC=C1		NCC1=CC=C(C)C=C1 [S]		OC(C)=C(C)(O)=CC=C1
135	131024021502260517102804	5		NCC1=CC(F)=C(F)C=C1		ClC(C)=C(C)(O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(C)(O)=CC=C1		NCC1=CC=C(C)C=C1 [S]		OC(C)=C(C)(O)=CC=C1
136	130124021509260317102804	4		NCC1=CC=C(N)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [S]		OC(C)=C(C)(O)=CC=C1
137	130124031504260517032802	4		NCCOC		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCCOC		OC(C)=CSC(C)=N1=O [S]
138	130124031509260171032810	4		NCCOC		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [S]		OC(C)=CSC(C)=N1=O [S]
139	130124041502260417032803	4		NCC=C		OC(C)=CSC(C)=N1=O		NCCN(C)C=O		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [S]
140	130124041502260517032802	4		NCC=C		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCCOC		OC(C)=CSC(C)=N1=O [S]
141	130124041510260217032803	4		NCC=C		OC(C)=CSC(C)=N1=O		CC(C)CCN		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [S]
142	130124051501260417032801	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCN(C)C=O		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [S]
143	130124051501260817032804	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O [S]
144	130124051502260417032803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCN(C)C=O		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [S]
145	130124051502260517102804	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [S]		OC(C)=CSC(C)=N1=O [S]
146	130124051502260817042809	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCC1COCC1		OC(C)=CSC(C)=N1=O [R]
147	13012405150326017022802	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCCOC		OC(C)=CSC(C)=N1=O [S]
148	130124051504260317042803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [R]
149	130124051504260517032802	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O [S]
150	130124051504260817032804	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [S]		OC(C)=CSC(C)=N1=O [S]
151	130124051509260217022803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		ClC(C)=C(C)(O)=CC=C1
152	130124071501260817042803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC(C)C(O)		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [R]
153	130124071501261017032804	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [S]		OC(C)=CSC(C)=N1=O [S]
154	130124071502260317032803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [S]
155	13012407150326017032803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [S]
156	130124071503260171012803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O
157	130124071504260817022803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		ClC(C)=C(C)(O)=CC=C1
158	130124071504260917042803	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O [R]
159	13012407150926017102804	4		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [S]		OC(C)=CSC(C)=N1=O [S]
160	130124081502260217012803	4		N1CCNCC1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O
161	130124081502261017012810	4		N1CCNCC1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [S]		OC(C)=CSC(C)=N1=O
162	13012408150926017102804	4		N1CCNCC1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [S]		OC(C)=CSC(C)=N1=O
163	130124091502260917032804	4		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O [S]
164	130124091503260517092804	4		NCCCN1C=C(N)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O		NCC1=CC=C(C)C=C1 [R]		CC(C)=O
165	130224031501260417032804	4		NCCOC		ClC(C)=C(C)(O)=CC=C1		NCCN(C)C=O		ClC(C)=C(C)(O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C)=CSC(C)=N1=O [S]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
166	130224031502260717012809	4		NCCCC		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CCl)=N)=O		NCC1CCCC1		OC(C1=CSC(CCl)=N)=O
167	130224031504260917032803	4		NCCCC		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC=C(CCl)=N)=O		NCCCN1C=CN=C1		OC([C@H](C)Cl)=O [S]
168	130224051501260217022803	4		NCC1=CC=C(OCCO2)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(O)C)O=C1		OC(C1=CC=C(CCl)=N)=O		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1
169	130224051501260417102801	4		NCC1=CC=C(OCCO2)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)=O		OC(C1=CC=C(CCl)=N)=O		N[C@@H](C)C1=CC=CC=C1 [S]		OC(C1=CSC(CCl)=N)=O
170	130224071501260217032801	4		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(O)C)O=C1		OC(C1=CC=C(CCl)=N)=O		NCCCN1C=CN=C21		OC([C@H](C)Cl)=O [S]
171	130224071501260817042803	4		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC=C(CCl)=N)=O		NCCCN1C=CN=C1		OC([C@H](C)Br)=O [R]
172	130224071502260317042803	4		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CS1		OC(C1=CC=C(CCl)=N)=O		NCCCN1C=CN=C1		OC([C@H](C)Br)=O [R]
173	130224071503260317032809	4		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CS1		OC(C1=CC=C(CCl)=N)=O		NCC1CCCC1		OC([C@H](C)Cl)=O [S]
174	130224071509260417102803	4		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)C=C([C@@H](C)C)C(O)=O		N[C@@H](C)C1=CC=CC=C1 [S]		OC([C@H](C)Cl)=O [S]
175	130224081504260317032803	4		N1CCNCCC1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CS1		OC(C1=CC=C(CCl)=N)=O		NCCCN1C=CN=C1		OC([C@H](C)Cl)=O [S]
176	130224081502260417102804	4		N1CCNCCC1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C([C@@H](C)C)C(O)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
177	130224091504260417092804	4		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)=O		OC(C1=CC=C(CCl)=N)=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
178	130224091504260817012803	4		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(CCl)=N)=O		NCCCN1C=CN=C1		OC(C1=CSC(CCl)=N)=O
179	130224091509260317032804	4		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)C=C([C@@H](C)C)C(O)=O		NCC1=CC=CC=C1		OC([C@H](C)Cl)=O [S]
180	130224091510260317022803	4		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1
181	130224101501260417022810	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)=O		OC(C1=CC=C(CCl)=N)=O		NCCCN1C=CC(O)C=C1		ClCC1=CC(C(O)=O)=CC=C1
182	130224101501260717092804	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(NC)C=C1		OC(C1=CSC(CCl)=N)=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
183	130224101502260417092802	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)=O		OC(C1=CC=C(CCl)=N)=O		N[C@@H](C)C1=CC=CC=C1 [R]		ClCC1=CC(C(O)=O)=CC=C1
184	130224101502260517102804	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)		OC(C1=CC=C(CCl)=N)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
185	130224101503260517102804	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)		OC(C1=CC=C(CCl)=N)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
186	130224101503261017102804	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)C)C(O)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
187	130224101504260817032805	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(CCl)=N)=O		NCC1CCCC1		OC([C@H](C)Cl)=O [S]
188	130224101509260817032801	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)C=C([C@@H](C)C)C(O)=O		NCCCN1C=CC(O)C=C21		OC([C@H](C)Cl)=O [S]
189	130224101510260417022803	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1
190	130224101510260417032803	4		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		OC([C@H](C)Cl)=O [S]
191	130324031501260417102803	4		NCCCC		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)=O		OC(C1=CC=C(CCl)=N)=O		N[C@@H](C)C1=CC=CC=C1 [S]		OC([C@H](C)Cl)=O [S]
192	130324031501260717032803	4		NCCCC		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CCl)=N)=O		NCCCN1C=CN=C1		OC([C@H](C)Cl)=O [S]
193	130324031509260417032803	4		NCCCC		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)C=C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		OC([C@H](C)Cl)=O [S]
194	130324041502260217032803	4		NCC=C		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(O)C)O=C1		OC(C1=CC=C(CCl)=N)=O		NCCCN1C=CN=C1		OC([C@H](C)Cl)=O [S]
195	130324051501260417032806	4		NCC1=CC=C(OCCO2)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)=O		OC(C1=CC=C(CCl)=N)=O		N[C@@H](C)C1=CC=CC=C1		OC([C@H](C)Cl)=O [S]
196	130324051509260117032803	4		NCC1=CC=C(OCCO2)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)C=C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		OC([C@H](C)Cl)=O [S]
197	130324051510260417032809	4		NCC1=CC=C(OCCO2)C=C1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C([C@@H](C)C)C(O)=O		NCC1CCCC1		OC([C@H](C)Cl)=O [S]
198	130324071504260517032802	4		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)		OC(C1=CC=C(CCl)=N)=O		NCCO		OC([C@H](C)Cl)=O [S]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
199	130324081502260817022803	4		N1CCNCCC1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C=C1)		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=CC=C1
200	130324081502260817022804	4		N1CCNCCC1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(=O)F)F=C1		ClC(C1=C=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(O)=O
201	130324091504260217032803	4		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)O)=O [S]
202	130324101502260817102804	4		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
203	130324101504261017032803	4		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C1=C=C(C(=O)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)O)=O [S]
205	130424031502260817012809	4		NCCOC		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(C=C1)		OC(C1=CC=C(C(=O)C=C1)=O		NCC1CCOCC1		OC(C1=CSC(C(=O)N1)=O
206	130424031504260817032805	4		NCCOC		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(C=C1)		OC(C1=CC=C(C(=O)C=C1)=O		NCC1CCO(C)C=CC=C2O1		OC([C@@H](C)O)=O [S]
207	130424041502260817032805	4		NCC=C		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		NCC1CCO(C)C=CC=C2O1		OC([C@@H](C)O)=O [S]
208	130424041502260817102804	4		NCC=C		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
209	130424051502260817022804	4		NCC1=CC=C(C(=O)O)C		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(O)=O
210	130424051504260817032802	4		NCC1=CC=C(C(=O)O)C		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		NCCO		OC([C@@H](C)O)=O [S]
211	130424051504260817032805	4		NCC1=CC=C(C(=O)O)C		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(C(=O)F)F=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1CCO(C)C=CC=C2O1		OC([C@@H](C)O)=O [S]
212	130424071501260817022809	4		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(C=C1)		OC(C1=CC=C(C(=O)C=C1)=O		NCC1CCOCC1		ClCC1=CC(C(=O)O)=CC=C1
213	130424071502260817032802	4		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(C(=O)F)F=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCCO		OC([C@@H](C)O)=O [S]
214	130424091501260317032803	4		NCCCN1C=CN=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(S1)		OC(C1=CCO(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)O)=O [S]
215	130424091501260417032803	4		NCCCN1C=CN=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)O)=O [S]
216	130424091504260817102804	4		NCCCN1C=CN=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
217	130424091504261017022803	4		NCCCN1C=CN=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=CC=C1
218	130424091502260817022803	4		NCCCN1C=CN=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(C(=O)F)F=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=CC=C1
219	130424101502260217022803	4		C1CNCCN1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CCO(C(=O)N1)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=CC=C1
220	130424101502260817022804	4		C1CNCCN1		ClC(C)C=C([C@@H](C)O)C(O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(O1)		ClCC1=CC(C(=O)O)=CC=C1
221	130424101502261017022807	4		C1CNCCN1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C([C@@H](C)O)C(O)=O		NCC1=CC(O)C=CC(=O)C=C1		ClCC1=CC(C(=O)O)=CC=C1
222	131024021502260417022804	4		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(O)=O
223	131024031501260417032810	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1=CC(O)C(=O)C(=O)C=C1		OC([C@@H](C)O)=O [S]
224	131024031503260317032806	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(S1)		OC(C1=CCO(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC([C@@H](C)O)=O [S]
225	131024031503260417032804	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCC1=CC=C(O1)		OC([C@@H](C)O)=O [S]
226	131024031503260417042803	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1C=CN=C1		OC([C@@H](C)O)=O [R]
227	131024031504260817032810	4		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1=CC(O)C(=O)C(=O)C=C1		OC([C@@H](C)O)=O [S]
228	130124011502260917092802	3		NCC1=CC=C(C(Br))=C1		OC(C1=CCO(C(=O)N1)=O		NCC1=CC(F)=CC(C(=O)F)F=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1[R]		ClCC1=CC(C(=O)O)=CC=C1
229	130124021502260317032803	3		NCC1=CC=CN=C1		OC(C1=CCO(C(=O)N1)=O		NCC1=CC=C(S1)		OC(C1=CCO(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)O)=O [S]
230	130124031501260417022804	3		NCCOC		OC(C1=CCO(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(O)=O
231	130124031502260317032810	3		NCCOC		OC(C1=CCO(C(=O)N1)=O		NCC1=CC=C(S1)		OC(C1=CCO(C(=O)N1)=O		NCCCN1=CC(O)C(=O)C(=O)C=C1		OC([C@@H](C)O)=O [S]
232	130124031502260717032803	3		NCCOC		OC(C1=CCO(C(=O)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=CN=C1		OC([C@@H](C)O)=O [S]

observation	full_mol.code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
233	130124031503260817032801	3		NCCCC		OC(C1=CO(C(C)C)=N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)=N1=O		NCCC1=CN(C2=CC=CC=C2)C=C21		OC([C@@H](C)C)=O [S]
234	130124031503260917032803	3		NCCCC		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C)C)=N1=O		NCCCN1C=CN=C1		OC([C@@H](C)C)=O [S]
235	130124031506260217012809	3		NCCCC		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(C(C)F)F=C1		ClC(C)=C[C@@H](C)C(O)=O		NCC1CCCC1		OC(C1=CSC(C)C)=N1=O
236	130124041501261017022809	3		NCC=C		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C[C@@H](C)C(O)=O		NCC1CCCC1		ClC(C1=CC(O)C)=O)=CC=C1
237	130124041501261017042803	3		NCC=C		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C[C@@H](C)C(O)=O		NCCCN1C=CN=C1		OC([C@@H](C)Br)=O [R]
238	130124041502260417102803	3		NCC=C		OC(C1=CO(C(C)C)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)=O		N[C@@H](C)C1=CC=CC=C1 [S]		OC([C@@H](C)C)=O [S]
239	130124041504260417032804	3		NCC=C		OC(C1=CO(C(C)C)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)=O		NCC1=CC=C1		OC([C@@H](C)C)=O [S]
240	130124041504260417092804	3		NCC=C		OC(C1=CO(C(C)C)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)=O		N[C@@H](C)C1=CC=CC=C1 [R]		CC(O)=O
241	1301240415102260417102803	3		NCC=C		OC(C1=CO(C(C)C)=N1)=O		CC(C)CCN		ClC(C)=C[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1 [S]		OC([C@@H](C)C)=O [S]
242	130124051501260317032802	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(S1)C=C1		OC(C1=CO(C)C)=N1=O		NCCO		OC([C@@H](C)C)=O [S]
243	130124051501260917022805	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C)C)=N1=O		NCC1COO(C=CC=C2)C=C2O1		ClC(C1=CC(O)C)=O)=CC=C1
244	130124051502260317022803	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(S1)C=C1		OC(C1=CO(C)C)=N1=O		NCCCN1C=CN=C1		ClC(C1=CC(O)C)=O)=CC=C1
245	130124051502260417012804	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)=O		NCC1=CC=C1		OC(C1=CSC(C)C)=N1=O
246	130124051503260417012808	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)=O		BrC1=CC=C(C)N(C)C=C1		OC(C1=CSC(C)C)=N1=O
247	130124051503260417032806	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)=O		N[C@@H](C)C1=CC=CC=C1		OC([C@@H](C)C)=O [S]
248	130124051503261017012809	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C[C@@H](C)C(O)=O		NCC1CCCC1		OC(C1=CSC(C)C)=N1=O
249	130124051504260817032809	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)=N1=O		NCC1CCCC1		OC([C@@H](C)C)=O [S]
250	130124051504260917012809	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C)C)=N1=O		NCC1CCCC1		OC(C1=CSC(C)C)=N1=O
251	130124061510260317102804	3		NCC1=CC=C1		OC(C1=CO(C(C)C)=N1)=O		CC(C)CCN		ClC(C)=C[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C=C1
252	130124071501260117102804	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCCO		OC(C1=CO(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C=C1
253	130124071501260417022803	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)=O		NCCCN1C=CN=C1		ClC(C1=CC(O)C)=O)=CC=C1
254	130124071501260917032801	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)=O		NCC1=CN(C2=CC=CC=C2)C=C21		OC([C@@H](C)C)=O [S]
255	130124071501260717012809	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C)C)=N1=O		NCC1CCCC1		OC(C1=CSC(C)C)=N1=O
256	130124071501260817032803	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)=N1=O		NCCCN1C=CN=C1		OC([C@@H](C)C)=O [S]
257	130124071501260817032809	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)=N1=O		NCC1CCCC1		OC([C@@H](C)C)=O [S]
258	130124071501260917092804	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		CC(O)=O
259	130124071502261017022808	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C[C@@H](C)C(O)=O		BrC1=CC=C(C)N(C)C=C1		ClC(C1=CC(O)C)=O)=CC=C1
260	130124071502261017092804	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1 [R]		CC(O)=O
261	130124071503260917032802	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)=O		NCCO		OC([C@@H](C)C)=O [S]
262	130124071504260517032802	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC(C)C(O)		OC(C1=CC=C(C)C)=O		NCCO		OC([C@@H](C)C)=O [S]
263	130124071504260917022804	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)=O		NCC1=CC=C1		ClC(C1=CC(O)C)=O)=CC=C1
264	130124071506260117102803	3		NCC1=CC=C(C)C=C1		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1 [S]		OC([C@@H](C)C)=O [S]
265	130124081501260217022803	3		NCCO		OC(C1=CO(C(C)C)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CO(C)C)=N1=O		NCCCN1C=CN=C1		ClC(C1=CC(O)C)=O)=CC=C1

