

Supporting Information

Enhanced Gene Transfection Efficiency by Use of Peptide Vectors Containing Laminin Receptor Targeting Sequence YIGSR

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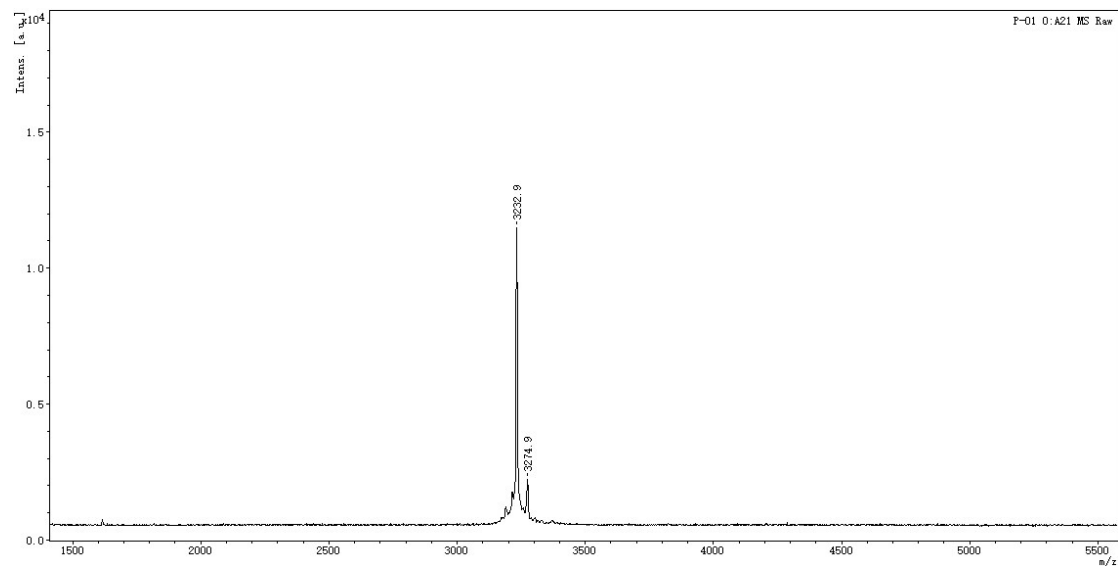
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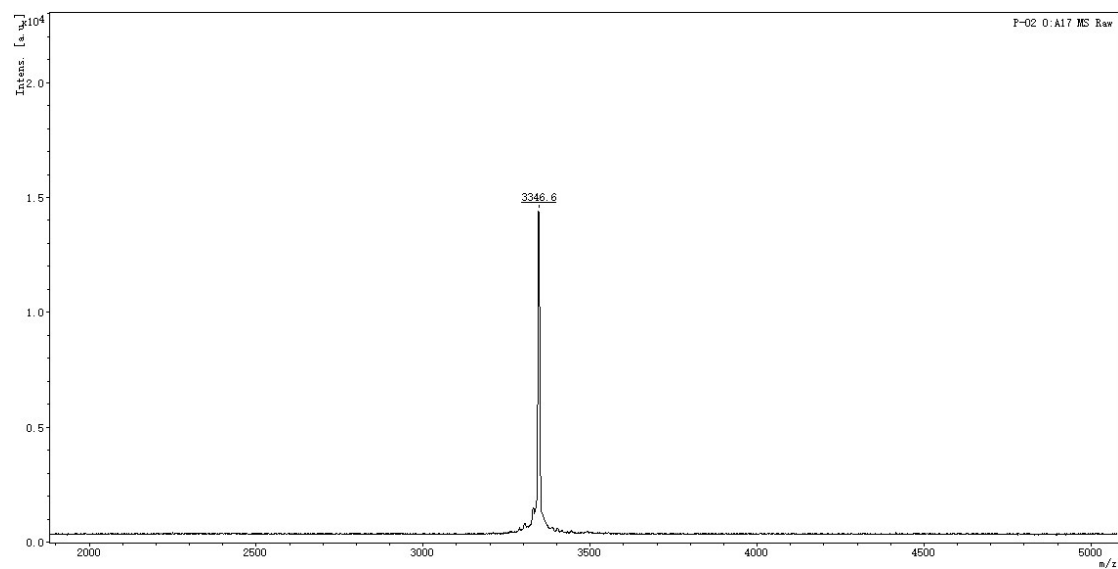
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Figure S1 MALDI-TOF mass of peptide vectors

