Supplementary Materials

Title:
High Cell Selectivity and Bactericidal Mechanism of Symmetric Peptides Centered on D-Pro–Gly Pairs

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Figure S1. The MALDI-TOF MS of IRGG (a), IRpG (b), FRGG (c), FRpG (d), LRGG (e), LRpG (f) and LRα (g).
(d) Chromatogram

Detected A Chl / 214nm

PeakTable

| Peak | Ret. Time | Area   | Height | Area %  | Height % |
|------|-----------|--------|--------|---------|----------|
| 1    | 10.192    | 53083  | 5429   | 0.190   | 0.411    |
| 2    | 12.086    | 105795 | 1055   | 0.155   | 0.589    |
| 3    | 13.752    | 38185101 | 1700530 | 60.102  | 99.999   |
| Total| 38486177 | 1808505 | 100.000 | 100.000 |

(e) Chromatogram

Detected A Chl / 214nm

PeakTable

| Peak | Ret. Time | Area   | Height | Area %  | Height % |
|------|-----------|--------|--------|---------|----------|
| 1    | 9.294     | 7005032 | 564679 | 99.045  | 98.718   |
| 2    | 10.654    | 15052   | 1099   | 0.215   | 0.207    |
| 3    | 11.340    | 22329   | 2858   | 0.457   | 0.400    |
| 4    | 12.198    | 12028   | 2777   | 0.266   | 0.435    |
| Total| 7074500   | 572014  | 100.000 | 100.000 |

(f) Chromatogram

Detected A Chl / 214nm

PeakTable

| Peak | Ret. Time | Area   | Height | Area %  | Height % |
|------|-----------|--------|--------|---------|----------|
| 1    | 0.760     | 7041113 | 880803 | 98.610  | 98.042   |
| 2    | 7.985     | 80078   | 4450   | 0.701   | 0.888    |
| 3    | 9.199     | 116341  | 1769   | 0.233   | 0.455    |
| 4    | 9.938     | 14363   | 1292   | 0.201   | 0.431    |
| 5    | 10.700    | 18138   | 1175   | 0.250   | 0.503    |
| Total| 7150344   | 188505  | 100.000 | 100.000 |
Figure S2. The HPLC spectra of IRGG (a), IRpG (b), FRGG (c), FRpG (d), LRGG (e), LRpG (f) and LRα (g).

Figure S3. The helical wheel projections of LRGG (a), LRpG (b) and LRα (c). The blue represents positively charged residues. The yellow represents hydrophobicity residues. The gray and green represent glycine and proline, respectively.

Figure S4. Cytotoxicity of the designed peptides against HEK293T cells.