observation	full_mol.code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair:	Pair:3Acids
266	130124081501260217032802	3		N1CCNCCC1		OC(C1=COO(CO)N)=O		NCC1=CC=C(C(=O)O)C=C		OC(C1=COO(CO)N)=O		NCCO		OC(C@H)(Cl)C(=O)O [S]
267	130124081501260517032805	3		N1CCNCCC1		OC(C1=COO(CO)N)=O		NCC(C)C(O)		OC(C1=COO(CO)N)=O		NCC1COO(C=C)C(=O)C2O1		OC(C@H)(Cl)C(=O)O [S]
268	130124081502261017012809	3		N1CCNCCC1		OC(C1=COO(CO)N)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(Cl)C@H(C)C(O)=O		NCC1COOCC1		OC(C1=CSC(CO)N)=O
269	130124081503260517022809	3		N1CCNCCC1		OC(C1=COO(CO)N)=O		NCC(C)C(O)		OC(C1=COO(CO)N)=O		NCC1COOCC1		ClC(C1=CC(CO)O)=CC=C1
270	130124081503260517092804	3		N1CCNCCC1		OC(C1=COO(CO)N)=O		NCC(C)C(O)		OC(C1=COO(CO)N)=O		N(C@H)(Cl)C1=CC=CC=C1[R]		CC(C)O=O
271	130124081506260317042803	3		N1CCNCCC1		OC(C1=COO(CO)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(Cl)C@H(C)C(O)=O		NCCCN1C=C1		OC(C@H)(Cl)Br)=O [R]
272	130124091501260517092802	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC(C)C(O)		OC(C1=COO(CO)N)=O		N(C@H)(Cl)C1=CC=CC=C1[R]		ClC(C1=CC(CO)O)=CC=C1
273	130124091501260617042803	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC1=CC=CC=C1		OC(C1=COO(CO)N)=O		NCCCN1C=C1		OC(C@H)(Cl)Br)=O [R]
274	130124091502260317022809	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC1=CC=CS1		OC(C1=COO(CO)N)=O		NCC1COOCC1		ClC(C1=CC(CO)O)=CC=C1
275	130124091502260417042803	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCCNC(C)O		OC(C1=COO(CO)N)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)Br)=O [R]
276	130124091502260917092804	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N)=O		N(C@H)(Cl)C1=CC=CC=C1[R]		CC(C)O=O
277	130124091502260917022809	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC1=CC(F)=CC(F)F=C1		OC(C1=CSC(CO)N)=O		NCC1COOCC1		ClC(C1=CC(CO)O)=CC=C1
278	130124091503260517032803	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC(C)C(O)		OC(C1=COO(CO)N)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)C(=O)O [S]
279	130124091504260517022803	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC(C)C(O)		OC(C1=COO(CO)N)=O		NCCCN1C=CN=C1		ClC(C1=CC(CO)O)=CC=C1
280	130124091504260917042803	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC1=CC(F)=CC(F)F=C1		OC(C1=CSC(CO)N)=O		NCCCN1C=C1		OC(C@H)(Cl)Br)=O [R]
281	130124091509260217032803	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(Cl)C@H(C)C(O)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)C(=O)O [S]
282	130124091509260317022804	3		NCCCN1C=CN=C1		OC(C1=COO(CO)N)=O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CSC(CO)N)=O		NCC1=CC=C1		ClC(C1=CC(CO)O)=CC=C1
283	130124101503260717032803	3		C1CNCCN1		OC(C1=COO(CO)N)=O		NCC1=CC=C(N)C=C1		OC(C1=CSC(CO)N)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)C(=O)O [S]
284	130124101503260717102804	3		C1CNCCN1		OC(C1=COO(CO)N)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N)=O		N(C@H)(Cl)C1=CC=CC=C1[S]		OC(C)C1=C(C)OC=C1
285	130124101503260817032803	3		C1CNCCN1		OC(C1=COO(CO)N)=O		N(C@H)(Cl)C1=CC=CC=C1		OC(C1=CSC(CO)N)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)C(=O)O [S]
286	130124101503260817042803	3		C1CNCCN1		OC(C1=COO(CO)N)=O		N(C@H)(Cl)C1=CC=CC=C1		OC(C1=CSC(CO)N)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)Br)=O [R]
287	130124101504260917032803	3		C1CNCCN1		OC(C1=COO(CO)N)=O		NCC1=CC=CC=C1		OC(C1=COO(CO)N)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)C(=O)O [S]
288	130124101504261017012805	3		C1CNCCN1		OC(C1=COO(CO)N)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(Cl)C@H(C)C(O)=O		NCC1COO(C=C)C(=O)C2O1		OC(C1=CSC(CO)N)=O
289	130224011503260717032803	3		NCC1=CC=C(CO)Br=C1		ClC(C1=CC(CO)O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)C(=O)O [S]
290	130224011504260817032809	3		NCC1=CC=C(CO)Br=C1		ClC(C1=CC(CO)O)=CC=C1		N(C@H)(Cl)C1=CC=CC=C1		OC(C1=CSC(CO)N)=O		NCC1COOCC1		OC(C@H)(Cl)C(=O)O [S]
291	130224031501260417022809	3		NCCOCC		ClC(C1=CC(CO)O)=CC=C1		NCCNC(C)O		OC(C1=COO(CO)N)=O		NCC1COOCC1		ClC(C1=CC(CO)O)=CC=C1
292	130224031501260617022805	3		NCCOCC		ClC(C1=CC(CO)O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=COO(CO)N)=O		NCC1COO(C=C)C(=O)C2O1		ClC(C1=CC(CO)O)=CC=C1
293	130224031503260817102804	3		NCCOCC		ClC(C1=CC(CO)O)=CC=C1		N(C@H)(Cl)C1=CC=CC=C1		OC(C1=CSC(CO)N)=O		N(C@H)(Cl)C1=CC=CC=C1[S]		OC(C)C1=C(C)OC=C1
294	130224031504260817032803	3		NCCOCC		ClC(C1=CC(CO)O)=CC=C1		N(C@H)(Cl)C1=CC=CC=C1		OC(C1=CSC(CO)N)=O		NCCCN1C=CN=C1		OC(C@H)(Cl)C(=O)O [S]
295	130224031504261017012803	3		NCCOCC		ClC(C1=CC(CO)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(Cl)C@H(C)C(O)=O		NCCCN1C=CN=C1		OC(C1=CSC(CO)N)=O
296	130224031509260417032810	3		NCCOCC		ClC(C1=CC(CO)O)=CC=C1		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(Cl)C@H(H)C(O)=O		NCC1=CC=C(CO)C(C)C=C1		OC(C@H)(Cl)C(=O)O [S]
297	130224041504260417092804	3		NCC=C		ClC(C1=CC(CO)O)=CC=C1		NCCNC(C)O		OC(C1=COO(CO)N)=O		N(C@H)(Cl)C1=CC=CC=C1[R]		CC(C)O=O
298	130224041509260217092804	3		NCC=C		ClC(C1=CC(CO)O)=CC=C1		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(Cl)C@H(H)C(O)=O		N(C@H)(Cl)C1=CC=CC=C1[R]		CC(C)O=O

observation	full_mol_code2	copies	Amines(X1)	Amines(X1)-smiles	Acid(X1)	Acid(X1)-smiles	Amines(X2)	Amines(X2)-smiles	Acid(X2)	Acid(X2)-smiles	Amines(X3)	Amines(X3)-smiles	Structure of Pair...	Pair3Acids
299	130224041502260417032803	3		NCC=C		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)(F)F)=C1		ClC(C)=C1C=C@H(C)C(C)O=O		NCCCN1C=CN=C1		OC1=C@H(C)C(O)=O [S]
300	130224051501260517022803	3		NCC1=CC=C(C(=O)O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)O		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1
301	130224051501260517042803	3		NCC1=CC=C(C(=O)O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC(F)=CC(C(F)F)=C1		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		OC1=C@H(C)C(O)=O [R]
302	130224051503260417032807	3		NCC1=CC=C(C(=O)O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C)O=C1=O		NCC1=CC(O)C(OC)C=C1		OC1=C@H(C)C(O)=O [S]
303	130224051503260817032802	3		NCC1=CC=C(C(=O)O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C)C)N1=O		NCCO		OC1=C@H(C)C(O)=O [S]
304	130224051504260317022809	3		NCC1=CC=C(C(=O)O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CS1		OC(C1=CC=C(C)C)N1=O		NCC1COCC1		ClCC1=CC(C(O)=O)=CC=C1
305	130224051504260417032810	3		NCC1=CC=C(C(=O)O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C(C(OC)C)C=C1		OC1=C@H(C)C(O)=O [S]
306	13022405150626071702804	3		NCC1=CC=C(C(=O)O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)=C1C=C@H(C)C(C)O=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
307	13022405151026021702804	3		NCC1=CC=C(C(=O)O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)=C1C=C@H(C)C(C)O=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
308	130224051503260817062804	3		NCC1=CC=C(O)C=C1		ClCC1=CC(C(O)=O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C)C)N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
309	130224071501260217012803	3		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		OC(C1=CC=C(C)C)N1=O
310	130224071501260517092804	3		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
311	130224071501261017032805	3		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C1C=C@H(C)C(C)O=O		NCC1COCC(C=CC=C2)C2O1		OC1=C@H(C)C(O)=O [S]
312	13022407150326041702806	3		NCC1=CC=C(C)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C)C)N1=O
313	130224091501260417032803	3		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		OC1=C@H(C)C(O)=O [S]
314	130224091501260517032803	3		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)O		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		OC1=C@H(C)C(O)=O [S]
315	130224091502260217012809	3		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCC1COCC1		OC(C1=CC=C(C)C)N1=O
316	130224091502260717032805	3		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCC1COCC(C=CC=C2)C2O1		OC1=C@H(C)C(O)=O [S]
317	130224091503260317102804	3		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CS1		OC(C1=CC=C(C)C)N1=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
318	130224101501260617022810	3		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C(C(OC)C)C=C1		ClCC1=CC(C(O)=O)=CC=C1
319	130224101501260817032802	3		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC1=C@H(C)C(O)=O [S]
320	130224101502260717032803	3		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCCCN1C=CN=C1		OC1=C@H(C)C(O)=O [S]
321	130224101503260217032809	3		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCC1COCC1		OC1=C@H(C)C(O)=O [S]
322	130224101503260717042809	3		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCC1COCC1		OC1=C@H(C)C(O)=O [R]
323	130224101510260317032801	3		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)=C1C=C@H(C)C(C)O=O		NCC1=C1C2=CC=C(C)C=C2		OC1=C@H(C)C(O)=O [S]
324	130224101510260317062804	3		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)=C1C=C@H(C)C(C)O=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
325	130324031502260817022810	3		NCCOCC		OC(C1=CC=C(C)C)N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C)C)N1=O		NCC1=CC=C(C(OC)C)C=C1		ClCC1=CC(C(O)=O)=CC=C1
326	130324031502260817032802	3		NCCOCC		OC(C1=CC=C(C)C)N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C)C)N1=O		NCCO		OC1=C@H(C)C(O)=O [S]
327	130324031503260517102804	3		NCCOCC		OC(C1=CC=C(C)C)N1=O		NCC(C)C(O)O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
328	130324031504260517032802	3		NCCOCC		OC(C1=CC=C(C)C)N1=O		NCC(C)C(O)O		OC(C1=CC=C(C)C)C=C1=O		NCCO		OC1=C@H(C)C(O)=O [S]
329	130324031504260817022810	3		NCCOCC		OC(C1=CC=C(C)C)N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C)C)N1=O		NCC1=CC=C(C(OC)C)C=C1		ClCC1=CC(C(O)=O)=CC=C1
330	130324041502260217032802	3		NCC=C		OC(C1=CC=C(C)C)N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C)C)N1=O		NCCO		OC1=C@H(C)C(O)=O [S]
331	130324041503260617022809	3		NCC=C		OC(C1=CC=C(C)C)N1=O		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C)C)C=C1=O		NCC1COCC1		ClCC1=CC(C(O)=O)=CC=C1

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3 Acids
332	130324051501260417102804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN(C)C=O		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(Cl)OC=C1
333	130324051502260917102801	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[S]		OC(=O)C1=C(Cl)OC=C1
334	130324051503260717032809	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(N(C)C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1COCC1		OC(=O)C1=C(Cl)OC=C1[S]
335	130324051503260817032803	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN1C=CN=C1		OC(=O)C1=C(Cl)OC=C1[S]
336	130324051503260817102804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(Cl)OC=C1
337	130324051504260517032802	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC(O)C(C)O		OC(=O)C=C(Cl)C(O)=N1=O		NCCO		OC(=O)C1=C(Cl)OC=C1[S]
338	130324051504260917092804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
339	130324051506260117032804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C(F)F)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C)C=C1		OC(=O)C1=C(Cl)OC=C1[S]
340	130324051509260217012803	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C(F)F)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN1C=CN=C1		OC(=O)C1=C(Cl)OC=C1
341	130324051509260217032802	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C(F)F)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCO		OC(=O)C1=C(Cl)OC=C1[S]
342	130324051510260417092804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		CC(C)CCN		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
343	130324061509260217102804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C(F)F)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(Cl)OC=C1
344	130324071501260417032802	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN(C)C=O		OC(=O)C=C(Cl)C(O)=N1=O		NCCO		OC(=O)C1=C(Cl)OC=C1[S]
345	130324071501260817012803	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN1C=CN=C1		OC(=O)C1=C(Cl)OC=C1
346	130324071502260317032802	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(S)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCO		OC(=O)C1=C(Cl)OC=C1[S]
347	130324071503260317092804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(S)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
348	130324071503260817042803	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN1C=CN=C1		OC(=O)C1=C(Cl)OC=C1[R]
349	130324071509260417032801	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C(F)F)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=C(N2=CC=CC=C2)C=CC=C21		OC(=O)C1=C(Cl)OC=C1[S]
350	130324071509260417092804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C(F)F)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
351	130324071510260317032804	3		NCC1=CC=C(O)C(O)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		CC(C)CCN		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C)C=C1		OC(=O)C1=C(Cl)OC=C1[S]
352	130324081503261017102804	3		N1CCNCC1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(Cl)OC=C1
353	130324081504260417102804	3		N1CCNCC1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN(C)C=O		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(Cl)OC=C1
354	130324081509260417032803	3		N1CCNCC1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C(F)F)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN1C=CN=C1		OC(=O)C1=C(Cl)OC=C1[S]
355	130324081510260417102802	3		N1CCNCC1		OC(=O)C=C(Cl)C(O)=N1=O		CC(C)CCN		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[S]		ClC1=C(Cl)OC(O)=CC=C1
356	130324091502260317092804	3		NCCN1C=CN=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(S)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
357	130324091503260417032802	3		NCCN1C=CN=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN(C)C=O		OC(=O)C=C(Cl)C(O)=N1=O		NCCO		OC(=O)C1=C(Cl)OC=C1[S]
358	130324091503260717012808	3		NCCN1C=CN=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(N(C)C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		BrC1=CC=C(C)N=C1		OC(=O)C1=C(Cl)OC=C1
359	130324091503260817022803	3		NCCN1C=CN=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN1C=CN=C1		ClC1=C(Cl)OC(O)=CC=C1
360	130324101502260217102804	3		C1CNCC1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(Cl)OC=C1
361	130324101502260517092804	3		C1CNCC1		OC(=O)C=C(Cl)C(O)=N1=O		NCC(O)C(C)O		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
362	130324101503260917022803	3		C1CNCC1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCN1C=CN=C1		ClC1=C(Cl)OC(O)=CC=C1
363	130324101504260517022806	3		C1CNCC1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		N[C@@H](C)C1=CC=CC=C1		ClC1=C(Cl)OC(O)=CC=C1
364	130324101504260617032802	3		C1CNCC1		OC(=O)C=C(Cl)C(O)=N1=O		NCC1=CC=C(C)C=C1		OC(=O)C=C(Cl)C(O)=N1=O		NCCO		OC(=O)C1=C(Cl)OC=C1[S]

observation	full_mol.code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
365	130324101504260817032805	3		C1CNCCN1		OC(C)=CSC(C)(C)N1=O		NCC1=CC=CC=C1		OC(C)=CC(C)(CC)C=C1=O		NCC1OC(C)C=CC=C2=C2O1		OC(C@H)(C)C=O [S]
366	130324101509260417042803	3		C1CNCCN1		OC(C)=CSC(C)(C)N1=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)C(O)=O		NCCCN1C=CN=C1		OC(C@H)(C)Br)=O [R]
367	130324101510260817042804	3		C1CNCCN1		OC(C)=CSC(C)(C)N1=O		CC(C)CCN		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=CC=C1		OC(C@H)(C)Br)=O [R]
368	130424021501260817032803	3		NCC1=CC=CN=C1		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=CC=C1		OC(C)=CC(C)(CC)C=C1=O		NCCCN1C=CN=C1		OC(C@H)(C)C=O [S]
369	130424021502260817022809	3		NCC1=CC=CN=C1		ClC(C)=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1		OC(C)=CSC(C)(C)N1=O		NCC1C1CCCC1		ClC1=CC(C(O)=O)=CC=C1
370	130424021504260717032803	3		NCC1=CC=CN=C1		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(NC)C=C1		OC(C)=CSC(C)(C)N1=O		NCCCN1C=CN=C1		OC(C@H)(C)C=O [S]
371	130424031501260117102804	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCCOC		OC(C)=CC(C)(C)N1=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
372	130424031501260417092804	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCCN(C)=O		OC(C)=CC(C)(CC)C=C1=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)=O
373	130424031501261017092804	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)=O
374	130424031503260217032803	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C		OC(C)=CC(C)(C)N1=O		NCCCN1C=CN=C1		OC(C@H)(C)C=O [S]
375	130424031503260917022802	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=CC=C1		OC(C)=CC(C)(C)C=C1=O		NCCO		ClC1=CC(C(O)=O)=CC=C1
376	130424031503260717032802	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C)=CSC(C)(C)N1=O		NCCO		OC(C@H)(C)C=O [S]
377	130424031503260917092803	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		OC(C@H)(C)C=O [S]
378	130424031504260917102804	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C)=CSC(C)(C)N1=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
379	130424031509260117042803	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)C(O)=O		NCCCN1C=CN=C1		OC(C@H)(C)Br)=O [R]
380	130424031509260217032806	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(C(C)F)F=C1		ClC(C)=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1		OC(C@H)(C)C=O [S]
381	130424031510260317102802	3		NCCOC		ClC(C)=C(C@H)(C)C(O)=O		CC(C)CCN		ClC(C)=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [S]		ClC1=CC(C(O)=O)=CC=C1
382	130424041503260417092803	3		NCC=C		ClC(C)=C(C@H)(C)C(O)=O		NCCN(C)=O		OC(C)=CC(C)(CC)C=C1=O		N(C@H)(C)C1=CC=CC=C1 [R]		OC(C@H)(C)C=O [S]
383	130424041504260317102804	3		NCC=C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=CS1		OC(C)=CC(C)(C)N1=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
384	13042404150426071702804	3		NCC=C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C)=CSC(C)(C)N1=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
385	130424051501260817102804	3		NCC1=CC=C(OC(=O)C)C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=CC=C1		OC(C)=CC(C)(CC)C=C1=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
386	130424051502260917022803	3		NCC1=CC=C(OC(=O)C)C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=CC=C1		OC(C)=CC(C)(CC)C=C1=O		NCCCN1C=CN=C1		ClC1=CC(C(O)=O)=CC=C1
387	130424051502260717012806	3		NCC1=CC=C(OC(=O)C)C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C)=CSC(C)(C)N1=O		N(C@H)(C)C1=CC=CC=C1		OC(C)=CSC(C)(C)N1=O
388	130424051503260217032803	3		NCC1=CC=C(OC(=O)C)C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C		OC(C)=CC(C)(C)N1=O		NCCCN1C=CN=C1		OC(C@H)(C)C=O [S]
389	130424051503261017102803	3		NCC1=CC=C(OC(=O)C)C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [S]		OC(C@H)(C)C=O [S]
390	130424051509260117092803	3		NCC1=CC=C(OC(=O)C)C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(C(C)F)F=C1		ClC(C)=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		OC(C@H)(C)C=O [S]
391	130424051509260317022809	3		NCC1=CC=C(OC(=O)C)C		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=C(C(C)F)F=C1		ClC(C)=C(C@H)(C)C(O)=O		NCC1C1CCCC1		ClC1=CC(C(O)=O)=CC=C1
392	130424061502260317102804	3		NCC1=CC=CO1		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC=CS1		OC(C)=CC(C)(C)N1=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
393	130424071501260517012803	3		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)(C)C(O)=O		NCC(C)C(O)		OC(C)=CC(C)(CC)C=C1=O		NCCCN1C=CN=C1		OC(C)=CSC(C)(C)N1=O
394	130424071501260517032809	3		NCC1=CC=C(C)C=C1		ClC(C)=C(C@H)(C)C(O)=O		NCC(C)C(O)		OC(C)=CC(C)(CC)C=C1=O		NCC1C1CCCC1		OC(C@H)(C)C=O [S]
395	130424081503260417092804	3		N1CCNCCC1		ClC(C)=C(C@H)(C)C(O)=O		NCCN(C)=O		OC(C)=CC(C)(CC)C=C1=O		N(C@H)(C)C1=CC=CC=C1 [R]		CC(O)=O
396	130424081503260917032808	3		N1CCNCCC1		ClC(C)=C(C@H)(C)C(O)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C)=CSC(C)(C)N1=O		BrC1=CC=C(N)C=C1		OC(C@H)(C)C=O [S]
397	130424081504260417032801	3		N1CCNCCC1		ClC(C)=C(C@H)(C)C(O)=O		NCCN(C)=O		OC(C)=CC(C)(CC)C=C1=O		NCCCN1C=CN=C2=C2O1		OC(C@H)(C)C=O [S]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
398	130424081510260417022805	3		N1CCNCC1		ClC(C)C=C(C)C(=O)O		CC(C)CN		ClC(C)C=C(C)C(=O)O		NCC1CC(C)C=CC=C2O1		ClC(C)C=C(C)C(=O)O
399	130424091501260417102804	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		CC(C)=CC(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(C)C1=C(C)OC=C1
400	130424091501260917102803	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCC1=C(F)C=C(C)C(F)F=C1		CC(C)=CSC(C)N=O		N[C@@H](C)C1=CC=CC=C1[S]		OC(C)C(=O)C1=O[S]
401	130424091502260217032803	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(S(=O)(=O)C)C=C1		CC(C)=COC(C)N=O		NCCCN1C=CN=C1		OC(C)C(=O)C1=O[S]
402	130424091502260317022803	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C1		CC(C)=COC(C)N=O		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O
403	130424091502260517092804	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCC(C)C(C)O		CC(C)=CC(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)O
404	130424091502260817032802	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1		CC(C)=CSC(C)N=O		NCCO		OC(C)C(=O)C1=O[S]
405	130424091504260417032804	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		CC(C)=CC(C)C(=O)O		NCC1=CC=CC1		OC(C)C(=O)C1=O[S]
406	130424091504260517032802	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCC(C)C(O)O		CC(C)=CC(C)C(=O)O		NCCO		OC(C)C(=O)C1=O[S]
407	130424091502260317032805	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C(=O)O		NCC1CC(C)C=CC=C2O1		OC(C)C(=O)C1=O[S]
408	130424091502260417022810	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C(=O)O		NCCCN1C=CC(C)OC=C1		ClC(C)C=C(C)C(=O)O
409	130424091502260317032802	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		CC(C)CN		ClC(C)C=C(C)C(=O)O		NCCO		OC(C)C(=O)C1=O[S]
410	130424091502260417032802	3		NCCCN1C=CN=C1		ClC(C)C=C(C)C(=O)O		CC(C)CN		ClC(C)C=C(C)C(=O)O		NCCO		OC(C)C(=O)C1=O[S]
411	130424101501260817032804	3		C1CNCCN1		ClC(C)C=C(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1		CC(C)=CSC(C)N=O		NCC1=CC=CC1		OC(C)C(=O)C1=O[S]
412	130424101501261017032809	3		C1CNCCN1		ClC(C)C=C(C)C(=O)O		NCC1=CC(C)C=C1		ClC(C)C=C(C)C(=O)O		NCC1CCOCC1		OC(C)C(=O)C1=O[S]
413	130424101502260217042809	3		C1CNCCN1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(S(=O)(=O)C)C=C1		CC(C)=COC(C)N=O		NCC1CCOCC1		OC(C)C(=O)C1=O[R]
414	130424101502260417012806	3		C1CNCCN1		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		CC(C)=CC(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1		OC(C)=CSC(C)N=O
415	130424101503260917012803	3		C1CNCCN1		ClC(C)C=C(C)C(=O)O		NCC1=CC=CC1		CC(C)=CC(C)C(=O)O		NCCCN1C=CN=C1		OC(C)=CSC(C)N=O
416	130424101504260917022808	3		C1CNCCN1		ClC(C)C=C(C)C(=O)O		NCC1=CC=CC1		CC(C)=CC(C)C(=O)O		BrC1=CC=C(C)C=C1		ClC(C)C=C(C)C(=O)O
417	130424101504260917032805	3		C1CNCCN1		ClC(C)C=C(C)C(=O)O		NCC1=CC=CC1		CC(C)=CC(C)C(=O)O		NCC1CC(C)C=CC=C2O1		OC(C)C(=O)C1=O[S]
418	130424101504260817032802	3		C1CNCCN1		ClC(C)C=C(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1		CC(C)=CSC(C)N=O		NCCO		OC(C)C(=O)C1=O[S]
419	130924021502260717032802	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(N)C=C1		CC(C)=CSC(C)N=O		NCCO		OC(C)C(=O)C1=O[S]
420	130924021502260717102804	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(N)C=C1		CC(C)=CSC(C)N=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(C)C1=C(C)OC=C1
421	130924021502261017042804	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCC1=CC(C)C=C1		ClC(C)C=C(C)C(=O)O		NCC1=CC=CC1		OC(C)C(=O)C1=O[R]
422	130924021503260417032803	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		CC(C)=CC(C)C(=O)O		NCCCN1C=CN=C1		OC(C)C(=O)C1=O[S]
423	130924021504260717092804	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(N)C=C1		CC(C)=CSC(C)N=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)O
424	130924021504260817102804	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1		CC(C)=CSC(C)N=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(C)C1=C(C)OC=C1
425	130924021506260417092804	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)O
426	130924031501260717022802	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(N)C=C1		CC(C)=CSC(C)N=O		NCCO		ClC(C)C=C(C)C(=O)O
427	130924031501260717022804	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C(N)C=C1		CC(C)=CSC(C)N=O		NCC1=CC=CC1		ClC(C)C=C(C)C(=O)O
428	130924031501260817042803	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1		CC(C)=CSC(C)N=O		NCCCN1C=CN=C1		OC(C)C(=O)C1=O[R]
429	130924031503260817102804	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		N[C@@H](C)C1=CC=CC=C1		CC(C)=CSC(C)N=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(C)C1=C(C)OC=C1
430	130924031504260317102804	3		NCC1CCOCC1		ClC(C)C=C(C)C(=O)O		NCC1=CC=C1		CC(C)=COC(C)N=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(C)C1=C(C)OC=C1

