Supporting Information

Vesicle leakage reflects target selectivity of antimicrobial lipopeptides from *Bacillus subtilis*

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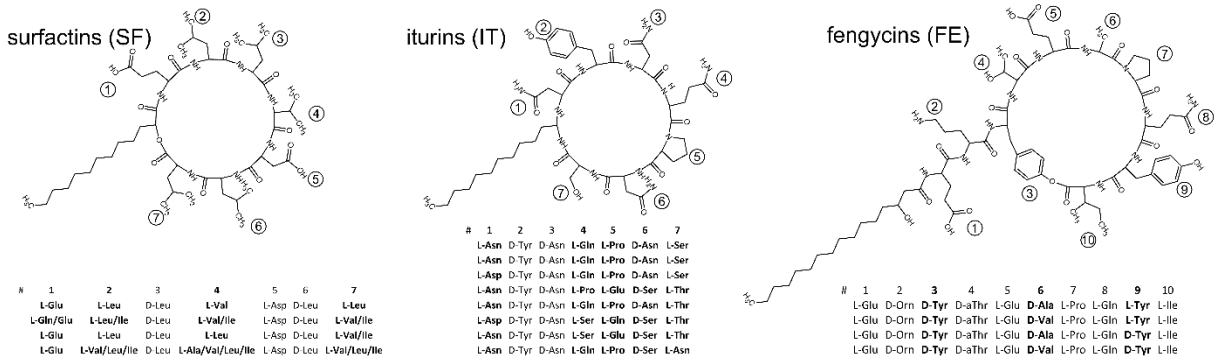

#	1	2	3	4	5	6	7
	L-Glu	**L-Leu**	D-Leu	**L-Val**	L-Asp	D-Leu	**L-Leu**
	L-Gln/Glu	**L-Leu/Ile**	D-Leu	**L-Val/Ile**	L-Asp	D-Leu	**L-Val/Ile**
	L-Glu	L-Leu	D-Leu	**L-Leu**	L-Asp	D-Leu	**L-Val/Ile**
	L-Glu	**L-Val/Leu/Ile**	D-Leu	**L-Ala/Val/Leu/Ile**	L-Asp	D-Leu	**L-Val/Leu/Ile**

#	1	2	3	4	5	6	7
	L-Asn	D-Tyr	D-Asn	**L-Gln**	**L-Pro**	**D-Asn**	L-Ser
	L-Asn	D-Tyr	D-Asn	**L-Gln**	**L-Pro**	**D-Asn**	L-Ser
	L-Asp	D-Tyr	D-Asn	**L-Gln**	**L-Pro**	**D-Asn**	L-Ser
	L-Asn	D-Tyr	D-Asn	**L-Pro**	**L-Glu**	**D-Ser**	**L-Thr**
	L-Asn	D-Tyr	D-Asn	**L-Gln**	**L-Pro**	**D-Asn**	**L-Thr**
	L-Asp	D-Tyr	D-Asn	**L-Ser**	**L-Gln**	**D-Ser**	**L-Thr**
	L-Asn	D-Tyr	D-Asn	**L-Ser**	**L-Glu**	**D-Ser**	**L-Thr**
	L-Asn	D-Tyr	D-Asn	**L-Gln**	**L-Pro**	**D-Ser**	**L-Asn**

#	1	2	**3**	4	5	**6**	7	8	**9**	10
	L-Glu	D-Orn	**D-Tyr**	D-aThr	L-Glu	**D-Ala**	L-Pro	L-Gln	**L-Tyr**	L-Ile
	L-Glu	D-Orn	**D-Tyr**	D-aThr	L-Glu	**D-Val**	L-Pro	L-Gln	**L-Tyr**	L-Ile
	L-Glu	D-Orn	**D-Tyr**	D-aThr	L-Glu	**D-Ala**	L-Pro	L-Gln	**D-Tyr**	L-Ile
	L-Glu	D-Orn	**D-Tyr**	D-aThr	L-Glu	**D-Val**	L-Pro	L-Gln	**D-Tyr**	L-Ile

Figure SI1. Structures of B. subtilis lipopeptides including their most common variants. For more details refer to: Ongena, M., and P. Jacques. 2008. Trends Microbiol. 16:115-125.

