Table S5. List of peptide mechanism from literature.
PDB id, binding energy and activity of these peptides can be found in the table S2.

Peptide	Mechanism
CA-MA hybrid peptides	Possibly pore forming because of voltage induced conductance[1]. But membrane broke down after certain amount of time.
CM15	Osmoprotection reveals that the pore size in bacterial membranes is 2.2-3.8nm in diameters[2].
Melittin	Pore forming in zwitterionic membrane (DTPC bilayer, R_{in}=21Å, R_{out}=38.5Å) [3]but detergent-like in anionic membranes[4,5].
Cecropin A	Possibly ion channel because voltage-dependent single channel conductance is recorded[6].
Latarcins	Latarcin1 or Latarcin7 seems to form pore in DOPE/DOPG and DPhPC[7]. But the rest latarcins may adopt detergent-like mechanism[8]. Evidences are not solid though. Latarcin2a is pore-forming in erythrocyte membrane suggested by osmoprotection[9].
Oxyopinins	Oxt1 and 2a were suggested to form pore on PC vesicles but not on PA/PE vesicles[10]. Oxt4a has a Rana-box at the terminus which resembles the structure of C terminus of gaegurin-4 and ranatuerin-2CSa[11]. Pore mechanism is speculated.
Cupiennin 1a	Toroidal pore mechanism is suggested in anionic lipids[12] to explain the mobility of head groups but may also attack intra-cellular target(inhibits nitric oxide synthase)[13]. However, the effect of peptide on DMPC is different from the anionic lipids.
Mastoparan M	No information but Mastoparan-X forms pore[14].
Aurein 1.2	Surface active instead of pore formation[15]
Gaegurin -4	Pore forming indicated by the ion permeability experiment[16].
Ranatuerin-2CSa	No information available but the peptide has a structure quite similar to Gaegurin-4
Dermadistinctin K	Possibly toroidal pore[17]. ^{31}P NMR line shape can only be explained if 50% head groups are randomly aligned and 50% head groups are oriented 2-30^{o}
Dermaseptin-S1	Suggested to be detergent-like because it only induces leakage at extremely high peptide/lipid ratio[18].
Magainin 2	Form toroidal pore in both neutral(DMPC) and anionic membranes[19]. It may adopt detergent-like mechanism in eukaryotic cell membranes though[20].
SMAP-29	Possibly pore forming[21]. But no actual evidence was given.
Ovispirin	It orient predominately parallel to the membrane surface, thus is considered to be adopting carpet mechanism[22].
LL-37	Previously suggested to be 'carpet' mechanism because it orients parallel to membrane surface[23]. The pore structure in DOPC/DOPE bilayers is however determined from neutron diffraction[24]. The radius of the pore is 23-33Å.
CAP18	Formation of transient lesions under voltage[25]. Possibly pore forming.
Fowlicidin	Fowl-1 aggregates in membrane mimicking solvents [26]. But no actual evidence for pore formation.

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Peptide	Mechanism
Indolicidin	Tryptophan location indicates 'Carpet' model on PC membranes[27] but with increased fraction of PG in the membrane, indolicidin starts to order the lipid acyl chains and this may be an indication of pore formation[28].
Human granulysin	Possibly intra-cellular pathways[29] because cell died in apoptotic but not necrotic ways.
Pleurocidin	Indicated by dye release experiment, it forms pore like magainin[30].
Piscidin 1	Single channel experiments indicate toroidal pore[31].
Warnericin-RK	Osmotic protection show that the pore in erythrocyte membranes can be as large as 5.7nm in diameter[32]. The author suggested that pore formation is not likely to be stable.
δ-hemolysin	Crystal structure shows that the pore is formed by 6-8 peptides[33].
HP(2-20)	Generates size dependent dype release in osmoprotection experiment for both PC and PG vesicles[34]. Supporting pore forming mechanism.
Alamethicin	Barrel-stave pore in DLPC membrane[35].
Pardaxin	Voltage induced multi-level channel in neutral membrane[36]. However, it is suggested to adopt detergent-like mechanism in the presence of PG[37].

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