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
431	130924031504260517032802	3		NCCC1COCCOCC1		OC(C1=CSC(C(C)C)=N1)=O		NCC(C)C(O)		OC(C1=CC=C(C(C)C)=C1)=O		NCCO		OC(C@H)(C)C(O)=O [S]
432	130924031504260517022803	3		NCCC1COCCOCC1		OC(C1=CSC(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(C)C)=N1)=O		NCCCN1C=CN=C1		ClCC1=CC(C)C(O)=O=CC=C
433	130924031510260317102802	3		NCCC1COCCOCC1		OC(C1=CSC(C(C)C)=N1)=O		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [S]		ClCC1=CC(C)C(O)=O=CC=C
434	130924041503260317032803	3		NCCC1COCCOCC1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=C(S1)		OC(C1=COO(C(C)C)=N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
435	130924041510260117092804	3		NCCC1COCCOCC1		ClC(C)C=C(C@H)(C)C(O)=O		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CCC(O)=O
436	131024011504260717042803	3		NCC1=CC(F)=C(F)C=C1		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [R]
437	131024011510260317102804	3		NCC1=CC(F)=C(F)C=C1		OC(C1=COC(C(C)C)=N1)=O		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
438	131024021501260317102804	3		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C)C(O)=O=CC=C1		NCC1=CC=C(S1)		OC(C1=COO(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
439	131024021503260417032803	3		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C)C(O)=O=CC=C1		NCCN(C)C=O		ClC(C)C=C(C)C(O)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
440	131024031501260817032802	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C(C)C)=O		NCCO		OC(C@H)(C)C(O)=O [S]
441	131024031503260717032802	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCCO		OC(C@H)(C)C(O)=O [S]
442	131024031503260817012803	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(C)C)=N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(C)C)=N1)=O
443	131024031504260917022804	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCC1=CC(F)=CC(C)C(F)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCC1=CC=CC1		ClCC1=CC(C)C(O)=O=CC=C
444	131024031509260117012803	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCC1=CC=C(C)C(F)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(C)C)=N1)=O
445	131024031509260317032802	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCC1=CC=C(C)C(F)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCCO		OC(C@H)(C)C(O)=O [S]
446	131024031510260417102803	3		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(C)C)=N1)=O		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1 [S]		OC(C@H)(C)C(O)=O [S]
447	131024041503260417092804	3		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCCN(C)C=O		OC(C1=CC=C(C)C(C)C)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CCC(O)=O
448	131024041504260717032803	3		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(C)C)=N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
449	130124011503260517102804	2		NCC1=CC=C(C)C(Br)=C1		OC(C1=COC(C(C)C)=N1)=O		NCC(C)C(O)		OC(C1=CC=C(C)C(C)C)=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1
450	130124011509260317032809	2		NCC1=CC=C(C)C(Br)=C1		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(C)C(F)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCCC1COCCOCC1		OC(C@H)(C)C(O)=O [S]
451	130124021502260817022804	2		NCC1=CC=CN=C1		OC(C1=COC(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(C)C)=N1)=O		NCC1=CC=CC1		ClCC1=CC(C)C(O)=O=CC=C
452	130124021503260217092804	2		NCC1=CC=CN=C1		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C(O)C=C1		OC(C1=COO(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1 [R]		CCC(O)=O
453	130124021503261017032801	2		NCC1=CC=CN=C1		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
454	130124031501260417042809	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C(C)C)=O		NCCC1COCCOCC1		OC(C@H)(C)C(O)=O [R]
455	130124031501260717032801	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C(C)C)=N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
456	130124031501260817022805	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(C)C)=N1)=O		NCC1=CC=C(C)C(C)C=C2O1		ClCC1=CC(C)C(O)=O=CC=C
457	130124031501260817032802	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(C)C)=N1)=O		NCCO		OC(C@H)(C)C(O)=O [S]
458	130124031501260817032803	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(C)C)=N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
459	130124031501261017042803	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [R]
460	130124031502260217032802	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C(O)C=C1		OC(C1=COO(C(C)C)=N1)=O		NCCO		OC(C@H)(C)C(O)=O [S]
461	130124031502261017012805	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=C(C)C(C)C=C2O1		OC(C1=CSC(C(C)C)=N1)=O
462	130124031503260217032802	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C(O)C=C1		OC(C1=COO(C(C)C)=N1)=O		NCCO		OC(C@H)(C)C(O)=O [S]
463	130124031503260217102804	2		NCCCCO		OC(C1=COC(C(C)C)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C(O)C=C1		OC(C1=COO(C(C)C)=N1)=O		N(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)C(O)C=C1

observation	full_mol.code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
464	130124031503260417022803	2		NCCOC		OC(C1=CC(C)C)=N1=O		NCCN(C)=O		OC(C1=CC(C)C)=N1=O		NCCCN1C=C1		ClCC1=CC(C1O)=CC=O
465	130124031503260917012803	2		NCCOC		OC(C1=CC(C)C)=N1=O		NOC1=CC=CC=C1		OC(C1=CC(C)C)=N1=O		NCCCN1C=C1		OC(C1=CC(C)C)=N1=O
466	130124031503260717032802	2		NCCOC		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(N(C)C)C=C1		OC(C1=CC(C)C)=N1=O		NCCO		OC([C@H](C)Cl)=O [S]
467	130124031503260717042803	2		NCCOC		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(N(C)C)C=C1		OC(C1=CC(C)C)=N1=O		NCCCN1C=C1		OC([C@H](C)Br)=O [R]
468	130124031504260417022810	2		NCCOC		OC(C1=CC(C)C)=N1=O		NCCN(C)=O		OC(C1=CC(C)C)=N1=O		NCCCN1=CC=C(C)C(C)C=C1		ClCC1=CC(C1O)=CC=O
469	130124031504260817102803	2		NCCOC		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1 [S]		OC([C@H](C)Cl)=O [S]
470	130124031506260217032808	2		NCCOC		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(C(F)F)C=C1		ClC(C)=C(C)C([C@H](C)C)C=O		BC1=C(C)C(N)C=C1		OC([C@H](C)Cl)=O [S]
471	130124031506260417012804	2		NCCOC		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(C(F)F)C=C1		ClC(C)=C(C)C([C@H](C)C)C=O		NOC1=CC=C1		OC(C1=CC(C)C)=N1=O
472	130124031506260417022805	2		NCCOC		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(C(F)F)C=C1		ClC(C)=C(C)C([C@H](C)C)C=O		NOC1COC(C=CC=C2)C2O1		ClCC1=CC(C1O)=CC=O
473	130124041501260517022804	2		NCC=C		OC(C1=CC(C)C)=N1=O		NCC(C)C=O		OC(C1=CC(C)C)=N1=O		NOC1=CC=C1		ClCC1=CC(C1O)=CC=O
474	130124041501260917032805	2		NCC=C		OC(C1=CC(C)C)=N1=O		NOC1=CC=CC=C1		OC(C1=CC(C)C)=N1=O		NOC1COC(C=CC=C2)C2O1		OC([C@H](C)Cl)=O [S]
475	130124041501260917032807	2		NCC=C		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC(C)C(C)C=C1		OC([C@H](C)Cl)=O [S]
476	130124041501260917022809	2		NCC=C		OC(C1=CC(C)C)=N1=O		NOC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CC(C)C)=N1=O		NOC1COCOC1		ClCC1=CC(C1O)=CC=O
477	130124041502260417042805	2		NCC=C		OC(C1=CC(C)C)=N1=O		NCCN(C)=O		OC(C1=CC(C)C)=N1=O		NOC1COC(C=CC=C2)C2O1		OC([C@H](C)Br)=O [R]
478	130124041502260517022803	2		NCC=C		OC(C1=CC(C)C)=N1=O		NCC(C)C=O		OC(C1=CC(C)C)=N1=O		NCCCN1C=C1		ClCC1=CC(C1O)=CC=O
479	130124041502260917032802	2		NCC=C		OC(C1=CC(C)C)=N1=O		NOC1=CC=CC=C1		OC(C1=CC(C)C)=N1=O		NCCO		OC([C@H](C)Cl)=O [S]
480	130124041502260917032802	2		NCC=C		OC(C1=CC(C)C)=N1=O		NOC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CC(C)C)=N1=O		NCCO		OC([C@H](C)Cl)=O [S]
481	130124041503260317032802	2		NCC=C		OC(C1=CC(C)C)=N1=O		NOC1=CC=CS1		OC(C1=CC(C)C)=N1=O		NCCO		OC([C@H](C)Cl)=O [S]
482	130124041503260917032801	2		NCC=C		OC(C1=CC(C)C)=N1=O		NOC1=CC=CC=C1		OC(C1=CC(C)C)=N1=O		NCCCN1=CNC2=CC=CC=C2		OC([C@H](C)Cl)=O [S]
484	130124041503260717032806	2		NCC=C		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(N(C)C)C=C1		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC([C@H](C)Cl)=O [S]
485	130124041503260817092804	2		NCC=C		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1 [R]		CC(C)O
486	130124041503260917032802	2		NCC=C		OC(C1=CC(C)C)=N1=O		NOC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CC(C)C)=N1=O		NCCO		OC([C@H](C)Cl)=O [S]
487	130124041504260417022805	2		NCC=C		OC(C1=CC(C)C)=N1=O		NCCN(C)=O		OC(C1=CC(C)C)=N1=O		NOC1COC(C=CC=C2)C2O1		ClCC1=CC(C1O)=CC=O
488	130124051501260717032802	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(N(C)C)C=C1		OC(C1=CC(C)C)=N1=O		NCCO		OC([C@H](C)Cl)=O [S]
489	130124051501260917032810	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CC(C)C)=N1=O		NCCCN1=CC=C(C)C(C)C=C1		OC([C@H](C)Cl)=O [S]
490	130124051501261017032809	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(C)C=C1		ClC(C)=C(C)C([C@H](C)C)C=O		NOC1COCOC1		OC([C@H](C)Cl)=O [S]
491	130124051502260217102802	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1 [S]		ClCC1=CC(C1O)=CC=O
492	130124051502260317032806	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC=CS1		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC([C@H](C)Cl)=O [S]
493	130124051502260317042804	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC=CS1		OC(C1=CC(C)C)=N1=O		NOC1=CC=C1		OC([C@H](C)Br)=O [R]
494	130124051502260517032802	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NCC(C)C=O		OC(C1=CC(C)C)=N1=O		NCCO		OC([C@H](C)Cl)=O [S]
495	130124051502260917032802	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC=CC=C1		OC(C1=CC(C)C)=N1=O		NCCO		OC([C@H](C)Cl)=O [S]
496	130124051502260717102802	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(N(C)C)C=C1		OC(C1=CC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1 [S]		ClCC1=CC(C1O)=CC=O
497	130124051502261017092804	2		NCC1=CC=C(C)C(C)C=C1		OC(C1=CC(C)C)=N1=O		NOC1=CC=C(C)C=C1		ClC(C)=C(C)C([C@H](C)C)C=O		N[C@@H](C)C1=CC=CC=C1 [R]		CC(C)O

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
498	130124051503260317102804	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1[S]		OC(C)C1=C(C)C(=O)C=C1
499	130124051503260417022809	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N)=O)=O		NCC1COCC1		ClCC1=CC(C(=O)O)=O=CC=
500	130124051504260417042809	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N)=O)=O		NCC1COCC1		OC([C@@H](C)Br)=O [R]
501	130124051504260817032802	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCO		OC([C@@H](C)O)=O [S]
502	130124051504260917022803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=O=CC=
503	130124051506260117042801	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		NCCCN1C=CN2=CC=CC=C21		OC([C@@H](C)Br)=O [R]
504	130124051506260217022808	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		BC1=C(C)C(C)N=C1		ClCC1=CC(C(=O)O)=O=CC=
505	130124051506260317032802	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		NCCO		OC([C@@H](C)O)=O [S]
506	130124051506260317012801	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		NCCCN1C=CN2=CC=CC=C21		OC(C1=C(C(=O)N)=O)=O
507	130124051506260417012804	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		NCC1=CC=CC1		OC(C1=C(C(=O)N)=O)=O
508	130124051510260117012803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		CC(C)CCN		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		OC(C1=C(C(=O)N)=O)=O
509	130124051510260117102804	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		CC(C)CCN		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)C(=O)C=C1
511	130124061502260317022803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C(=O)N)=O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=O=CC=
512	130124061502260617022803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=O=CC=
513	130124061502260717102803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1[S]		OC([C@@H](C)O)=O [S]
514	130124061504260417092804	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
515	130124061506260317022803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=O=CC=
516	130124071501260217032805	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1COCC(C)C=CC2=C21		OC([C@@H](C)O)=O [S]
517	130124071501260317012810	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C(=O)N)=O)=O		NCCCN1C=CC(C)C(=O)C=C1		OC(C1=C(C(=O)N)=O)=O
518	130124071501260317092803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1[R]		OC([C@@H](C)O)=O [S]
519	130124071501260417032802	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N)=O)=O		NCCO		OC([C@@H](C)O)=O [S]
520	130124071501260517102802	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1[S]		ClCC1=CC(C(=O)O)=O=CC=
521	130124071501260717022807	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC(C)C(=O)C(=O)C=C1		ClCC1=CC(C(=O)O)=O=CC=
522	130124071501260717042804	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=CC1		OC([C@@H](C)Br)=O [R]
523	130124071501260817022803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=O=CC=
524	130124071501260817032802	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCO		OC([C@@H](C)O)=O [S]
525	130124071501261017012801	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		NCCCN1C=CN2=CC=CC=C21		OC(C1=C(C(=O)N)=O)=O
526	130124071501261017092804	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C([C@@H](C)C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
527	130124071502260317032801	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C(=O)N)=O)=O		NCCCN1C=CN=C1		OC([C@@H](C)O)=O [S]
528	130124071502260417022805	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)N)=O)=O		NCC1COCC(C)C=CC2=C21		ClCC1=CC(C(=O)O)=O=CC=
529	130124071502260517042803	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)N)=O)=O		NCCCN1C=CN=C1		OC([C@@H](C)Br)=O [R]
530	130124071502260617032806	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1		OC([C@@H](C)O)=O [S]
531	130124071502260817022802	2		NCC1=CC=C(O)C=C1		OC(C1=CC=C(C(=O)N)=O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O)=O		NCCO		ClCC1=CC(C(=O)O)=O=CC=

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
532	130124071502261017032805	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C=C1		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
533	130124071503260317022808	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		BrC1=CC=C(C)C=C1		ClC1=CC(C)C=O)=CC=C1
534	130124071503260517032802	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCCO		OC(C@H)(C)C=O [S]
535	130124071503260817062804	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1 [R]		CC(C)=O
536	130124071503260817032802	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCCO		OC(C@H)(C)C=O [S]
537	130124071503260817032804	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
538	130124071503260917012805	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O
539	13012407150326091702804	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1 [S]		O=C(O)C1=C(C)C=C(C)C=C1
540	130124071504260317032802	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCCO		OC(C@H)(C)C=O [S]
541	130124071504260817032802	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCCO		OC(C@H)(C)C=O [S]
542	130124071504260817032807	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
543	130124071506260917012803	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C=C1		NCCN(C)=C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O
544	130124071506260917012807	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C=C1		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O
545	130124071506260917032807	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C=C1		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
546	130124071506260917032802	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C=C1		NCCO		OC(C@H)(C)C=O [S]
547	130124071506260917022807	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C=C1		NCC1=CC=C(C)C=C1		ClC1=CC(C)C=O)=CC=C1
548	130124071506260917032802	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C=C1		NCCO		OC(C@H)(C)C=O [S]
549	130124071506260917032809	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C=C1		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
550	130124071510260917032801	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		CC(C)CCN		ClC(C)C=C(C)C=C1		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
551	130124071510260917032809	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		CC(C)CCN		ClC(C)C=C(C)C=C1		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
552	130124071510260917032803	2		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		CC(C)CCN		ClC(C)C=C(C)C=C1		NCCN(C)=C=C1		OC(C@H)(C)C=O [S]
553	130124081501260417042803	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=N1=O		NCCN(C)=C=C1		OC(C@H)(C)C=O [R]
554	130124081501260517022809	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCC(C)C(O)C		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		ClC1=CC(C)C=O)=CC=C1
555	130124081501260617012803	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCCN(C)=C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O
556	130124081502260117012804	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCCOC		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O
557	130124081502260217032802	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=N1=O		NCCO		OC(C@H)(C)C=O [S]
558	13012408150226041702804	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCCN(C)C=O		OC(C1=C(C)C=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1 [S]		O=C(O)C1=C(C)C=C(C)C=C1
559	130124081502260617032806	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
560	130124081502260817022802	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCCO		ClC1=CC(C)C=O)=CC=C1
561	130124081502260917042804	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [R]
562	130124081503260417032805	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCCN(C)C=O		ClC(C)C=C(C)C=C1		NCC1=CC=C(C)C=C1		OC(C@H)(C)C=O [S]
563	13012408150326051702804	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		N(C@H)(C)C1=CC=C(C)C=C1 [S]		O=C(O)C1=C(C)C=C(C)C=C1
564	130124081503260717012803	2		N1CCNCC1		OC(C1=CC=C(C)C=C1)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O		NCCN(C)=C=C1		OC(C1=C(C)C=C(C)C=C1)=N1=O