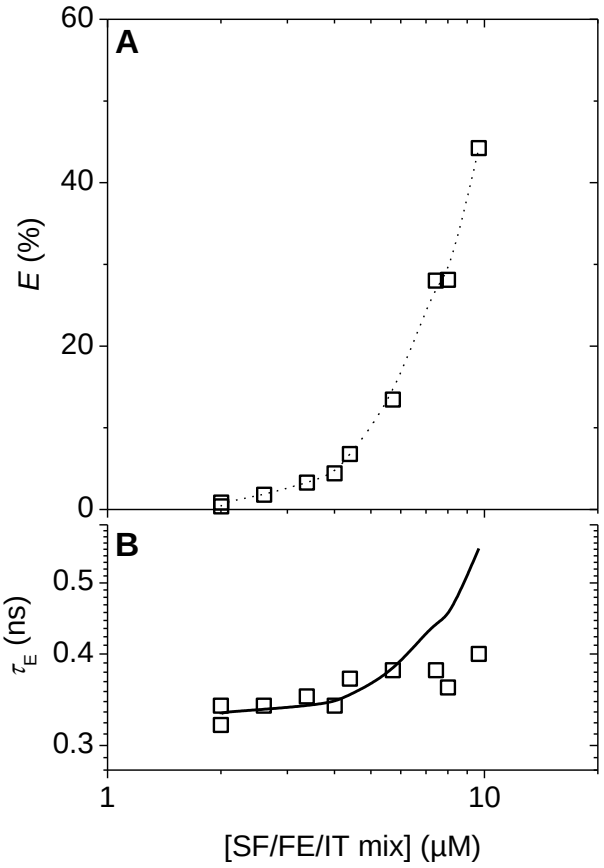

Figure SI2. SF/IT/FE mix-induced leakage of 30 µM POPC vesicles. (A) Dye efflux after 1 h, E, as a function of SF/IT/FE mix concentration. Dotted lines guide the eye. (B) Lifetime of entrapped dye, τ_E, as a function of SF/IT/FE mix concentration. Solid lines simulate τ_E for ideal homogeneously graded leakage (Eqs. 3 and 4 of the main text).

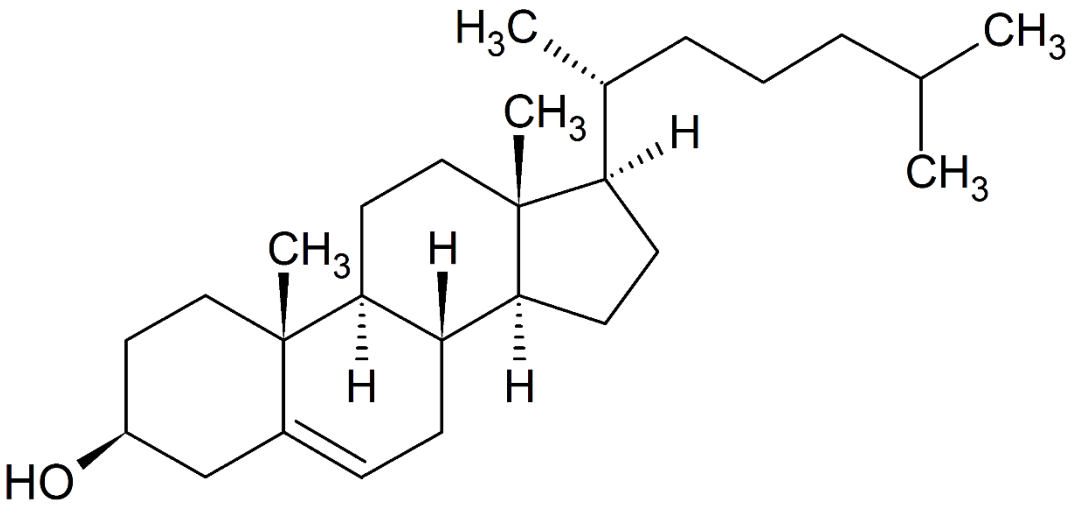

Figure SI3. Structural formula of Cholesterol.

