

## Supplementary Material:

Self-Association and Membrane-Binding Behavior of  
Melittins Containing Trifluoroleucine

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Pasadena, CA 91125**Table 1:** NH and C $\alpha$ H proton chemical shifts of M-13tfl-A and -B derived via 2D-NMR.

Residue #	Amide Region Chemical Shift [ppm]			C $\alpha$ Region Chemical Shift [ppm]		
	M-13tfl-A	M-13tfl-B	wt	M-13tfl-A	M-13tfl-B	wt
Ile 2	9.02	9.01	9.00	4.01	4.05	4.03
Gly 3	8.91	8.90	8.80	3.83	3.87	3.92
Ala 4	7.89	7.87	7.97	4.04	4.07	4.06
Val 5	7.47	7.45	7.47	3.56	3.59	3.57
Leu 6	8.22	8.21	8.22	4.05	4.09	4.06
Lys 7	8.22	8.21	8.23	4.05	4.09	4.05
Val 8	8.12	8.11	8.12	3.66	3.69	3.70
Leu 9	8.31	8.30	8.27	4.12	4.15	4.14
Thr 10	8.13	8.13	8.07	4.07	4.10	4.15
Thr 11	7.86	7.89	7.83	4.23	4.27	4.31
Gly 12	8.17	8.22	8.17	4.10	4.14	4.09
Leu 13	8.29	8.30	8.28	4.51	4.51	4.40
Ala 15	7.74	7.52	7.53	4.15	4.14	4.13
Leu 16	8.00	8.01	8.05	4.21	4.24	4.23
Ile 17	8.32	8.35	8.48	3.73	3.73	3.72
Ser 18	8.14	8.19	8.16	4.07	4.10	4.11
Trp 19	8.31	8.35	8.33	4.29	4.31	4.28
Ile 20	8.50	8.51	8.52	3.48	3.52	3.48
Lys 21	8.39	8.40	8.38	3.85	3.88	3.89
Arg 22	8.21	8.21	8.22	4.03	4.06	4.02
Lys 23	8.31	8.30	8.30	3.92	3.95	3.92
Arg 24	8.19	8.18	8.18	4.03	4.06	4.03
Gln 25	7.93	7.92	7.92	4.09	4.12	4.09
Gln 26	7.76	7.75	7.74	4.16	4.18	4.36

**Table 2:** Complete proton chemical shifts for Leu13 of M-13tfl-A and -B derived via 2D-NMR.

	NH	C $\alpha$ H	C $\beta$ H	C $\beta$ H	C $\gamma$ H	C $\delta$ H
M-13tfl-A Leu 13	8.29	4.51	2.46	1.80	2.67	1.15
M-13tfl-B Leu 13	8.30	4.51	2.37	2.11	2.49	1.29