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
565	130124081503260717022803	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C)C)=N1=O		NCCCN1C=CN=C1		ClCC1=CC(C1O)=O+CC=O
566	130124081503260717022805	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C)C)=N1=O		NCC1COO(C=C=CC=C2)C2O1		OC([C@H](C)C)=O [S]
567	130124081503260817022809	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)=N1=O		NCC1COCCC1		ClCC1=CC(C1O)=O+CC=O
568	130124081504260117032801	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCOC		OC(C1=CO(C)C2)=N1=O		NCCCN1C=CN=C1		OC([C@H](C)C)=O [S]
569	130124081504260217032802	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CSC(C)C)=N1=O		NCOO		OC([C@H](C)C)=O [S]
570	130124081504260217092804	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CSC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(O)=O
571	130124081504260417012807	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCOC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCC1=C(C)C=CC(OC)C=C1		OC(C1=CSC(C)C)=N1+O
572	130124081504260417032801	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCOC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		OC([C@H](C)C)=O [S]
573	130124081504260517032802	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCOC(C)O		OC(C1=CC=C(C)C)C=C1=O		NCOO		OC([C@H](C)C)=O [S]
574	130124081504260517092804	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCOC(C)O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(O)=O
575	130124081504260917032806	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC([C@H](C)C)=O [S]
576	130124081506260217102803	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)=C(C)C@H(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		OC([C@H](C)C)=O [S]
577	130124081506260317012808	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)=C(C)C@H(C)C(O)=O		BC1=CC=C(C)N(C)C=C1		OC(C1=CSC(C)C)=N1+O
578	130124081510260117012809	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		CC(C)CCN		ClC(C)=C(C)C@H(C)C(O)=O		NCC1COCCC1		OC(C1=CSC(C)C)=N1+O
579	130124081510260317032808	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		CC(C)CCN		ClC(C)=C(C)C@H(C)C(O)=O		BC1=CC=C(C)N(C)C=C1		OC([C@H](C)C)=O [S]
580	130124081510260317102801	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		CC(C)CCN		ClC(C)=C(C)C@H(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		OC(C1=CSC(C)C)=N1+O
581	130124081510260317102803	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		CC(C)CCN		ClC(C)=C(C)C@H(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S]		OC([C@H](C)C)=O [S]
582	130124081510260417012805	2		N1CCNCCC1		OC(C1=CO(C)C2)=N1=O		CC(C)CCN		ClC(C)=C(C)C@H(C)C(O)=O		NCC1COO(C=C=CC=C2)C2O1		OC(C1=CSC(C)C)=N1+O
583	130124091501260417032807	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCOC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C(C)C(OC)C=C1		OC([C@H](C)C)=O [S]
584	130124091501260817022810	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)=N1=O		NCCCN1C=CC(OC)C=C1		ClCC1=CC(C1O)=O+CC=O
585	130124091501260917092804	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(F)C(C)C(F)F=C1		OC(C1=CSC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(O)=O
586	130124091502260217022809	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CO(C)C2)=N1=O		NCC1COCCC1		ClCC1=CC(C1O)=O+CC=O
587	130124091502260317022806	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(S1)C=C1		OC(C1=CSC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		ClCC1=CC(C1O)=O+CC=O
588	130124091502260317032803	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(S1)C=C1		OC(C1=CO(C)C2)=N1=O		NCCCN1C=CN=C1		OC([C@H](C)C)=O [S]
589	130124091502260417042809	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCOC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCC1COCCC1		OC([C@H](C)C)Br+O [R]
590	130124091502260917032803	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CN=C1		OC([C@H](C)C)=O [S]
591	130124091502260717032810	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C)C)=N1=O		NCCCN1C=CC(OC)C=C1		OC([C@H](C)C)=O [S]
592	130124091502260817042806	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)=N1=O		N[C@@H](C)C1=CC=CC=C1		OC([C@H](C)C)Br+O [R]
593	130124091503260917032802	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C)C=C1=O		NCOO		OC([C@H](C)C)=O [S]
594	130124091504260417032810	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCOC(C)=O		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=CC(OC)C=C1		OC([C@H](C)C)=O [S]
595	130124091504260517032804	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCOC(C)O		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C(C)C=C1		OC([C@H](C)C)=O [S]
596	130124091504260517032808	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCOC(C)O		OC(C1=CC=C(C)C)C=C1=O		BC1=CC=C(C)N(C)C=C1		OC([C@H](C)C)=O [S]
597	130124091506260417012805	2		NCCCN1C=CN=C1		OC(C1=CO(C)C2)=N1=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)=C(C)C@H(C)C(O)=O		NCC1COO(C=C=CC=C2)C2O1		OC(C1=CSC(C)C)=N1+O

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
598	130124091510260117022809	2		NCCCN1C=CN=C1		OC(C1=COO(C2)=N1)=O		CC(C)CCN		ClC(C)=C(C)C@H(C)C(C)O=O		NCC1COCCC1		ClCC1=CC(C1O)=CC=O
599	130124101501260117032801	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCCOC		OC(C1=COO(C2)=N1)=O		NCCCN1C=CN=C21		OC(C@H(C)C)O=O [S]
600	130124101501260217032802	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C=O		OC(C1=COO(C2)=N1)=O		NCCO		OC(C@H(C)C)O=O [S]
601	130124101501260217032804	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C=O		OC(C1=COO(C2)=N1)=O		NCC1=CC=C1		OC(C@H(C)C)O=O [S]
602	130124101501260317102804	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C1		OC(C1=COO(C2)=N1)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
603	130124101501260317032801	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C1		OC(C1=CC=C(C)C)C=O		NCCCN1C=CN=C21		OC(C@H(C)C)O=O [S]
604	130124101501260317042807	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C1		OC(C1=CC=C(C)C)C=O		NCC1=CC=C(C)C=O		OC(C@H(C)C)Br=O [R]
605	130124101501261017032809	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(C)C=O		ClC(C)=C(C)C@H(C)C(C)O=O		NCC1COCCC1		OC(C@H(C)C)O=O [S]
606	130124101502260217022805	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C=O		OC(C1=COO(C2)=N1)=O		NCC1COO(C)C=CC=C21		ClCC1=CC(C1O)=CC=O
607	130124101502260217022803	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(S(=O)(=O)C)C=O		OC(C1=COO(C2)=N1)=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C@H(C)C)O=O [S]
608	130124101502260317022803	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C1		OC(C1=CC=C(C)C)C=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C@H(C)C)O=O [S]
609	130124101502260317032805	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=COO(C2)=N1)=O		NCC1COO(C)C=CC=C21		OC(C@H(C)C)O=O [S]
610	130124101503260417012804	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)C=O		NCC1=CC=C1		OC(C1=CSC(C)C)N1=O
611	130124101503260417042803	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(N(C)C)C=O		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C@H(C)C)Br=O [R]
612	130124101503260917032803	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C@H(C)C)O=O [S]
613	130124101503260917032804	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C)C)N1=O		NCC1=CC=C1		OC(C@H(C)C)O=O [S]
614	130124101504260317012809	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C1		OC(C1=COO(C2)=N1)=O		NCC1COCCC1		OC(C1=CSC(C)C)N1=O
615	130124101504260317032802	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC(C)C=O		OC(C1=CC=C(C)C)C=O		NCCO		OC(C@H(C)C)O=O [S]
616	130124101504260317032802	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C1		OC(C1=CC=C(C)C)C=O		NCCO		OC(C@H(C)C)O=O [S]
617	130124101504260917032803	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C@H(C)C)O=O [S]
618	130124101504261017032805	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(C)C=O		ClC(C)=C(C)C@H(C)C(C)O=O		NCC1COO(C)C=CC=C21		OC(C@H(C)C)O=O [S]
619	130124101506260317012804	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(C)C=O		ClC(C)=C(C)C@H(C)C(C)O=O		NCC1=CC=C1		OC(C1=CSC(C)C)N1=O
620	130124101506260417012809	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(C)C=O		ClC(C)=C(C)C@H(C)C(C)O=O		NCC1COCCC1		OC(C1=CSC(C)C)N1=O
621	130124101506260317032809	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		NCC1=CC=C(C)C=O		ClC(C)=C(C)C@H(H)C(C)O=O		NCC1COCCC1		OC(C@H(C)C)O=O [S]
622	130124101510260317012809	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		CC(C)CCN		ClC(C)=C(C)C@H(H)C(C)O=O		NCC1COCCC1		OC(C1=CSC(C)C)N1=O
623	130124101510260317022802	2		C1CNCCN1		OC(C1=COO(C2)=N1)=O		CC(C)CCN		ClC(C)=C(C)C@H(H)C(C)O=O		N[C@@H](C)C1=CC=CC=C1 [R]		ClCC1=CC(C1O)=CC=O
624	130224011502260717032810	2		NCC1=CC=C(C)C=O		ClCC1=CC(C1O)=CC=C1		NCC1=CC=C1		OC(C1=CC=C(C)C)C=O		NCCCN1C=CN=C1		OC(C@H(C)C)O=O [S]
625	130224011502260717032803	2		NCC1=CC=C(C)C=O		ClCC1=CC(C1O)=CC=C1		NCC1=CC=C(N(C)C)C=O		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C@H(C)C)O=O [S]
626	130224011504260817022803	2		NCC1=CC=C(C)C=O		ClCC1=CC(C1O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		ClCC1=CC(C1O)=CC=O
627	130224021501260417022803	2		NCC1=CC=C1		ClCC1=CC(C1O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C)C=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C@H(C)C)O=O [S]
628	130224021501260717012803	2		NCC1=CC=C1		ClCC1=CC(C1O)=CC=C1		NCC1=CC=C(N(C)C)C=O		OC(C1=CSC(C)C)N1=O		NCCCN1C=CN=C1		OC(C1=CSC(C)C)N1=O
629	130224021502260417102804	2		NCC1=CC=C1		ClCC1=CC(C1O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C)C=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
630	130224021502260517022804	2		NCC1=CC=C1		ClCC1=CC(C1O)=CC=C1		NCC(C)C=O		OC(C1=CC=C(C)C)C=O		N[C@@H](C)C1=CC=CC=C1 [R]		CC(C)O=O

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
631	130224021503260217032802	2		NCC1=CC=C(N)C=C1		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(=O)C(Cl)=O		NCCO		OC(Cl)C(Cl)=O [S]
632	130224021510260117102804	2		NCC1=CC=C(N)C=C1		ClC(=O)C(Cl)=O=C=C1		CC(C)CCN		ClC(=O)C(Cl)=O		N(C)C@H(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(Cl)OC=C1
633	130224031501260317022803	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(S1)C=C1		OC(=O)C(Cl)=O		NCCCN1C=CN=C1		ClC(=O)C(Cl)=O=C=C1
634	130224031501260317032804	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(S1)C=C1		OC(=O)C(Cl)=O		NCC1=CC=C(O1)C=C1		OC(Cl)C(Cl)=O [S]
635	130224031501260417032802	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCCN(C)C=O		OC(=O)C(Cl)=O		NCCO		OC(Cl)C(Cl)=O [S]
636	130224031501260817012805	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C=C1)C=C1		OC(=O)C(Cl)=O		NCC1COC(C)C=CC2=C2O1		OC(=O)C(Cl)=O
637	130224031501260717032802	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(N(C)C)C=C1		OC(=O)C(Cl)=O		NCCO		OC(Cl)C(Cl)=O [S]
638	130224031501261017022810	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C)C=C1		ClC(=O)C(Cl)=O		NCC1=CC=C(C)C=C1		ClC(=O)C(Cl)=O=C=C1
639	130224031502260717032802	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(N(C)C)C=C1		OC(=O)C(Cl)=O		NCCO		OC(Cl)C(Cl)=O [S]
640	130224031503260717032801	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(N(C)C)C=C1		OC(=O)C(Cl)=O		NCC1=CNC2=CC=CC=C2		OC(Cl)C(Cl)=O [S]
641	130224031503260817042803	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		N(C)C@H(C)C1=CC=CC=C1		OC(=O)C(Cl)=O		NCCCN1C=CN=C1		OC(Cl)C(Cl)=O [R]
642	130224031504260317032802	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(S1)C=C1		OC(=O)C(Cl)=O		NCCO		OC(Cl)C(Cl)=O [S]
643	130224031504260417022810	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCCN(C)C=O		OC(=O)C(Cl)=O		NCC1=CC=C(C)C=C1		ClC(=O)C(Cl)=O=C=C1
644	130224031506260217102801	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C(F)F)C=C1		ClC(=O)C(Cl)=O		N(C)C@H(C)C1=CC=CC=C1 [S]		OC(=O)C(Cl)=O
645	130224031506260317032805	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C(F)F)C=C1		ClC(=O)C(Cl)=O		NCC1COC(C)C=CC2=C2O1		OC(Cl)C(Cl)=O [S]
646	130224031506260417092803	2		NCCOCC		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C(F)F)C=C1		ClC(=O)C(Cl)=O		N(C)C@H(C)C1=CC=CC=C1 [R]		OC(Cl)C(Cl)=O [S]
647	130224041501260417012809	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCCN(C)C=O		OC(=O)C(Cl)=O		NCC1COCOC1		OC(=O)C(Cl)=O
648	130224041502260217032802	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(=O)C(Cl)=O		NCCO		OC(Cl)C(Cl)=O [S]
649	130224041502260317032804	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(S1)C=C1		OC(=O)C(Cl)=O		NCC1=CC=C(O1)C=C1		OC(Cl)C(Cl)=O [S]
650	130224041502260417022803	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCCN(C)C=O		OC(=O)C(Cl)=O		NCCCN1C=CN=C1		ClC(=O)C(Cl)=O=C=C1
651	130224041502260817012809	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C=C1)C=C1		OC(=O)C(Cl)=O		NCC1COCOC1		OC(=O)C(Cl)=O
652	130224041502260717032805	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(N(C)C)C=C1		OC(=O)C(Cl)=O		NCC1COC(C)C=CC2=C2O1		OC(Cl)C(Cl)=O [S]
653	130224041503260217102803	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(=O)C(Cl)=O		N(C)C@H(C)C1=CC=CC=C1 [S]		OC(Cl)C(Cl)=O [S]
654	130224041503260317102804	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(S1)C=C1		OC(=O)C(Cl)=O		N(C)C@H(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(Cl)OC=C1
655	130224041503261017032803	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C)C=C1		ClC(=O)C(Cl)=O		NCCCN1C=CN=C1		OC(Cl)C(Cl)=O [S]
656	130224041504260517032802	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC(C)C(O)C		OC(=O)C(Cl)=O		NCCO		OC(Cl)C(Cl)=O [S]
657	130224041506260317022807	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C(F)F)C=C1		ClC(=O)C(Cl)=O		NCC1=CC=C(C)C=C1		ClC(=O)C(Cl)=O=C=C1
658	130224041506260417022803	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		NCC1=CC=C(C(F)F)C=C1		ClC(=O)C(Cl)=O		NCCCN1C=CN=C1		ClC(=O)C(Cl)=O=C=C1
659	130224041510260217092803	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		CC(C)CCN		ClC(=O)C(Cl)=O		N(C)C@H(C)C1=CC=CC=C1 [R]		OC(Cl)C(Cl)=O [S]
660	130224041510260317022809	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		CC(C)CCN		ClC(=O)C(Cl)=O		NCC1COCOC1		ClC(=O)C(Cl)=O=C=C1
661	130224041510260417032804	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		CC(C)CCN		ClC(=O)C(Cl)=O		NCC1=CC=C(O1)C=C1		OC(Cl)C(Cl)=O [S]
662	130224041510260417032810	2		NCC=C		ClC(=O)C(Cl)=O=C=C1		CC(C)CCN		ClC(=O)C(Cl)=O		NCC1=CC=C(C)C=C1		OC(Cl)C(Cl)=O [S]
663	130224051501260817022803	2		NCC1=CC=C(C)C=C1		ClC(=O)C(Cl)=O=C=C1		N(C)C@H(C)C1=CC=CC=C1		OC(=O)C(Cl)=O		NCCCN1C=CN=C1		ClC(=O)C(Cl)=O=C=C1

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
664	130224051501260817022804	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCC1=CC=C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1
665	130224051502260317032802	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S1)C=C1		OC(C1=CC(C(=O)O)=N1)=O		NCCO		OC([C@@H](C)Cl)=O [S]
666	130224051502260317032809	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S1)C=C1		OC(C1=CC(C(=O)O)=N1)=O		NCC1COCCO1		OC([C@@H](C)Cl)=O [S]
667	130224051502260417042808	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCCN(C)C=O		OC(C1=CC(C(=O)O)=N1)=O		BrC1=CC=C(C)C=C1		OC([C@@H](C)Br)=O [R]
668	130224051502260517092804	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC(C)C(O)C		OC(C1=CC(C(=O)O)=N1)=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
669	130224051502260817012803	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCCCN1C=C1		OC(C1=CSC(C(=O)O)=N1)=O
670	130224051503260317012803	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S1)C=C1		OC(C1=CC(C(=O)O)=N1)=O		NCCCN1C=C1		OC(C1=CSC(C(=O)O)=N1)=O
671	130224051503260317022808	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S1)C=C1		OC(C1=CC(C(=O)O)=N1)=O		BrC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1
672	13022405150326031702804	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S1)C=C1		OC(C1=CC(C(=O)O)=N1)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(Cl)OC=C1
673	130224051503260317062803	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC(C)C(O)C		OC(C1=CC(C(=O)O)=N1)=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC([C@@H](C)Cl)=O [S]
674	130224051503260717032802	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCCO		OC([C@@H](C)Cl)=O [S]
675	130224051503260817022801	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCCO1=NC2=CC=CC=C2		ClCC1=CC(C(=O)O)=CC=C1
676	130224051503261017092804	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
677	130224051504260817102804	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC(C(=O)O)=N1)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(Cl)OC=C1
678	130224051504260717032805	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCC1COO(C=CC=C)C2O1		OC([C@@H](C)Cl)=O [S]
679	130224051504260917032803	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCCCN1C=C1		OC([C@@H](C)Cl)=O [S]
680	130224051504260917042803	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCCCN1C=C1		OC([C@@H](C)Br)=O [R]
681	130224051504261017032810	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		NCCO1=CC=C(O)C(O)C=C1		OC([C@@H](C)Cl)=O [S]
682	130224051506260217012803	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		NCCCN1C=C1		OC(C1=CSC(C(=O)O)=N1)=O
683	130224051506260217032802	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(C(F)F)C=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		NCCO		OC([C@@H](C)Cl)=O [S]
684	130224051510260317032808	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		CC(C)CCN		ClC(C)=C(C)[C@@H](C)C(O)=O		BrC1=CC=C(C)C=C1		OC([C@@H](C)Cl)=O [S]
685	130224051510260417022809	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		CC(C)CCN		ClC(C)=C(C)[C@@H](C)C(O)=O		NCC1COCCO1		ClCC1=CC(C(=O)O)=CC=C1
686	130224051510260417032805	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		CC(C)CCN		ClC(C)=C(C)[C@@H](C)C(O)=O		NCC1COO(C=CC=C)C2O1		OC([C@@H](C)Cl)=O [S]
687	130224061504260517102804	2		NCC1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC(C)C(O)C		OC(C1=CC(C(=O)O)=N1)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(Cl)OC=C1
688	130224071501260317022810	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S1)C=C1		OC(C1=CC(C(=O)O)=N1)=O		NCCO1=CC=C(O)C(O)C=C1		ClCC1=CC(C(=O)O)=CC=C1
689	130224071501260317032802	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S1)C=C1		OC(C1=CC(C(=O)O)=N1)=O		NCCO		OC([C@@H](C)Cl)=O [S]
690	130224071501260917022809	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCC1COCCO1		ClCC1=CC(C(=O)O)=CC=C1
691	130224071501261017022809	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		NCC1COCCO1		ClCC1=CC(C(=O)O)=CC=C1
692	130224071502260217032802	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C(=O)O)=N1)=O		NCCO		OC([C@@H](C)Cl)=O [S]
693	130224071502260217032803	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C(=O)O)=N1)=O		NCCCN1C=C1		OC([C@@H](C)Cl)=O [S]
694	130224071502260417032803	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCCN(C)C=O		OC(C1=CC(C(=O)O)=N1)=O		NCCCN1C=C1		OC([C@@H](C)Cl)=O [S]
695	130224071502260717012808	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)O)=N1)=O		BrC1=CC=C(C)C=C1		OC(C1=CSC(C(=O)O)=N1)=O
696	130224071502260817022803	2		NCC1=CC=C(C)C=C1		ClCC1=CC(C(=O)O)=CC=C1		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)O)=N1)=O		NCCCN1C=C1		ClCC1=CC(C(=O)O)=CC=C1