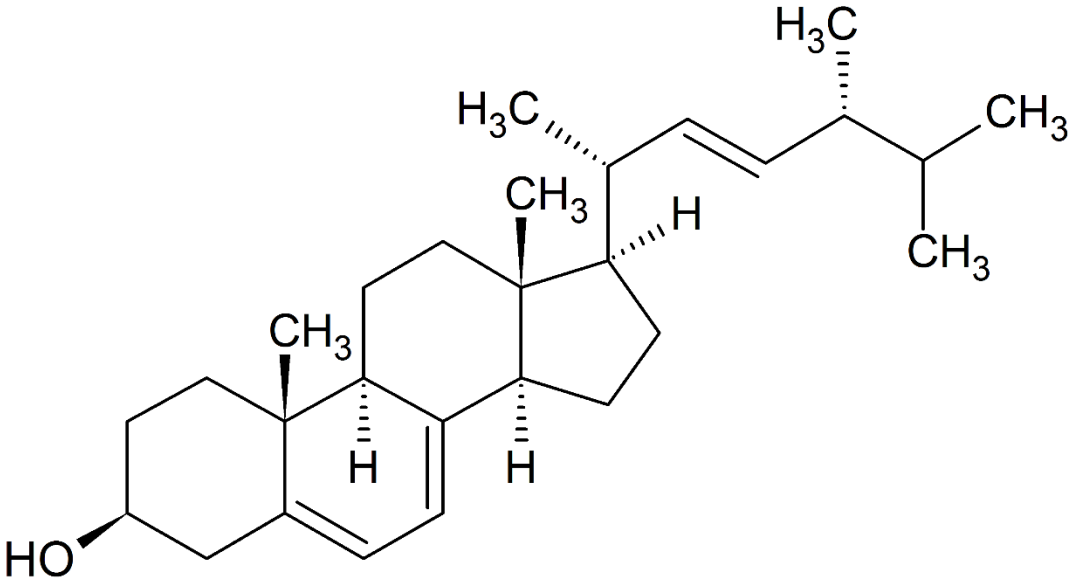

Figure SI4. Structural formula of Ergosterol.

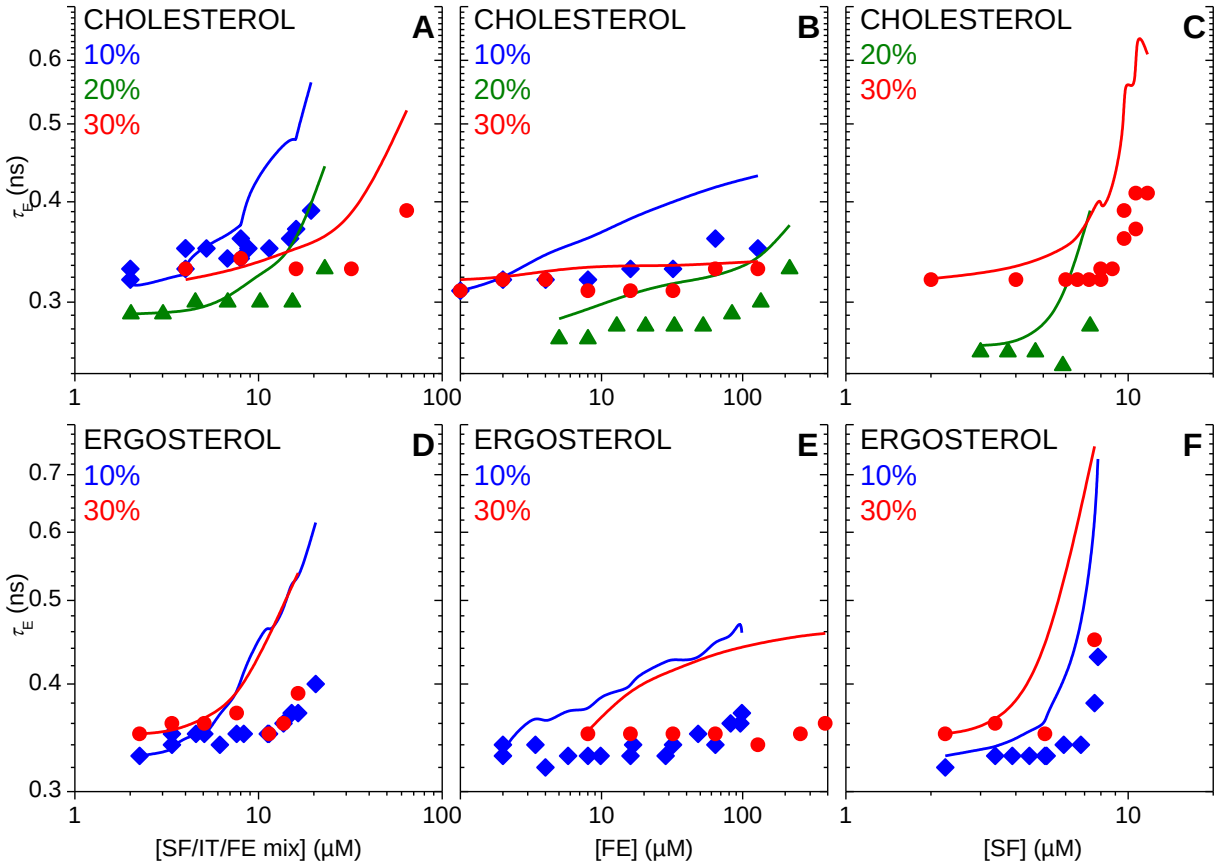

Figure SI5. Lifetime of entrapped dye, τ_E, as a function of lipopeptide concentration as obtained by leakage of 30 μM POPC vesicles containing cholesterol (A–C) or ergosterol (D–E) induced by surfactins (SF)/iturins (IT)/fengycins (FE) natural mixture (A/D), FE (B/E), and SF (C/F), respectively. Lines indicate simulated values of τ_E for ideal homogeneously graded leakage mechanisms (Eqs. 3 and 4 of the main text). Squares, diamonds, triangles, and circles represent pure POPC, 10% sterol, 20% sterol, and 30% sterol, respectively.