

Supplemental information

**Accurate *de novo* design
of membrane-traversing macrocycles**

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Table S1: RMSD between the designed models and X-ray crystal structures of the 7- and 8-amino acid macrocycles. Related to Figure 1.

Design Name	RMSD (CA only) (Å)	RMSD backbone (C+N+CA+O+CN) (Å)	RMSD All Heavy Atoms (Å)
D7.6	0.22	0.35	0.9
D7.8	0.31	0.5	1.43
D8.1	0.2	0.21	0.85
D8.2	0.2	0.24	0.86
D8.3.p1*	0.56	0.57	1.23
D8.3.p2	0.92	1.1	1.25
D8.5.p2	0.11	0.24	0.55
D8.6	1.04	1.35	1.56
D8.9	0.7	1.04	1.65
D8.10	0.22	0.35	0.96
D8.12	0.29	0.48	0.79
D8.13	0.63	0.65	1.78
D8.14	0.46	0.5	1.17
D8.15	0.34	0.42	0.98
D8.17	1.25	1.7	3.14
D8.19	2.43	2.24	4.13
D8.25	0.28	0.95	1.07
D8.26	0.57	0.7	1.07

*D8.3 peak 1 matches closely with the alternate low-energy state from structure prediction calculations and the X-ray crystal structure shows cis-trans isomerization around one of the prolines and racemization of residue 1 from chemical synthesis.