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3 Acids
697	130224071503260417102804	2		NCC1=CC=C(C)C=C1		ClC(=O)C(C(=O)O)=CC=C1		NCCNC(C)=O		OC(=O)C=C(C)C(C)C=C1=O		[N]C@H(C)C1=CC=C(C)C=C1 [S]		O=C(O)C1=CC(C)OC=C1
698	130224071503260817022803	2		NCC1=CC=C(C)C=C1		ClC(=O)C(C(=O)O)=CC=C1		[N]C@H(C)C1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1
699	130224071503260817022803	2		NCC1=CC=C(C)C=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC(F)=CC(C(F)F)F=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1
700	130224071503261017032801	2		NCC1=CC=C(C)C=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(=O)C=C(C)C(C)C=C1=O		NCC1=CC(C)C=C(C)C=C21		OC(=O)C1=CC(C)C=C1 [S]
701	130224071504260817012806	2		NCC1=CC=C(C)C=C1		ClC(=O)C(C(=O)O)=CC=C1		[N]C@H(C)C1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		[N]C@H(C)C1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O
702	130224081501260417032802	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		NCCNC(C)=O		OC(=O)C=C(C)C(C)C=C1=O		NCCO		OC(=O)C1=CC(C)C=C1 [S]
703	130224081501260817022806	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		[N]C@H(C)C1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		[N]C@H(C)C1=CC=C(C)C=C1		ClC(=O)C(C(=O)O)=CC=C1
704	130224081501260817042803	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		[N]C@H(C)C1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCNC1C=CN=C1		OC(=O)C1=CC(C)C=C1 [R]
705	130224081504260417092804	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		NCCNC(C)=O		OC(=O)C=C(C)C(C)C=C1=O		[N]C@H(C)C1=CC=C(C)C=C1 [R]		CC(=O)O
706	130224081504260817032802	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		NCC(C)C(C)O		OC(=O)C=C(C)C(C)C=C1=O		NCCO		OC(=O)C1=CC(C)C=C1 [S]
707	130224081504260817092804	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		[N]C@H(C)C1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		[N]C@H(C)C1=CC=C(C)C=C1 [R]		CC(=O)O
708	130224081504260817042803	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC(F)=CC(C(F)F)F=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCNC1C=CN=C1		OC(=O)C1=CC(C)C=C1 [R]
709	130224081506260217042805	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C(C)C=C1		ClC(=O)C=C(C)C@H(C)C(C)C=O		NCC1COO(C)C=CC=C2)C2O1		OC(=O)C1=CC(C)C=C1 [R]
710	130224081506260317032810	2		N1CCNCCC1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C(C)C=C1		ClC(=O)C=C(C)C@H(C)C(C)C=O		NCC1=CC=C(C)C(C)C=C1		OC(=O)C1=CC(C)C=C1 [S]
711	130224091501260317012803	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC(C)C(S1)		OC(=O)C=C(C)C(C)C=C1=O		NCCNC1C=CN=C1		OC(=O)C=C(C)C(C)C=C1=O
712	130224091501260817032802	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCO		OC(=O)C1=CC(C)C=C1 [S]
713	130224091501260717042802	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(N)C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCO		OC(=O)C1=CC(C)C=C1 [R]
714	130224091501261017022809	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(=O)C=C(C)C@H(C)C(C)C=O		NCC1COOCC1		ClC(=O)C(C(=O)O)=CC=C1
715	130224091501261017032805	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(=O)C=C(C)C@H(C)C(C)C=O		NCC1COO(C)C=C(C)C=C2O1		OC(=O)C1=CC(C)C=C1 [S]
716	130224091501261017092804	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(=O)C=C(C)C@H(C)C(C)C=O		[N]C@H(C)C1=CC=C(C)C=C1 [R]		CC(=O)O
717	130224091502260217012803	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCNC1C=CN=C1		OC(=O)C=C(C)C(C)C=C1=O
718	130224091502260317042803	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(S1)		OC(=O)C=C(C)C(C)C=C1=O		NCCNC1C=CN=C1		OC(=O)C1=CC(C)C=C1 [R]
719	130224091502260817032809	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCC1COOCC1		OC(=O)C1=CC(C)C=C1 [S]
720	130224091502260717022802	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(N)C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCO		ClC(=O)C(C(=O)O)=CC=C1
721	130224091502260717092804	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(N)C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		[N]C@H(C)C1=CC=C(C)C=C1 [R]		CC(=O)O
722	130224091502260817022804	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		[N]C@H(C)C1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCC1=CC=C(C)C=C1		ClC(=O)C(C(=O)O)=CC=C1
723	130224091503260217032802	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCO		OC(=O)C1=CC(C)C=C1 [S]
724	130224091503260417032807	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCCNC(C)=O		OC(=O)C=C(C)C(C)C=C1=O		NCC1=CC(C)C=C(C)C=C1		OC(=O)C1=CC(C)C=C1 [S]
725	130224091503260817032802	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCO		OC(=O)C1=CC(C)C=C1 [S]
726	130224091503260717042803	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(N)C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCNC1C=CN=C1		OC(=O)C1=CC(C)C=C1 [R]
727	130224091503261017032802	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(=O)C=C(C)C@H(C)C(C)C=O		NCCO		OC(=O)C1=CC(C)C=C1 [S]
728	130224091504260717032802	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(N)C(C)C=C1		OC(=O)C=C(C)C(C)C=C1=O		NCCO		OC(=O)C1=CC(C)C=C1 [S]
729	130224091506260117032801	2		NCCNC1C=CN=C1		ClC(=O)C(C(=O)O)=CC=C1		NCC1=CC=C(C)C(C)C=C1		ClC(=O)C=C(C)C@H(C)C(C)C=O		NCC1=CC(C)C=C(C)C=C21		OC(=O)C1=CC(C)C=C1 [S]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
730	130224091506260417012809	2		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(C(F)F)F)F=C1		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		NCC1CCCCC1		OC(C1=CSC(C(C)=N1)=O
731	130224091506260417022802	2		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		NCCO		ClCC1=CC(C(O)=O)=CC=C1
732	130224091506260417022809	2		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		NCC1CCCCC1		ClCC1=CC(C(O)=O)=CC=C1
733	130224091510260117092804	2		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		N(C@H)C(C1=CC=CC=C1R)		CCC(O)=O
734	130224101501260217032802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCCO		OC(C@H)C(C)=O [S]
735	130224101501260317032802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CS1		OC(C1=CSC(C(C)=N1)=O		NCCO		OC(C@H)C(C)=O [S]
736	130224101501260317042804	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CS1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=C01		OC(C@H)C(Br)=O [R]
737	130224101501260517032805	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC(C)C(O)		OC(C1=CC=C(C(C)=O)C=C1)=O		NCC1COCC(C=CC=C2)C2O1		OC(C@H)C(C)=O [S]
738	130224101501260717032802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCCO		OC(C@H)C(C)=O [S]
739	130224101502260417012802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C(C)=O)C=C1)=O		NCCO		OC(C1=CSC(C(C)=N1)=O
740	130224101502260417032804	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C(C)=O)C=C1)=O		NCC1=CC=C01		OC(C@H)C(C)=O [S]
741	130224101502260717012803	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(C)=N1)=O
742	130224101502260717032802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCCO		OC(C@H)C(C)=O [S]
743	130224101502260717032804	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=C01		OC(C@H)C(C)=O [S]
744	130224101502260917032810	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C(C)=N1)=O		NCCCN1=CC=C(C)C(C)C(O)C=C1		OC(C@H)C(C)=O [S]
745	130224101503260317032805	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CS1		OC(C1=CSC(C(C)=N1)=O		NCC1COCC(C=CC=C2)C2O1		OC(C@H)C(C)=O [S]
746	130224101503260617022803	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC=C(C(C)=O)C=C1)=O		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1
747	130224101503260917022809	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C(C)=N1)=O		NCC1CCCCC1		ClCC1=CC(C(O)=O)=CC=C1
748	130224101504260217022802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCCO		ClCC1=CC(C(O)=O)=CC=C1
749	130224101504260417032802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCCNC(C)=O		OC(C1=CC=C(C(C)=O)C=C1)=O		NCCO		OC(C@H)C(C)=O [S]
750	13022410150426071702804	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=CC=C1		OC(C1=CC=C(C(C)=O)C=C1)=O		N(C@H)C(C1=CC=C(C)C=C1)S		O=C(O)C1=C(C)OC=C1
751	130224101504260817032802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(C)=N1)=O		NCCO		OC(C@H)C(C)=O [S]
752	130224101504260817042805	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		N(C@H)C(C1=CC=CC=C1)S		OC(C1=CSC(C(C)=N1)=O		NCC1COCC(C=CC=C2)C2O1		OC(C@H)C(Br)=O [R]
753	130224101504260917092802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C(C)=N1)=O		N(C@H)C(C1=CC=CC=C1R)		ClCC1=CC(C(O)=O)=CC=C1
754	130224101504260917092804	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C(C)=N1)=O		N(C@H)C(C1=CC=CC=C1R)		CCC(O)=O
755	130224101509260117012803	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(C)F)F=C1		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(C)=N1)=O
756	130224101509260117022801	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(C)F)F=C1		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		NCCCN1=CC=C(C)C(C)C(O)C=C21		ClCC1=CC(C(O)=O)=CC=C1
757	130224101509260217022803	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(C)F)F=C1		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1
758	130224101509260417102802	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C(C)F)F=C1		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		N(C@H)C(C1=CC=CC=C1)S		ClCC1=CC(C(O)=O)=CC=C1
759	130224101510260317022809	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		NCC1CCCCC1		ClCC1=CC(C(O)=O)=CC=C1
760	130224101510260417032801	2		C1CNCCN1		ClCC1=CC(C(O)=O)=CC=C1		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(C)C(O)=O		NCCCN1=CC=C(C)C(C)C(O)C=C21		OC(C@H)C(C)=O [S]
761	130324021501260417102804	2		NCC1=CC=CN=C1		OC(C1=CSC(C(C)=N1)=O		NCCNC(C)=O		OC(C1=CC=C(C(C)=O)C=C1)=O		N(C@H)C(C1=CC=CC=C1)S		O=C(O)C1=C(C)OC=C1
762	130324021501260617032801	2		NCC1=CC=CN=C1		OC(C1=CSC(C(C)=N1)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(C)=O)C=C1)=O		NCCCN1=CC=C(C)C(C)C(O)C=C21		OC(C@H)C(C)=O [S]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
763	130324021502260417102804	2		NCC1=C+CN=C1		OC(C1=CSC(C(=O)N)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[S		OC(C)C1=C(C)C(=O)C=C1
764	130324021509260217092802	2		NCC1=CC=CN=C1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[R]		ClCC1=CC(C(=O)O)=CC=C1
765	130324031501260217032802	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(S(=O)(=O)C)O=C1		OC(C1=CC=C(C(=O)N)=O		NCCO		OC([C@@H](C)C)O=[S]
766	130324031501260217032802	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C(=O)N)=O		NCCO		OC([C@@H](C)C)O=[S]
767	130324031501260517022802	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		NCCO		ClCC1=CC(C(=O)O)=CC=C1
768	130324031502260217022803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(S(=O)(=O)C)O=C1		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=C+CN=C1		ClCC1=CC(C(=O)O)=CC=C1
769	130324031502260317032802	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C(=O)N)=O		NCCO		OC([C@@H](C)C)O=[S]
770	130324031502260417012804	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCC1=CC=C(O1)		OC(C1=CSC(C(=O)N)=O
771	130324031502260517032802	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		NCCO		OC([C@@H](C)C)O=[S]
772	130324031502260517032803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1C=C+CN=C1		OC([C@@H](C)C)O=[S]
773	130324031502260517092803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[R]		OC([C@@H](C)C)O=[S]
774	130324031502260917022805	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CC=C(C(=O)N)=O		NCC1COO(C)C=CC=C2=C2O1		OC([C@@H](C)C)O=[S]
775	130324031503260417012803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1C=C+CN=C1		OC(C1=CSC(C(=O)N)=O
776	130324031503260517012803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1C=C+CN=C1		OC(C1=CSC(C(=O)N)=O
777	130324031503260617012803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(O=C1)		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1C=C+CN=C1		OC(C1=CSC(C(=O)N)=O
778	130324031504260417022806	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1		ClCC1=CC(C(=O)O)=CC=C1
779	130324031504260417032801	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCCN(C)C=O		OC(C1=CC=C(C(=O)C=C1)=O		NCCCN1C=C2+CC=CC=C21		OC([C@@H](C)C)O=[S]
780	130324031504261017012803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCCCN1C=C+CN=C1		OC(C1=CSC(C(=O)N)=O
781	130324031504261017022803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCCCN1C=C+CN=C1		ClCC1=CC(C(=O)O)=CC=C1
782	130324031509260117022809	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCC1COOCC1		ClCC1=CC(C(=O)O)=CC=C1
783	130324031509260217022809	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCC1COOCC1		ClCC1=CC(C(=O)O)=CC=C1
784	130324031509260217032802	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCCO		OC([C@@H](C)C)O=[S]
785	130324031509260217042804	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCC1=CC=C(O1)		OC([C@@H](C)C)O=[R]
786	130324031509260217092804	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(C)O
787	130324031509260317032805	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCC1COOCC1		OC([C@@H](C)C)O=[S]
788	130324031509260417042803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCCCN1C=C+CN=C1		OC([C@@H](C)C)O=[R]
789	130324031510260117012803	2		NCCOC		OC(C1=CSC(C(=O)N)=O		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(O)=O		NCCCN1C=C+CN=C1		OC(C1=CSC(C(=O)N)=O
790	130324031510260317032802	2		NCCOC		OC(C1=CSC(C(=O)N)=O		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(O)=O		NCCO		OC([C@@H](C)C)O=[S]
791	130324041501260217092804	2		NCC=C		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(S(=O)(=O)C)O=C1		OC(C1=CC=C(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(C)O
792	130324041503260317092804	2		NCC=C		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(S1)		OC(C1=CC=C(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(C)O
793	130324041503260417022803	2		NCC=C		OC(C1=CSC(C(=O)N)=O		NCCN(C)C=O		ClC(C)C=C(C)C@H(C)C(O)=O		NCCCN1C=C+CN=C1		ClCC1=CC(C(=O)O)=CC=C1
795	130324041504260417032801	2		NCC=C		OC(C1=CSC(C(=O)N)=O		NCCN(C)C=O		ClC(C)C=C(C)C@H(C)C(O)=O		NCCCN1C=C2+CC=CC=C21		OC([C@@H](C)C)O=[S]
796	130324041504260617092804	2		NCC=C		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(O=C1)		OC(C1=CC=C(C(=O)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[R]		CC(C)O

observation	full_molcode2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
797	130324041504260717032802	2		NCC=C		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCCO		OC(C@H)(C)O=[S]
798	130324041509260117022803	2		NCC=C		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)O		NCCCN1C=CN=C1		ClC1=CC(CO)=O=CC=C1
799	130324041509260117032803	2		NCC=C		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)O		NCCCN1C=CN=C1		OC(C@H)(C)O=[S]
800	130324041509260117032803	2		NCC=C		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)O		NCCCN1C=CN=C1		OC(C@H)(C)O=[S]
801	130324041509260117032801	2		NCC=C		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)O		NCCCN1C=CN=C1		OC(C@H)(C)O=[S]
802	130324051501260217022802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S(=O)(C)O)C=C1		OC(C1=CSC(CO)N1)=O		NCCO		ClC1=CC(CO)=O=CC=C1
803	130324051501260217032802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S(=O)(C)O)C=C1		OC(C1=CSC(CO)N1)=O		NCCO		OC(C1=CSC(CO)N1)=O
804	130324051501260117012804	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(CO)C=C1)=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O
805	130324051501260117032806	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(CO)C=C1)=O		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O
806	130324051501260717032802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCCO		OC(C@H)(C)O=[S]
807	130324051501260117032810	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(CO)N1)=O		NCCCN1C=CC(O)C(O)C=C1		OC(C@H)(C)O=[S]
808	130324051502260217032801	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S(=O)(C)O)C=C1		OC(C1=CSC(CO)N1)=O		NCCCN1C=CC(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O
809	130324051502260117022809	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(CO)C=C1)=O		NCC1=CC=C(C)C=C1		ClC1=CC(CO)=O=CC=C1
810	130324051503260417012803	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCCN(C)C=O		OC(C1=CC=C(CO)C=C1)=O		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O
811	130324051503260117032802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(CO)C=C1)=O		NCCO		OC(C@H)(C)O=[S]
812	130324051503260117022809	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		ClC1=CC(CO)=O=CC=C1
813	130324051504260117032808	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(CO)C=C1)=O		BrC1=CC=C(C)C=C1		OC(C@H)(C)O=[S]
814	13032405150426011702804	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(CO)N1)=O		N(C@H)(C)C1=CC=CC=C1		O=C(O)C1=C(C)OC=C1
815	130324051504260117012803	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(CO)N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O
816	130324051509260217092804	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)O		N(C@H)(C)C1=CC=CC=C1		CCO(O)=O
817	130324051509260317032806	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)O		N(C@H)(C)C1=CC=CC=C1		OC(C@H)(C)O=[S]
818	130324051509260417022807	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		ClC(C)=C(C@H)(C)O		NCC1=CC=C(CO)C(O)C=C1		ClC1=CC(CO)=O=CC=C1
819	130324061504260517032802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC(C)C(O)O		OC(C1=CC=C(CO)C=C1)=O		NCCO		OC(C@H)(C)O=[S]
820	130324071501260217032802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S(=O)(C)O)C=C1		OC(C1=CSC(CO)N1)=O		NCCO		OC(C@H)(C)O=[S]
821	130324071501260417032808	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCCN(C)C=O		OC(C1=CC=C(CO)C=C1)=O		BrC1=CC=C(C)C=C1		OC(C@H)(C)O=[S]
822	130324071501260117032806	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(CO)C=C1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C@H)(C)O=[S]
823	130324071501260717032810	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCCCN1C=CC(O)C(O)C=C1		OC(C@H)(C)O=[S]
824	130324071502260317102804	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S)C=C1		OC(C1=CSC(CO)N1)=O		N(C@H)(C)C1=CC=CC=C1		O=C(O)C1=C(C)OC=C1
825	130324071502260517032802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC(C)C(O)O		OC(C1=CC=C(CO)C=C1)=O		NCCO		OC(C@H)(C)O=[S]
826	130324071502260817102804	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(CO)N1)=O		N(C@H)(C)C1=CC=CC=C1		O=C(O)C1=C(C)OC=C1
827	130324071503260417032802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCCN(C)C=O		OC(C1=CC=C(CO)C=C1)=O		NCCO		OC(C@H)(C)O=[S]
828	130324071503260517092803	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC(C)C(O)O		OC(C1=CC=C(CO)C=C1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C@H)(C)O=[S]
829	130324071503261017032802	2		NCC1=CC=C(O)C(O)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(O)C=C1		ClC(C)=C(C@H)(C)O		NCCO		OC(C@H)(C)O=[S]

