Table 3 Thermodynamic parameters of binding of peptides to POPC vesicles at 25 °C.

Compound	$\Delta H^{\rm a}$ (kcal/mol)	$K^{\rm b} ({ m M}^{-1})$	G ^c (kcal/mol)	$\Delta S^{ m d}$ (cal/mol K)
23	0.67	211.0	-5.54	20.84
36	0.65	365.60	-5.87	21.87
29	1.79	192.83	-5.49	24.43
37	1.81	424.55	-5.96	26.07
M2a ^e	-15.9	2000.0	-7.0	-29.4

 $^{^{\}rm a}$ ΔH values are directly measured binding enthalpies and calculated using Eq. (2).

- ^c Free energies were calculated using Eq. (3).
- ^d Entropy was calculated using Eq. (4).
- ^e Thermodynamic parameters for magainin analog M2a as presented by Wieprecht et al.

Table 1Amino acid sequences of the peptides used in this study (Hicks et al., 2007).

Compound Number	Amino Acid Sequence	Spacer length (Å)a
23	Ac-GF-Tic-Oic-GK-Tic-Oic-GF-Tic-Oic-GK-Tic-KKKK-CONH ₂	2.46
29	Ac-Gaba-F-Tic-Oic-Gaba-K-Tic-Oic-Gaba-F-Tic-Oic-Gaba-K-Tic-KKKK-CONH2	4.68
36	Ac-βAla-F-Tic-Oic-βAla-K-Tic-Oic-βAla-F-Tic-Oic-βAla-K-Tic-KKKK-CONH2	2.94
37	Ac-Ahx-F-Tic-Oic-Ahx-K-Tic-Oic-Ahx-F-Tic-Oic-Ahx-K-Tic-KKKK-CONH ₂	6.91

^a Spacer length is defined as the distance between the carbonyl atom and the amide nitrogen.

^b Binding constants were generated from the lipid-into-peptide titration using as described in the text.