observation	full_molcode2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
830	130324071504260317042803	2		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)Br=O [R]
831	130324071504260417042806	2		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O		NCCN(C)=O		OC(C1=CC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1		OC(C@H)(C)Br=O [R]
832	130324071504260517032803	2		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O		NCC(C)C(O)		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
833	13032407150426117022803	2		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1
834	130324071509260417042804	2		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)Br=O [R]
835	130324071510260117102804	2		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O		CC(C)CCN		OC(C1=CC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
836	130324071510260417032804	2		NCC1=CC=C(C)C=C1		OC(C1=CSC(CO)N1)=O		CC(C)CCN		OC(C1=CC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C(O)=O [S]
837	130324081501260217032802	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(CO)N1)=O		NCCO		OC(C@H)(C)C(O)=O [S]
838	130324081501260317032806	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1		OC(C@H)(C)C(O)=O [S]
839	130324081501260817012803	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O
840	130324081502260717012803	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O
841	130324081503260217102804	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
842	130324081503260317032803	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)C(O)=O [S]
843	130324081503260817012803	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O
844	130324081503260717022802	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1 [R]		ClCC1=CC(C(O)=O)=CC=C1
845	130324081503260717102804	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
846	130324081503260817032809	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(CO)N1)=O		NCC1CCCC1		OC(C@H)(C)C(O)=O [S]
847	130324081504260517032802	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC(C)C(O)		OC(C1=CC(CO)N1)=O		NCCO		OC(C@H)(C)C(O)=O [S]
848	130324081504261017102804	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C)OC=C1
849	130324081509260217032807	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C(O)=O [S]
850	130324081509260217042803	2		N1CCNCCC1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)Br=O [R]
851	130324081501260217022809	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(CO)N1)=O		NCC1CCCC1		ClCC1=CC(C(O)=O)=CC=C1
852	130324091501260317092804	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1 [R]		CCC(O)=O
853	130324091501260717032802	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCCO		OC(C@H)(C)C(O)=O [S]
854	130324091501260917032805	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C(O)=O [S]
855	130324091502260817032804	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C(O)=O [S]
856	130324091502260717022806	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1		ClCC1=CC(C(O)=O)=CC=C1
857	130324091503260317042803	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		OC(C@H)(C)Br=O [R]
858	130324091503260417012803	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCCN(C)=O		OC(C1=CC(CO)N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O
859	130324091503260717022803	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(CO)N1)=O		NCCCN1C=CN=C1		ClCC1=CC(C(O)=O)=CC=C1
860	130324091503260817012803	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(CO)N1)=O		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O
861	130324091503260817022809	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(CO)N1)=O		NCC1CCCC1		ClCC1=CC(C(O)=O)=CC=C1
862	130324091504260317032805	2		NCCCN1C=CN=C1		OC(C1=CSC(CO)N1)=O		NCC1=CC=C(S1)		OC(C1=CC(CO)N1)=O		NCC1=CC=C(C)C=C1		OC(C@H)(C)C(O)=O [S]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
863	13032409150260217102804	2		NCCN(C)C=CN=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(C(F)F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1[S		OC(C)C1=C(C)OC=C1
864	13032409150260317022808	2		NCCN(C)C=CN=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(C(F)F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		BrC1=CC=C(C)N=C1		ClC1=CC(C)O)=CC=C1
865	13032409150260417022806	2		NCCN(C)C=CN=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(C(F)F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1		ClC1=CC(C)O)=CC=C1
866	130324091510260217102804	2		NCCN(C)C=CN=C1		OC(C1=CSC(C(=O)N1)=O		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1[S		OC(C)C1=C(C)OC=C1
867	13032410150260217042801	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C(=O)N1)=O		NCC1=CNC2=CC=CC=C2		OC(C@H)(C)Br)=O [R]
868	13032410150260317032802	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		NCCO		OC(C@H)(C)O)=O [S]
869	13032410150260617012805	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CC=C1		OC(C1=CC(C)C(=O)N1)=O		NCC1COO(C=CC=C2)C2O1		OC(C1=CSC(C(=O)N1)=O
870	13032410150260917032802	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC(F)=CC(C(F)F)F=C1		OC(C1=CSC(C(=O)N1)=O		NCCO		OC(C@H)(C)O)=O [S]
871	13032410150261017022805	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1COO(C=CC=C2)C2O1		ClC1=CC(C)O)=CC=C1
872	13032410150261017032805	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1COO(C=CC=C2)C2O1		OC(C@H)(C)O)=O [S]
873	13032410150260317032807	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		NCC1=CC(O)C(=O)C1		OC(C@H)(C)O)=O [S]
874	13032410150260317042805	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		NCC1COO(C=CC=C2)C2O1		OC(C@H)(C)Br)=O [R]
875	13032410150260417012803	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C=O		OC(C1=CC(C)C(=O)N1)=O		NCCN(C)C=CN=C1		OC(C1=CSC(C(=O)N1)=O
876	13032410150260717032806	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C@H)(C)O)=O [S]
877	13032410150260817022804	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C1		ClC1=CC(C)O)=CC=C1
878	13032410150260817022809	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1COOCC1		ClC1=CC(C)O)=CC=C1
879	13032410150260817032802	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCO		OC(C@H)(C)O)=O [S]
880	130324101503260317092802	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		N(C@H)(C)C1=CC=CC=C1[R]		ClC1=CC(C)O)=CC=C1
881	130324101503260717022802	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCO		ClC1=CC(C)O)=CC=C1
882	130324101504260217022809	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C(=O)N1)=O		NCC1COOCC1		ClC1=CC(C)O)=CC=C1
883	130324101504260317012803	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		NCCN(C)C=CN=C1		OC(C1=CSC(C(=O)N1)=O
884	130324101504260317042803	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		NCCN(C)C=CN=C1		OC(C@H)(C)Br)=O [R]
885	130324101504260817032802	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCO		OC(C@H)(C)O)=O [S]
886	130324101509260317022803	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(C(F)F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCCN(C)C=CN=C1		ClC1=CC(C)O)=CC=C1
887	130324101509260417022807	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C(C(F)F)F)F=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC(O)C(=O)C1		ClC1=CC(C)O)=CC=C1
888	130324101510260417032804	2		C1CNCCN1		OC(C1=CSC(C(=O)N1)=O		CC(C)CCN		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=C1		OC(C@H)(C)O)=O [S]
889	130424011503260317022808	2		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		BrC1=CC=C(C)N=C1		ClC1=CC(C)O)=CC=C1
890	130424011503260617032802	2		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=CC=C1		OC(C1=CC(C)C(=O)N1)=O		NCCO		OC(C@H)(C)O)=O [S]
891	130424011504260317022803	2		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		NCCN(C)C=CN=C1		ClC1=CC(C)O)=CC=C1
892	130424011504260317102804	2		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		N(C@H)(C)C1=CC=CC=C1[S		OC(C)C1=C(C)OC=C1
893	130424021502260217032802	2		NCC1=CC=CN=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C(=O)N1)=O		NCCO		OC(C@H)(C)O)=O [S]
894	130424021503260817022803	2		NCC1=CC=C(C)C=C1		ClC(C)C=C(C@H)(C)C(O)=O		N(C@H)(C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCN(C)C=CN=C1		ClC1=CC(C)O)=CC=C1
895	130424021504260317032803	2		NCC1=CC=CN=C1		ClC(C)C=C(C@H)(C)C(O)=O		NCC1=CC=CS1		OC(C1=CC(C)C(=O)N1)=O		NCCN(C)C=CN=C1		OC(C@H)(C)O)=O [S]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1)-smiles	Acid(X1)	Acid(X1)-smiles	Amines(X2)	Amines(X2)-smiles	Acid(X2)	Acid(X2)-smiles	Amines(X3)	Amines(X3)-smiles	Structure of Pair...	Pair3 Acids
896	130424021502260417092804	2		<chem>NCC1=CC=CN=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=CC=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1[R]</chem>		<chem>CCC(O)=O</chem>
897	130424031501260217032802	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C(=O)O)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
898	130424031501260217032803	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(S(=O)(=O)C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCCN1=CC=CN=C1</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
899	13042403150126017032802	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
900	130424031501260917092804	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC(F)=CC(C(F)(F)F)=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1[R]</chem>		<chem>CCC(O)=O</chem>
901	130424031501261017032809	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1CCCC1</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
902	130424031502260117102802	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1[S]</chem>		<chem>ClCC1=CC(O)=O=CC=C1</chem>
903	130424031502260217032802	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(S(=O)(=O)C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
904	130424031502260217032810	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(S(=O)(=O)C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCCN1=CC=C(C)OC=C1</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
905	130424031502260917032806	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
906	130424031502261017102803	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1[S]</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
907	130424031502260317032802	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=CS1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
908	130424031503260417092804	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCN(C)O</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1[R]</chem>		<chem>CCC(O)=O</chem>
909	130424031503260517012803	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC(C)O</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCCN1=CC=CN=C1</chem>		<chem>CC(C1=CC(O)=O)C=C1=O</chem>
910	130424031503260617042802	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>CC([C@@H](C)O)=O</chem> [R]
911	130424031503261017042806	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1</chem>		<chem>CC([C@@H](C)O)=O</chem> [R]
912	130424031504260617012803	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCCN1=CC=CN=C1</chem>		<chem>CC(C1=CC(O)=O)C=C1=O</chem>
913	130424031504260817032802	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
914	130424031506260217022802	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>ClCC1=CC(O)=O=CC=C1</chem>
915	130424031506260217022803	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCCN1=CC=CN=C1</chem>		<chem>ClCC1=CC(O)=O=CC=C1</chem>
916	130424031506260317012803	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCCN1=CC=CN=C1</chem>		<chem>CC(C1=CC(O)=O)C=C1=O</chem>
917	130424031506260417012803	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCCN1=CC=CN=C1</chem>		<chem>CC(C1=CC(O)=O)C=C1=O</chem>
918	130424031506260417012804	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=CO1</chem>		<chem>CC(C1=CC(O)=O)C=C1=O</chem>
919	130424031506260417012806	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1</chem>		<chem>CC(C1=CC(O)=O)C=C1=O</chem>
920	130424031510260117102804	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>CC(C)CN</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1[S]</chem>		<chem>O=C(O)C1=C(C)OC=C1</chem>
921	130424031510260317012806	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>CC(C)CN</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1</chem>		<chem>CC(C1=CC(O)=O)C=C1=O</chem>
922	130424031510260417042805	2		<chem>NCCCCO</chem>		<chem>ClCC(=O)O</chem>		<chem>CC(C)CN</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1CCC(C)C=C2=C2O1</chem>		<chem>CC([C@@H](C)O)=O</chem> [R]
923	130424041501260317012805	2		<chem>NCC=C</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=CS1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1CCC(C)C=C2=C2O1</chem>		<chem>CC(C1=CC(O)=O)C=C1=O</chem>
924	130424041501260417022807	2		<chem>NCC=C</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCN(C)O</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC(C)C=C(C)OC=C1</chem>		<chem>ClCC1=CC(O)=O=CC=C1</chem>
925	130424041501260517032806	2		<chem>NCC=C</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC(C)O</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1</chem>		<chem>CC([C@@H](C)O)=O</chem> [S]
926	130424041501260517102804	2		<chem>NCC=C</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC(C)O</chem>		<chem>ClCC(=O)O</chem>		<chem>N[C@@H](C)C1=CC=CC=C1[S]</chem>		<chem>O=C(O)C1=C(C)OC=C1</chem>
927	130424041502260517022802	2		<chem>NCC=C</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCO</chem>		<chem>ClCC1=CC(O)=O=CC=C1</chem>
928	130424041502260717022803	2		<chem>NCC=C</chem>		<chem>ClCC(=O)O</chem>		<chem>NCC1=CC=C(N(C)C)C=C1</chem>		<chem>ClCC(=O)O</chem>		<chem>NCCCN1=CC=CN=C1</chem>		<chem>ClCC1=CC(O)=O=CC=C1</chem>

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
929	130424041503260217032802	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(S(=O)(=O)C)C=C		OC(C)=COC(C)N=O		NCCO		OC(C(=O)H)C(C)O [S]
930	130424041503260417032802	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		OC(C)=CC(C)C(C)C=O		NCCO		OC(C(=O)H)C(C)O [S]
931	130424041506260117032808	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(C)C(F)F=C1		ClC(C)C=C(C)C(=O)O		BrC1=CC=C(N)C=C1		OC(C(=O)H)C(C)O [S]
932	130424041510260417012803	2		NCC=C		ClC(C)C=C(C)C(=O)O		CC(C)CCN		ClC(C)C=C(C)C(=O)O		NCCCN=C=N=C1		OC(C1=CSC(C)N)O
933	130424051501260217012809	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(S(=O)(=O)C)C=C		OC(C)=COC(C)N=O		NCC1CCCC1		OC(C1=CSC(C)N)O
934	130424051501260717022803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(N)C(C)C=C1		OC(C)=CSC(C)N=O		NCCCN=C=C1		ClCC1=CC(C)O)O)CC=C
935	130424051501260717022809	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(N)C(C)C=C1		OC(C)=CSC(C)N=O		NCC1CCCC1		ClCC1=CC(C)O)O)CC=C
936	130424051502260417032806	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		OC(C)=CC(C)C(C)C=O		N(C)C(=O)C1=CC=CC=C1		OC(C(=O)H)C(C)O [S]
937	130424051503260417042803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		OC(C)=CC(C)C(C)C=O		NCCCN=C=C1		OC(C(=O)H)C(C)O [R]
938	130424051503260717032802	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(N)C(C)C=C1		OC(C)=COC(C)N=O		NCCO		OC(C(=O)H)C(C)O [S]
939	130424051504260317032803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(S1)		OC(C)=COC(C)N=O		NCCCN=C=C1		OC(C(=O)H)C(C)O [S]
940	130424051506260117032801	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(C)C(F)F=C1		ClC(C)C=C(C)C(=O)O		NCCC1=NC2=CC=CC=C21		OC(C(=O)H)C(C)O [S]
941	130424051510260217032805	2		NCC=C		ClC(C)C=C(C)C(=O)O		CC(C)CCN		ClC(C)C=C(C)C(=O)O		NCC1CCC(C)C=C2O1		OC(C(=O)H)C(C)O [S]
942	130424061501260217102804	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(S(=O)(=O)C)C=C		OC(C)=COC(C)N=O		N(C)C(=O)C1=CC=CC=C1		O=C(O)C1=C(C)OC=C1
943	130424061501260717022809	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(N)C(C)C=C1		OC(C)=CSC(C)N=O		NCC1CCCC1		ClCC1=CC(C)O)O)CC=C
944	130424061504260317032803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(S1)		OC(C)=COC(C)N=O		NCCCN=C=C1		OC(C(=O)H)C(C)O [S]
945	130424071501260217012803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(S(=O)(=O)C)C=C		OC(C)=COC(C)N=O		NCCCN=C=C1		OC(C1=CSC(C)N)O
946	130424071501260317032802	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(S1)		OC(C)=COC(C)N=O		NCCO		OC(C(=O)H)C(C)O [S]
947	130424071501260717022805	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(N)C(C)C=C1		OC(C)=CSC(C)N=O		NCC1CCC(C)C=C2O1		ClCC1=CC(C)O)O)CC=C
948	130424071501260917032808	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(F)C(C)C(F)F=C1		OC(C)=CSC(C)N=O		BrC1=CC=C(N)C=C1		OC(C(=O)H)C(C)O [S]
949	130424071501261017032803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(C)C=C1		ClC(C)C=C(C)C(=O)O		NCCCN=C=C1		OC(C(=O)H)C(C)O [S]
950	130424071502260517022810	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC(C)C(O)C		OC(C)=CC(C)C(C)C=O		NCCC1=CC(C)OC(C)C=C1		ClCC1=CC(C)O)O)CC=C
951	130424071502260817022803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(N)C(C)C=C1		OC(C)=CSC(C)N=O		NCCCN=C=C1		ClCC1=CC(C)O)O)CC=C
952	130424071502260817022804	2		NCC=C		ClC(C)C=C(C)C(=O)O		N(C)C(=O)C1=CC=CC=C1		OC(C)=CSC(C)N=O		NCC1=CC=C(O)C=C1		ClCC1=CC(C)O)O)CC=C
953	130424071502261017022803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(C)C=C1		ClC(C)C=C(C)C(=O)O		NCCCN=C=C1		ClCC1=CC(C)O)O)CC=C
954	130424071503260417022803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		OC(C)=CC(C)C(C)C=O		NCCCN=C=C1		ClCC1=CC(C)O)O)CC=C
955	130424071503260417032806	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCCN(C)C=O		OC(C)=CC(C)C(C)C=O		N(C)C(=O)C1=CC=CC=C1		OC(C(=O)H)C(C)O [S]
956	130424071503260817032804	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(C)C=C1		OC(C)=CC(C)C(C)C=O		NCC1=CC=C(O)C=C1		OC(C(=O)H)C(C)O [S]
957	130424071503260817022803	2		NCC=C		ClC(C)C=C(C)C(=O)O		N(C)C(=O)C1=CC=CC=C1		OC(C)=CSC(C)N=O		NCCCN=C=C1		ClCC1=CC(C)O)O)CC=C
958	130424071503260917022803	2		NCC=C		ClC(C)C=C(C)C(=O)O		NCC=C=C(F)C(C)C(F)F=C1		OC(C)=CSC(C)N=O		N(C)C(=O)C1=CC=CC=C1		OC(C(=O)H)C(C)O [S]
959	130424071504260817022803	2		NCC=C		ClC(C)C=C(C)C(=O)O		N(C)C(=O)C1=CC=CC=C1		OC(C)=CSC(C)N=O		NCCCN=C=C1		ClCC1=CC(C)O)O)CC=C
960	130424071504260817022810	2		NCC=C		ClC(C)C=C(C)C(=O)O		N(C)C(=O)C1=CC=CC=C1		OC(C)=CSC(C)N=O		NCCC1=CC(C)OC(C)OC=C1		ClCC1=CC(C)O)O)CC=C
961	130424071504260817042805	2		NCC=C		ClC(C)C=C(C)C(=O)O		N(C)C(=O)C1=CC=CC=C1		OC(C)=CSC(C)N=O		NCC1CCC(C)C=C2O1		OC(C(=O)H)C(C)O [R]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1): smiles	Acid(X1)	Acid(X1): smiles	Amines(X2)	Amines(X2): smiles	Acid(X2)	Acid(X2): smiles	Amines(X3)	Amines(X3): smiles	Structure of Pair...	Pair3Acids
962	130424071509260117042803	2		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CN=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [R]
963	130424071509260417042809	2		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [R]
964	130424071510260317102802	2		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>CC(C)CN</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>N[C@@H](C)C1=CC=C(C)C=C1</chem> [S]		<chem>ClCC1=CC=C(C)C=C1</chem> [O] [CC]
965	130424081501260217032803	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CN=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
966	130424081501260317032802	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCO</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
967	130424081501260417032805	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN(C)C=O</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1C=CC=C(C)C=C1</chem> [S]		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
968	130424081501260717032804	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
969	130424081501260717042803	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [R]
970	130424081501260917022803	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>ClCC1=CC=C(C)C=C1</chem> [O] [CC]
971	130424081502260717102804	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>N[C@@H](C)C1=CC=C(C)C=C1</chem> [S]		<chem>O=C(O)C1=CC=C(C)C=C1</chem>
972	130424081503260317012803	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [O]
973	130424081503260317032802	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCO</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
974	130424081503261017012803	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [O]
975	130424081504260817042803	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [R]
976	130424081504260917022804	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>N[C@@H](C)C1=CC=C(C)C=C1</chem> [R]		<chem>CCC(O)=O</chem>
977	130424081504261017032808	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>BC1=CC=C(C)C=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
978	130424081509260417042803	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [R]
979	130424081510260317022803	2		<chem>N1CCNCCC1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>CC(C)CN</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>ClCC1=CC=C(C)C=C1</chem> [O] [CC]
980	130424091501260717032802	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCO</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
981	130424091501260917032801	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1C=CC=C(C)C=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
982	130424091501261017022805	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1C=CC=C(C)C=C1</chem>		<chem>ClCC1=CC=C(C)C=C1</chem> [O] [CC]
983	130424091502260317042803	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [R]
984	130424091502260417032810	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN(C)C=O</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
985	130424091502260517032810	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC(C)C=O</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
986	130424091502260717032802	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCO</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [S]
987	130424091503260117102804	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCOC</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>N[C@@H](C)C1=CC=C(C)C=C1</chem> [S]		<chem>O=C(O)C1=CC=C(C)C=C1</chem>
988	130424091503260217022804	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1C=CC=C1</chem>		<chem>ClCC1=CC=C(C)C=C1</chem> [O] [CC]
989	130424091503260917022804	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>N[C@@H](C)C1=CC=C(C)C=C1</chem> [R]		<chem>CCC(O)=O</chem>
990	130424091503261017022803	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>ClCC1=CC=C(C)C=C1</chem> [O] [CC]
991	130424091503261017012806	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>N[C@@H](C)C1=CC=C(C)C=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [O]
992	130424091503261017042803	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [R]
993	130424091504260517022804	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCC(C)C=O</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>N[C@@H](C)C1=CC=C(C)C=C1</chem> [R]		<chem>CCC(O)=O</chem>
994	130424091504260817042803	2		<chem>NCCN1C=CC=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>N[C@@H](C)C1=CC=C(C)C=C1</chem>		<chem>ClC(C)C(=O)C</chem>		<chem>NCCN1C=CC=C1</chem>		<chem>OC(=O)C1=CC=C(C)C=C1</chem> [R]

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
995	130424091504261017012809	2		NCCCN1C=CN=C1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1CCCCC1		OC(C1=C(C)C(C)C)=N1)O
996	130424091509260317012805	2		NCCCN1C=CN=C1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1COO(C=C)C=C2)C2O1		OC(C1=C(C)C(C)C)=N1)O
997	130424091510260217012806	2		NCCCN1C=CN=C1		ClC(C)C=C(C)C@H(C)C(C)O=O		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(C)O=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=C(C)C(C)C)=N1)O
998	130424091510260217012804	2		NCCCN1C=CN=C1		ClC(C)C=C(C)C@H(C)C(C)O=O		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(C)O=O		N[C@@H](C)C1=CC=CC=C1		O=C(O)C1=C(C)C(C)C=C1
999	130424101501260317032802	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=C(S1)C=C1		OC(C1=CC(C)C(C)C)=N1)O		NCCO		OC(C1=C(C)C(C)C)=O [S]
1000	130424101501260517022807	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC(C)C(C)O		OC(C1=CC=C(C)C(C)C)=O		NCC1=CC(C)C=CC(C)C=C1		ClCC1=C(C)C(C)O=O)CC=C
1001	130424101501260517032802	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC(C)C(C)O		OC(C1=CC=C(C)C(C)C)=O		NCCO		OC(C1=C(C)C(C)C)=O [S]
1002	13042410150126051702804	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC(C)C(C)O		OC(C1=CC=C(C)C(C)C)=O		N[C@@H](C)C1=CC=CC=C1		O=C(O)C1=C(C)C(C)C=C1
1003	130424101501260917012809	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C(C)C)=O		NCC1CCCCC1		OC(C1=C(C)C(C)C)=N1)O
1004	130424101501260917042803	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C(C)C)=O		NCCCN1C=CN=C1		OC(C1=C(C)C(C)C)=O [R]
1005	130424101501260917042808	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=CC=C1		OC(C1=CC=C(C)C(C)C)=O		BrC1=CC=C(C)C(N)C=C1		OC(C1=C(C)C(C)C)=O [R]
1006	130424101501260917032802	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CC(C)C(C)C)=N1)O		NCCO		OC(C1=C(C)C(C)C)=O [S]
1007	130424101502260217012803	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C(C)C)=N1)O		NCCCN1C=CN=C1		OC(C1=C(C)C(C)C)=N1)O
1008	130424101502260317012804	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=C(S1)C=C1		OC(C1=CC(C)C(C)C)=N1)O		NCC1=CC=CO1		OC(C1=C(C)C(C)C)=N1)O
1009	130424101502260517032801	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC(C)C(C)O		OC(C1=CC=C(C)C(C)C)=O		NCCCN1C=CC(C)C=C2)C2O1		OC(C1=C(C)C(C)C)=O [S]
1010	130424101502260717022802	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=C(C)C(C)C)=N1)O		NCCO		ClCC1=C(C)C(C)O=O)CC=C
1011	130424101502260717022803	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=C(C)C(C)C)=N1)O		NCCCN1C=C1		ClCC1=C(C)C(C)O=O)CC=C
1012	13042410150226091702804	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=C(C)C(C)C)=N1)O		N[C@@H](C)C1=CC=CC=C1		O=C(O)C1=C(C)C(C)C=C1
1013	130424101502260917032806	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC(F)C(C)C(F)F=C1		OC(C1=C(C)C(C)C)=N1)O		N[C@@H](C)C1=CC=CC=C1		OC(C1=C(C)C(C)C)=O [S]
1014	130424101502261017012803	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCCCN1C=CN=C1		OC(C1=C(C)C(C)C)=N1)O
1015	130424101503260417032807	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCCN(C)C=O		OC(C1=CC=C(C)C(C)C)=O		NCC1=CC(C)C=CC(C)C=C1		OC(C1=C(C)C(C)C)=O [S]
1016	130424101503260517012806	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC(C)C(C)O		OC(C1=CC=C(C)C(C)C)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=C(C)C(C)C)=N1)O
1017	130424101503260917032802	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC(F)C(C)C(F)F=C1		OC(C1=C(C)C(C)C)=N1)O		NCCO		OC(C1=C(C)C(C)C)=O [S]
1018	130424101503260917032804	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC(F)C(C)C(F)F=C1		OC(C1=C(C)C(C)C)=N1)O		N[C@@H](C)C1=CC=CC=C1		OC(C)O=O
1019	13042410150326091702804	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(C)O=O		NCC1=CC(F)C(C)C(F)F=C1		OC(C1=C(C)C(C)C)=N1)O		N[C@@H](C)C1=CC=CC=C1		O=C(O)C1=C(C)C(C)C=C1
1020	130424101504260217032803	2		C1CNCCN1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C(C)C)=N1)O		NCCCN1C=C1		OC(C1=C(C)C(C)C)=O [S]
1021	130424101504260517032802	2		C1CNCCN1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC(C)C(C)O		OC(C1=CC=C(C)C(C)C)=O		NCCO		OC(C1=C(C)C(C)C)=O [S]
1022	130424101504260917022803	2		C1CNCCN1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC(F)C(C)C(F)F=C1		OC(C1=C(C)C(C)C)=N1)O		NCCCN1C=C1		ClCC1=C(C)C(C)O=O)CC=C
1023	130424101509260117022804	2		C1CNCCN1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC=CO1		ClCC1=C(C)C(C)O=O)CC=C
1024	13042410150926021702804	2		C1CNCCN1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(H)C(C)O=O		N[C@@H](C)C1=CC=CC=C1		OC(C)O=O
1025	130424101509260217012804	2		C1CNCCN1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC=CO1		OC(C1=C(C)C(C)C)=N1)O
1026	130424101509260217012808	2		C1CNCCN1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(H)C(C)O=O		BrC1=CC=C(C)C(N)C=C1		OC(C1=C(C)C(C)C)=N1)O
1027	13042410150926031702801	2		C1CNCCN1		ClC(C)C=C(C)C@H(H)C(C)O=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(H)C(C)O=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=C(C)C(C)C)=N1)O

observation	full_mol.code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
1028	130424101510260217022803	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(O)=O		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(O)=O		NCCCN1C=CN=C1		ClC(C)C=C(C)C(O)=CC=C
1029	130424101510260417102802	2		C1CNCCN1		ClC(C)C=C(C)C@H(C)C(O)=O		CC(C)CCN		ClC(C)C=C(C)C@H(C)C(O)=O		N(C)C@H(C)C1=CC=CC=C1[S]		ClC(C)C=C(O)=CC=C
1030	130924011502260217102804	2		NCC1CCOCC1		OC(C1=CC(C)C)=N1=O		NCC1=CC=C(S(=O)(=O)C)C=C		OC(C1=CC(C)C)=N1=O		N(C)C@H(C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
1031	130924011502260417032804	2		NCC1CCOCC1		OC(C1=CC(C)C)=N1=O		NCCN(C)C=O		OC(C1=CC(C)C)=N1=O		NCC1=CC=C1		OC(C@H(C)C)C(O)=S
1032	130924011502260517092802	2		NCC1CCOCC1		OC(C1=CC(C)C)=N1=O		NCC(C)C(O)C		OC(C1=CC(C)C)=N1=O		N(C)C@H(C)C1=CC=CC=C1[R]		ClC(C)C=C(O)=CC=C
1033	1309240115062260217092802	2		NCC1CCOCC1		OC(C1=CC(C)C)=N1=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		N(C)C@H(C)C1=CC=CC=C1[R]		ClC(C)C=C(O)=CC=C
1034	130924021501260417042806	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		NCCN(C)C=O		OC(C1=CC(C)C)C=C1=O		N(C)C@H(C)C1=C=CC=C1		OC(C)C@H(C)C(O)=R
1035	130924011502260517092801	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		NCC1=CC=C=C1		OC(C1=CC(C)C)C=C1=O		N(C)C@H(C)C1=C=CC=C1[R]		OC(C1=CSC(C)C)=N1=O
1036	130924021502260817032806	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		N(C)C@H(C)C1=C=CC=C1		OC(C1=CSC(C)C)=N1=O		N(C)C@H(C)C1=C=CC=C1		OC(C)C@H(C)C(O)=S
1037	13092402150226081702803	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		N(C)C@H(C)C1=C=CC=C1		OC(C1=CSC(C)C)=N1=O		N(C)C@H(C)C1=C=CC=C1[S]		OC(C)C@H(C)C(O)=S
1038	130924021502260917092802	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		NCC1=CC(F)=CC(F)F=C1		OC(C1=CSC(C)C)=N1=O		N(C)C@H(C)C1=CC=CC=C1[R]		ClC(C)C=C(O)=CC=C
1039	130924021504260517032809	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		NCC1=CC=C=C1		OC(C1=CC(C)C)C=C1=O		NCC1CCOCC1		OC(C)C@H(C)C(O)=S
1040	130924021504260817102804	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		NCC1=CC=C=C1		OC(C1=CC(C)C)C=C1=O		N(C)C@H(C)C1=CC=CC=C1[S]		O=C(O)C1=C(C)OC=C1
1041	130924021504261017102804	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		NCC1=CC=C=C1		ClC(C)C=C(C)C@H(C)C(O)=O		N(C)C@H(C)C1=C=CC=C1[S]		O=C(O)C1=C(C)OC=C1
1042	1309240215062260117102804	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		N(C)C@H(C)C1=C=CC=C1[S]		O=C(O)C1=C(C)OC=C1
1043	1309240215062260417022806	2		NCC1CCOCC1		ClC(C)C=C(O)=CC=C1		NCC1=CC=C(C)C(F)F=C1		ClC(C)C=C(C)C@H(C)C(O)=O		N(C)C@H(C)C1=C=CC=C1		ClC(C)C=C(O)=CC=C
1044	130924031501260417042804	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCCN(C)C=O		OC(C1=CC(C)C)C=C1=O		NCC1=CC=C1		OC(C)C@H(C)C(O)=R
1045	130924031501260517102802	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC(C)C(O)C		OC(C1=CC(C)C)C=C1=O		N(C)C@H(C)C1=C=CC=C1[S]		ClC(C)C=C(O)=CC=C
1046	130924031501260817032801	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C=C1		OC(C1=CC(C)C)C=C1=O		NCC1=CNC2=CC=CC=C2		OC(C)C@H(C)C(O)=S
1047	130924031501260917042804	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C=C1		OC(C1=CC(C)C)C=C1=O		NCC1=CC=C1		OC(C)C@H(C)C(O)=R
1048	130924031501260717032807	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C)C)=N1=O		NCC1=CC(C)C(C)C=C1		OC(C)C@H(C)C(O)=S
1049	130924031501260717092803	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C)C)=N1=O		N(C)C@H(C)C1=C=CC=C1[R]		OC(C)C@H(C)C(O)=S
1050	130924031501260717092804	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C)C)=N1=O		N(C)C@H(C)C1=C=CC=C1[R]		CCC(O)=O
1051	130924031502260217012804	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C(S(=O)(=O)C)C=C		OC(C1=CC(C)C)=N1=O		NCC1=CC=C1		OC(C1=CSC(C)C)=N1=O
1052	130924031502260417022804	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCCN(C)C=O		OC(C1=CC(C)C)C=C1=O		NCC1=CC=C1		ClC(C)C=C(O)=CC=C
1053	130924031502260517032802	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC(C)C(O)C		OC(C1=CC(C)C)C=C1=O		NCCO		OC(C)C@H(C)C(O)=S
1054	130924031502260817012803	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		N(C)C@H(C)C1=C=CC=C1		OC(C1=CSC(C)C)=N1=O		NCCCN1C=CN=C1		OC(C1=CSC(C)C)=N1=O
1055	130924031502261017012808	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C@H(C)C(O)=O		BrC1=CC=C(C)C=C1		OC(C1=CSC(C)C)=N1=O
1056	130924031502261017032801	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C@H(C)C(O)=O		NCC1=CNC2=CC=CC=C2		OC(C)C@H(C)C(O)=S
1057	130924031502261017092804	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C(C)C=C1		ClC(C)C=C(C)C@H(C)C(O)=O		N(C)C@H(C)C1=C=CC=C1[R]		CCC(O)=O
1058	130924031503260317032802	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C=S1		OC(C1=CC(C)C)=N1=O		NCCO		OC(C)C@H(C)C(O)=S
1059	130924031503260317032805	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C=S1		OC(C1=CC(C)C)=N1=O		NCC1CC(C)C=C2		OC(C)C@H(C)C(O)=S
1060	130924031503260317102804	2		NCC1CCOCC1		OC(C1=CSC(C)C)=N1=O		NCC1=CC=C=S1		OC(C1=CC(C)C)=N1=O		N(C)C@H(C)C1=C=CC=C1[S]		O=C(O)C1=C(C)OC=C1

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
1061	130924031503260817102802	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1 [S]		ClCC1=CC(C(=O)O)=CC=C1
1062	130924031503260817092804	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
1063	130924031504260317022803	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=CN=C1		ClCC1=CC(C(=O)O)=CC=C1
1064	130924031504260317092803	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C1=CSC(C(=O)N)=O
1065	130924031504260517032803	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		NCC(C)C(O)C		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O
1066	130924031509260117012803	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O
1067	130924031509260217012803	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O
1068	130924031509260217032804	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC=C(C(=O)N)=O		NCC1=CC=CC=C1		OC(C1=CSC(C(=O)N)=O
1069	130924031510260317012803	2		NCCC1CCCCC1		OC(C1=CSC(C(=O)N)=O		CC(C)CCN		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O
1070	130924041501260817102804	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C(=O)O)C=C1
1071	130924041501260917012803	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CSC(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O
1072	130924041501260917032808	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CSC(C(=O)N)=O		BrC1=CC=C(C(N)=O)C=C1		OC(C1=CSC(C(=O)N)=O
1073	130924041501261017102802	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1 [S]		ClCC1=CC(C(=O)O)=CC=C1
1074	130924041502260217092804	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1 [R]		CCC(O)=O
1075	130924041502260317032809	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=CC=C1		OC(C1=CC=C(C(=O)N)=O		NCC1CCCCC1		OC(C1=CSC(C(=O)N)=O
1076	130924041502260817012808	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N)=O		BrC1=CC=C(C(N)=O)C=C1		OC(C1=CSC(C(=O)N)=O
1077	130924041502260217032802	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC=C(C(=O)N)=O		NCCO		OC(C1=CSC(C(=O)N)=O
1078	130924041503260917042803	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CSC(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O
1079	13092404150426017032801	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C(=O)N)=O		NCCCN1=CNC2=CC=CC=C2		OC(C1=CSC(C(=O)N)=O
1080	130924041509260217032802	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC=C(C(=O)N)=O		NCCO		OC(C1=CSC(C(=O)N)=O
1081	130924041509260217032809	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		NCC1=CC=C(C(F)F)F=C1		OC(C1=CC=C(C(=O)N)=O		NCC1CCCCC1		OC(C1=CSC(C(=O)N)=O
1082	130924041510260317022806	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		CC(C)CCN		OC(C1=CC=C(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1		ClCC1=CC(C(=O)O)=CC=C1
1083	130924041510260317092803	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		CC(C)CCN		OC(C1=CC=C(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1 [R]		OC(C1=CSC(C(=O)N)=O
1084	130924041510260417032805	2		NCCC1CCCCC1		ClC(C)C=C(C1=CC=CC=C1)O		CC(C)CCN		OC(C1=CC=C(C(=O)N)=O		NCC1OCC(C=O)C=C2O1		OC(C1=CSC(C(=O)N)=O
1085	131024011501260417022809	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCCNC(C)=O		OC(C1=CC=C(C(=O)N)=O		NCC1CCCCC1		ClCC1=CC(C(=O)O)=CC=C1
1086	131024011501261017032803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O
1087	131024011502260217032802	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C(=O)N)=O		NCCO		OC(C1=CSC(C(=O)N)=O
1088	131024011502260417022809	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCCNC(C)=O		OC(C1=CC=C(C(=O)N)=O		NCC1CCCCC1		ClCC1=CC(C(=O)O)=CC=C1
1089	131024011502260917012803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O
1090	131024011502260717042805	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N)=O		NCC1OCC(C=O)C=C2O1		OC(C1=CSC(C(=O)N)=O
1091	131024011503260717032802	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N)=O		NCCO		OC(C1=CSC(C(=O)N)=O
1092	131024011503260717102804	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C(=O)N)=O		N[C@@H](C)C1=CC=CC=C1 [S]		O=C(O)C1=C(C(=O)O)C=C1
1093	131024011504260617012803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C(=O)N)=O		NCCCN1C=CN=C1		OC(C1=CSC(C(=O)N)=O

observation	full_mol_code2	copies	Amines(X1)	Amines(X1):smiles	Acid(X1)	Acid(X1):smiles	Amines(X2)	Amines(X2):smiles	Acid(X2)	Acid(X2):smiles	Amines(X3)	Amines(X3):smiles	Structure of Pair...	Pair3Acids
1094	131024011504260717032801	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CC(F)=C(F)C=C1)=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CC(F)=C(F)C=C1)=O		NCCC1=CNC2=CC=CC=C2		OC([C@H](C)C)=O [S]
1095	131024021501260417102803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		NCCCN1=CN=C1		OC(C1=CC=C(C)C=C1)=O
1096	131024021501260517032802	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=O		NCCO		OC([C@H](C)C)=O [S]
1097	131024021501260717032802	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C)C=C1)=O		NCCO		OC([C@H](C)C)=O [S]
1098	131024021501261017022806	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		N[C@H](C)C1=CC=CC=C1		ClCC1=CC(C(O)=O)=CC=C1
1099	131024021501261017032803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		NCCCN1C=C1		OC([C@H](C)C)=O [S]
1100	131024021502260117032803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCOC		OC(C1=CC(C)C=C1)=O		NCCCN1C=C1		OC([C@H](C)C)=O [S]
1101	131024021502260217032804	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C=C1)=O		NCC1=CC=C1		OC([C@H](C)C)=O [S]
1102	131024021502260717092803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(N(C)C)C=C1		OC(C1=CSC(C)C=C1)=O		N[C@H](C)C1=CC=CC=C1		OC([C@H](C)C)=O [S]
1103	131024021502260417092804	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		N[C@H](C)C1=CC=CC=C1		CCC(O)=O
1104	131024021502260417102803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		N[C@H](C)C1=CC=CC=C1		OC([C@H](C)C)=O [S]
1105	131024021502260517022803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=O		NCCCN1C=C1		ClCC1=CC(C(O)=O)=CC=C1
1106	131024021503260917042803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CSC(C)C=C1)=O		NCCCN1C=C1		OC([C@H](C)C)Br [R]
1107	131024021509260117032804	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C(F)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		NCC1=CC=C1		OC([C@H](C)C)=O [S]
1108	131024021509260317012803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C(F)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		NCCCN1C=C1		OC(C1=CSC(C)C=C1)=O
1109	131024021509260417012803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C(F)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		NCCCN1C=C1		OC(C1=CSC(C)C=C1)=O
1110	131024021509260417022803	2		NCC1=CC(F)=C(F)C=C1		ClCC1=CC(C(O)=O)=CC=C1		NCC1=CC=C(C)C(F)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		NCCCN1C=C1		ClCC1=CC(C(O)=O)=CC=C1
1112	131024031501260317092804	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCC1=CC=CS1		OC(C1=CC(C)C=C1)=O		N[C@H](C)C1=CC=CC=C1		CCC(O)=O
1113	131024031501260417022809	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		NCC1C000C1		ClCC1=CC(C(O)=O)=CC=C1
1114	131024031501260417032809	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		NCC1C000C1		OC([C@H](C)C)=O [S]
1115	131024031501260417102801	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C=C1)=O
1116	131024031501260417102804	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		N[C@H](C)C1=CC=CC=C1		O=C(C)C1=C(C)OC=C1
1117	131024031501260817022802	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		N[C@H](C)C1=CC=CC=C1		OC(C1=CSC(C)C=C1)=O		NCCO		ClCC1=CC(C(O)=O)=CC=C1
1118	131024031501261017012803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		NCCCN1C=C1		OC(C1=CSC(C)C=C1)=O
1119	131024031501261017022803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C)C([C@H](C)C)C(O)=O		NCCCN1C=C1		ClCC1=CC(C(O)=O)=CC=C1
1120	131024031502260417032810	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		NCC1=CC=C(C)C(C)C=C1		OC([C@H](C)C)=O [S]
1121	131024031502260517092804	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCC(C)C(O)		OC(C1=CC=C(C)C=C1)=O		N[C@H](C)C1=CC=CC=C1		CCC(O)=O
1122	131024031503260217012803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC(C)C=C1)=O		NCCCN1C=C1		OC(C1=CSC(C)C=C1)=O
1123	131024031503260417032801	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		NCC1=CNC2=CC=CC=C2		OC([C@H](C)C)=O [S]
1124	131024031503260517032803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=O		NCCCN1C=C1		OC([C@H](C)C)=O [S]
1125	131024031503260517032809	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C=C1)=O		NCC1C000C1		OC([C@H](C)C)=O [S]
1126	131024031503260517032808	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCC1=CC(F)=CC(C(F)F)C=C1		OC(C1=CSC(C)C=C1)=O		BrC1=CC=C(N)C=C1		OC([C@H](C)C)=O [S]
1127	131024031504260417022809	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C)C=C1)=O		NCCN(C)C=O		OC(C1=CC=C(C)C=C1)=O		NCC1C000C1		ClCC1=CC(C(O)=O)=CC=C1

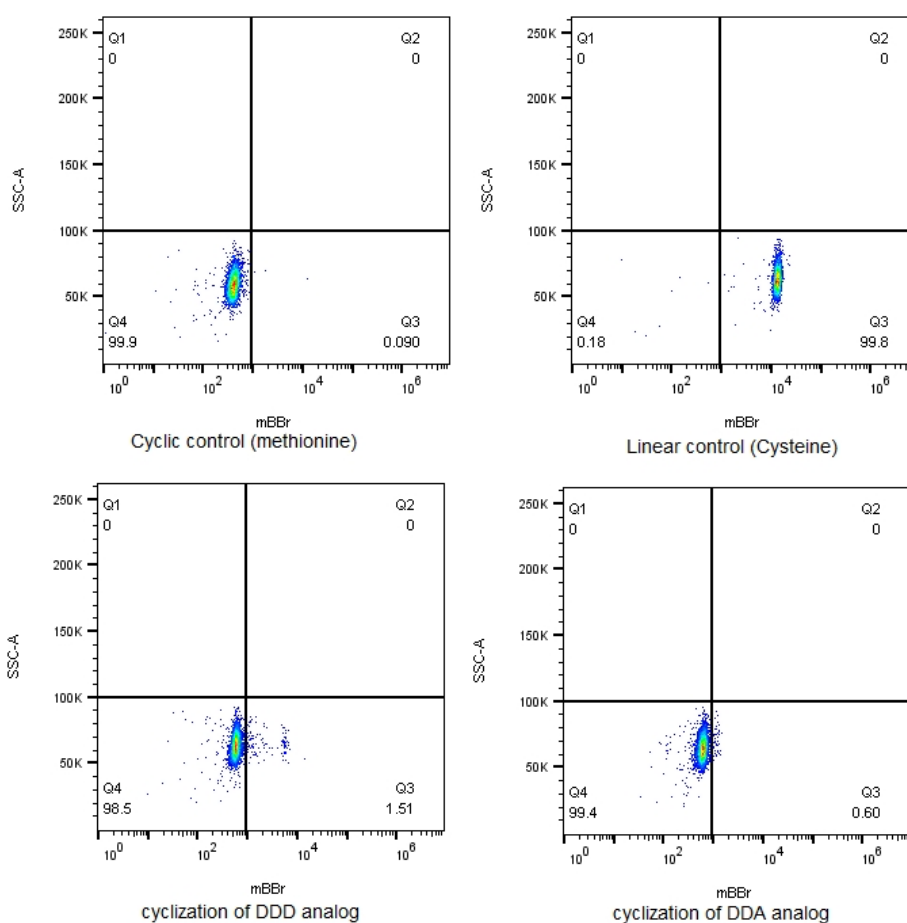
observation	full_mol_code2	copies	Amines(X1)	Amines(X1)-smiles	Acid(X1)	Acid(X1)-smiles	Amines(X2)	Amines(X2)-smiles	Acid(X2)	Acid(X2)-smiles	Amines(X3)	Amines(X3)-smiles	Structure of Pair...	Pair3Acids
1128	131024031504260517102804	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC(C)C(O)		OC(C1=CC=C(C(C)C=C1)=O		N[C@@H](C)C1=CC=CC=C1[S		O=C(O)C1=C(C)OC=C1
1129	131024031504260817032802	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCCO		OC([C@@H](C)C)=O[S
1130	131024031504261017092804	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
1131	131024031509260317102804	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S		O=C(O)C1=C(C)OC=C1
1132	131024031509260417022809	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		NCC1CCCC1		ClC1=CC(C(=O)O)=CC=C1
1133	131024031510260317012803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		CC(C)CCN		ClC(C)=C(C)[C@@H](C)C(O)=O		NCCCN1C=C=C1		OC(C1=CSC(C(=O)N1)=O
1134	131024031510260317032803	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		CC(C)CCN		ClC(C)=C(C)[C@@H](C)C(O)=O		NCCCN1C=C=C1		OC([C@@H](C)C)=O[S
1135	131024031510260417032804	2		NCC1=CC(F)=C(F)C=C1		OC(C1=CSC(C(=O)N1)=O		CC(C)CCN		ClC(C)=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(O)1		OC([C@@H](C)C)=O[S
1136	131024041501260217032805	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(S(=O)(=O)C)C=C1		OC(C1=CC=C(C(=O)N1)=O		NCC1COO(C=C=O)C=C2O1		OC([C@@H](C)C)=O[S
1137	131024041501260417022806	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1		ClC1=CC(C(=O)O)=CC=C1
1138	131024041501260417032806	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1		OC([C@@H](C)C)=O[S
1139	131024041501260417032807	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C(C)C(OC)C=C1		OC([C@@H](C)C)=O[S
1140	131024041501260817032804	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(C)C=C1		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C(O)1		OC([C@@H](C)C)=O[S
1141	131024041501260817032807	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1=CC(C)C(=O)C(OC)C=C1		OC([C@@H](C)C)=O[S
1142	131024041501260917012803	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC(F)=CC(C)C(F)F=C1		OC(C1=CSC(C(=O)N1)=O		NCCCN1C=C=C1		OC(C1=CSC(C(=O)N1)=O
1143	131024041501260917032809	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC(F)=CC(C)C(F)F=C1		OC(C1=CSC(C(=O)N1)=O		NCC1CCCC1		OC([C@@H](C)C)=O[S
1144	131024041502260617032808	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C)C(C)C=C1=O		BrC1=CC=C(C)C=C1		OC([C@@H](C)C)=O[S
1145	131024041502261017092802	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(C)C=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[R]		ClC1=CC(C(=O)O)=CC=C1
1146	131024041503260417032801	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		NCCCN1C=C=C1		OC([C@@H](C)C)=O[S
1147	131024041504260417032804	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		NCC1=CC=C(O)1		OC([C@@H](C)C)=O[S
1148	131024041504260417092804	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCCN(C)C=O		OC(C1=CC=C(C)C)C=C1=O		N[C@@H](C)C1=CC=CC=C1[R]		CCC(O)=O
1149	131024041504260717032802	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(N)C(C)C=C1		OC(C1=CSC(C(=O)N1)=O		NCCO		OC([C@@H](C)C)=O[S
1150	131024041504260717032805	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1		OC(C1=CSC(C(=O)N1)=O		NCC1COO(C=C=O)C=C2O1		OC([C@@H](C)C)=O[S
1151	131024041509260317032803	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		NCCCN1C=C=C1		OC([C@@H](C)C)=O[S
1152	131024041509260317102804	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1[S		O=C(O)C1=C(C)OC=C1
1153	131024041509260417022806	2		NCC1=CC(F)=C(F)C=C1		ClC(C)C=C(C)[C@@H](C)C(O)=O		NCC1=CC=C(C)C(F)F=C1		ClC(C)=C(C)[C@@H](C)C(O)=O		N[C@@H](C)C1=CC=CC=C1		ClC1=CC(C(=O)O)=CC=C1

Section 11: Analysis of ring-closure via the Michael (thiol-enone) reaction

Linear analogs of DDD and DDA were synthesized with acrylic acid at the X3 position on 10 & 160 μM beads following general SPS method. Compound DDD and DDA have complete cyclization after 8hrs. Thiol protecting STMP group was removed from the linear precursor and it was suspended in 2x PBST buffer at 37°C for 12 hrs. DMSO solution of BnBr was added to beads suspended in PBST buffer (final conc, 1.0M, 150uL) and incubated for an hour at 37°C. Similarly, 10 μM beads were treated with DMSO solution of mBBr dye (final conc, 1mM, 150ul, PBS). After thiol alkylations, they were washed, 160 μM beads were TFA cleaved and analyzed over LCMS. 10 μM beads were suspended in PBST buffer, transferred to BD FACS tube and their fluorescence was measured.

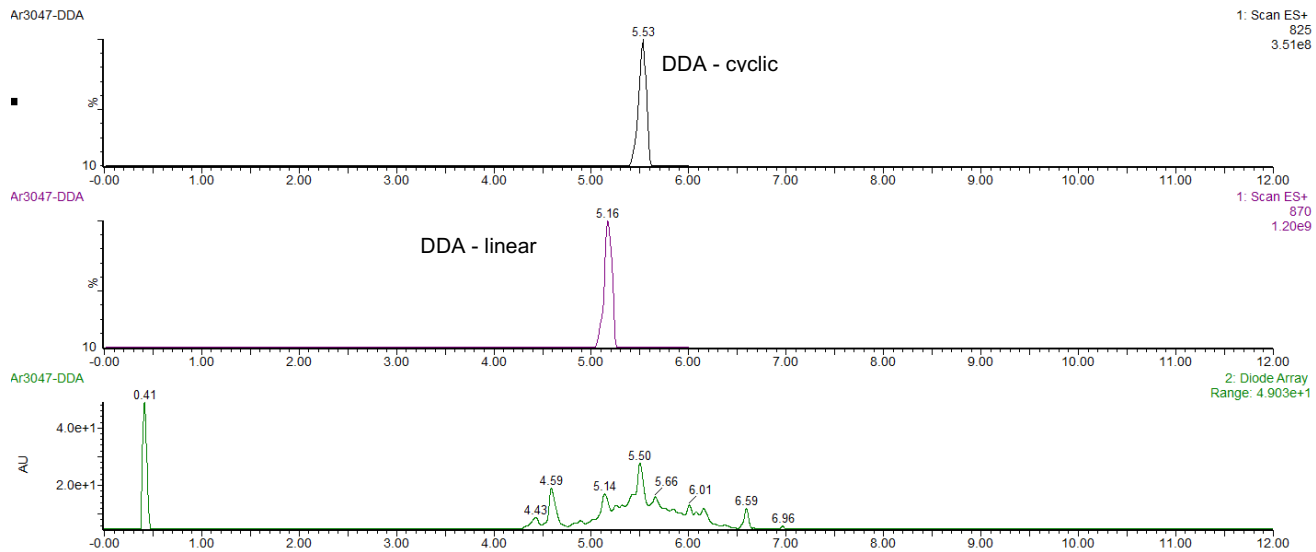
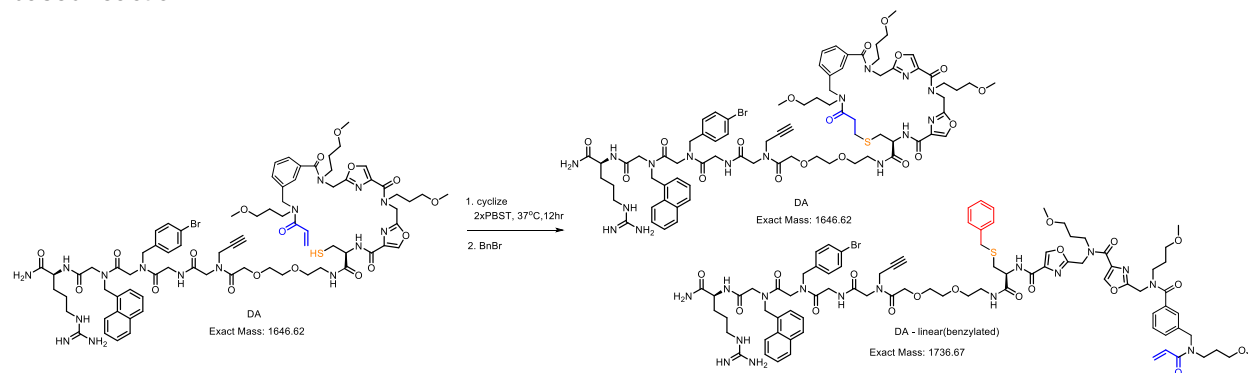
Incomplete cyclization was observed for both DDD and DDA analogs for thiol-ene based ring closure.

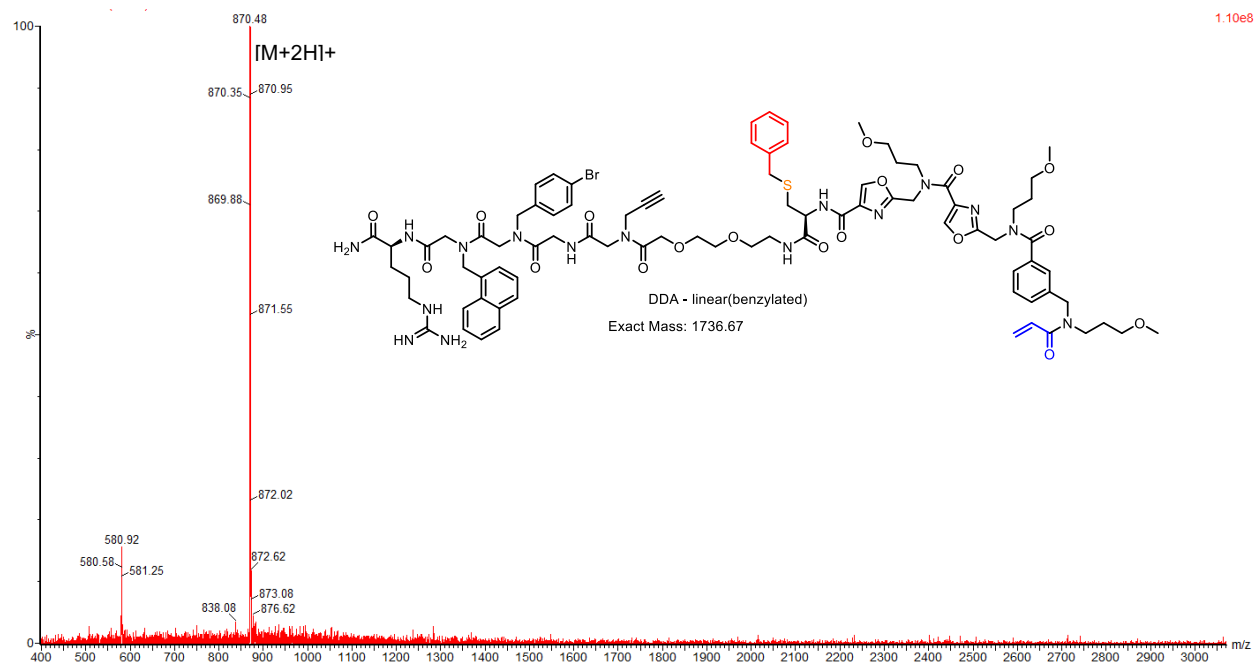
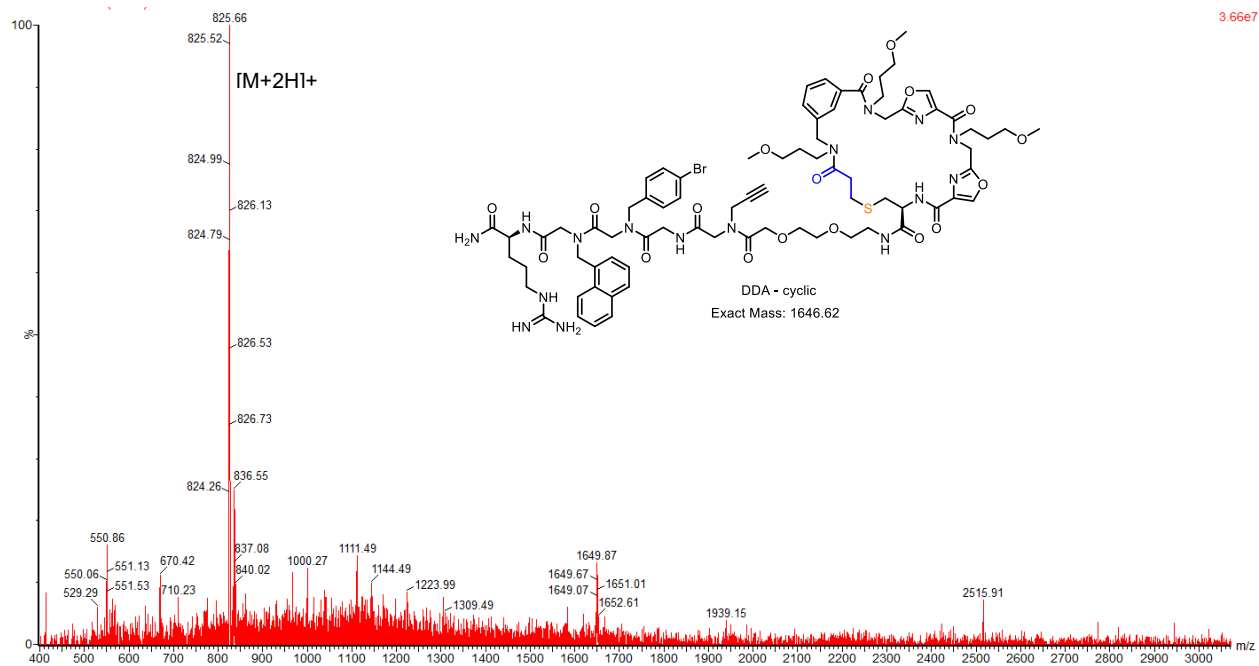
Analysis of ring-closure via flow-cytometry:



Cyclization of DDA-analog:

Incomplete cyclization was observed on 160 μM beads but 10 μM beads seems to have completed cyclization. Ring closure via thiol-ene reaction appears to be slower compared to halide displacement based reaction.





Cyclization of DDD analog:

Incomplete cyclization was observed on 160 μM beads but 10 μM beads seems to have completed cyclization. Ring closure via thiol-ene reaction appears to be slower compared to halide displacement based reaction.