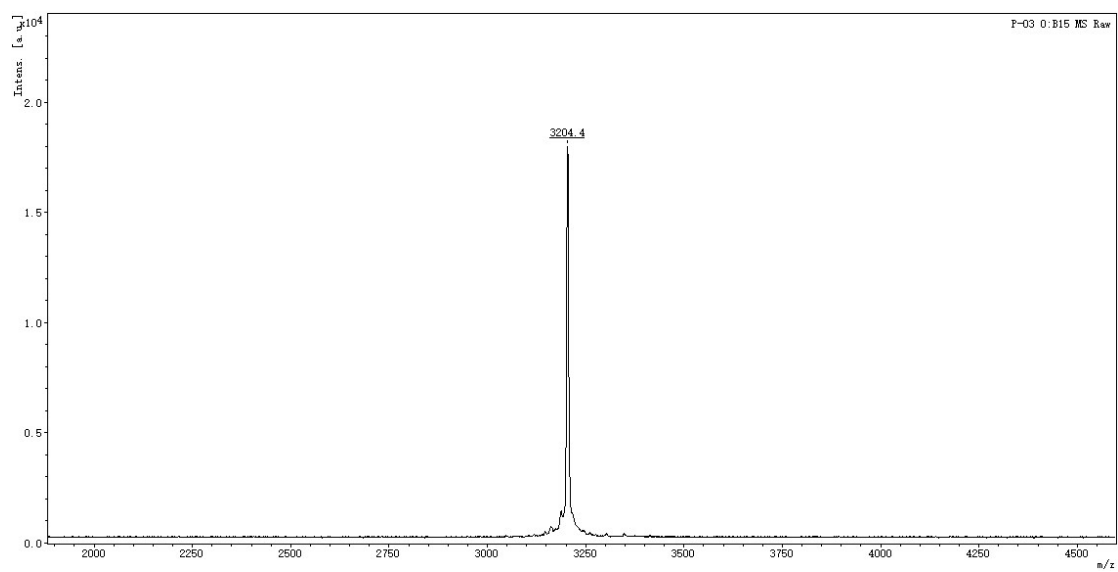
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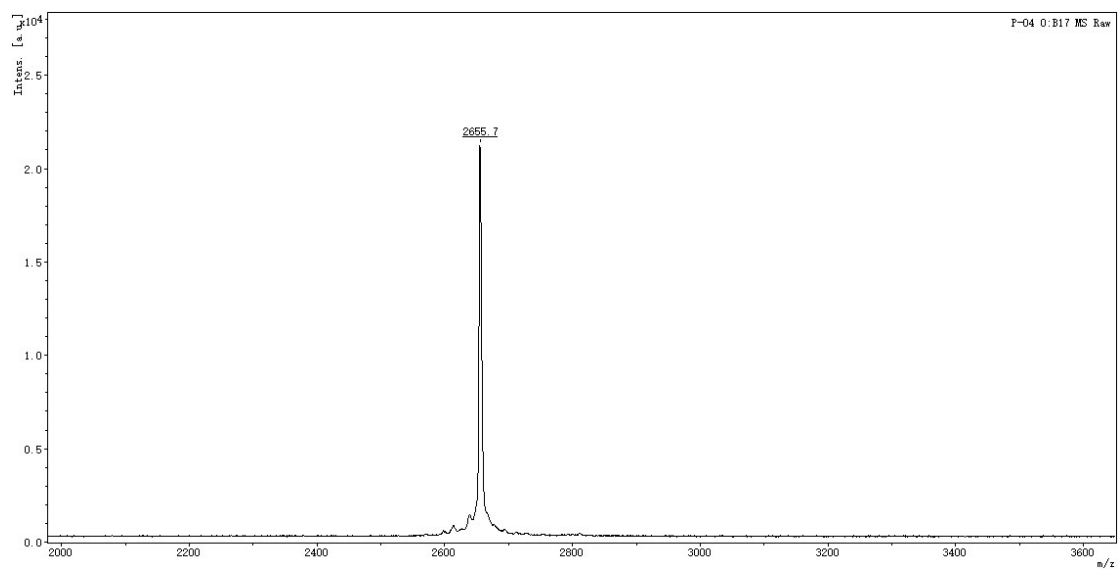
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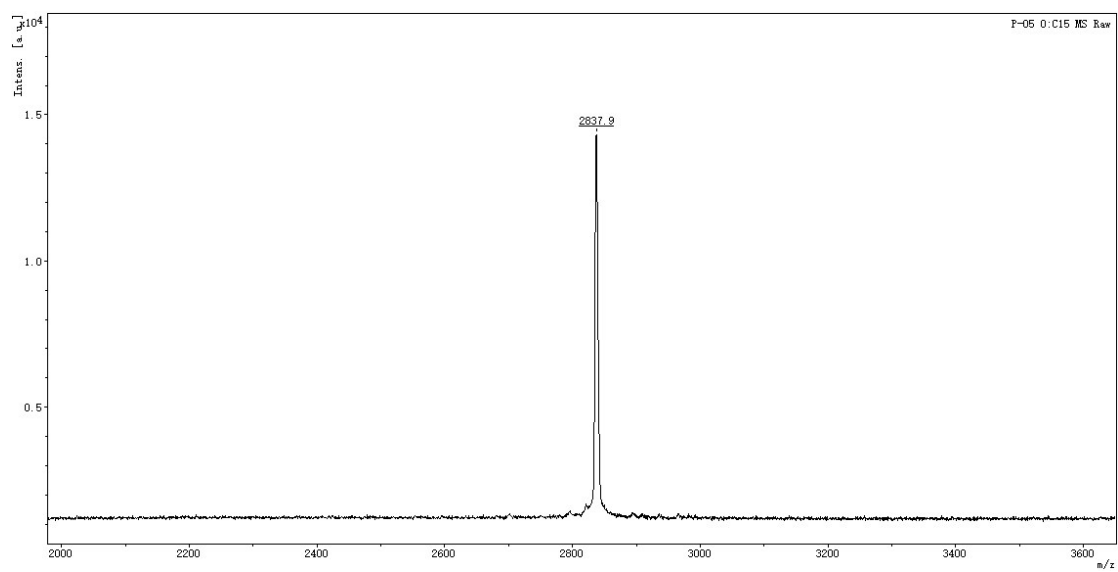
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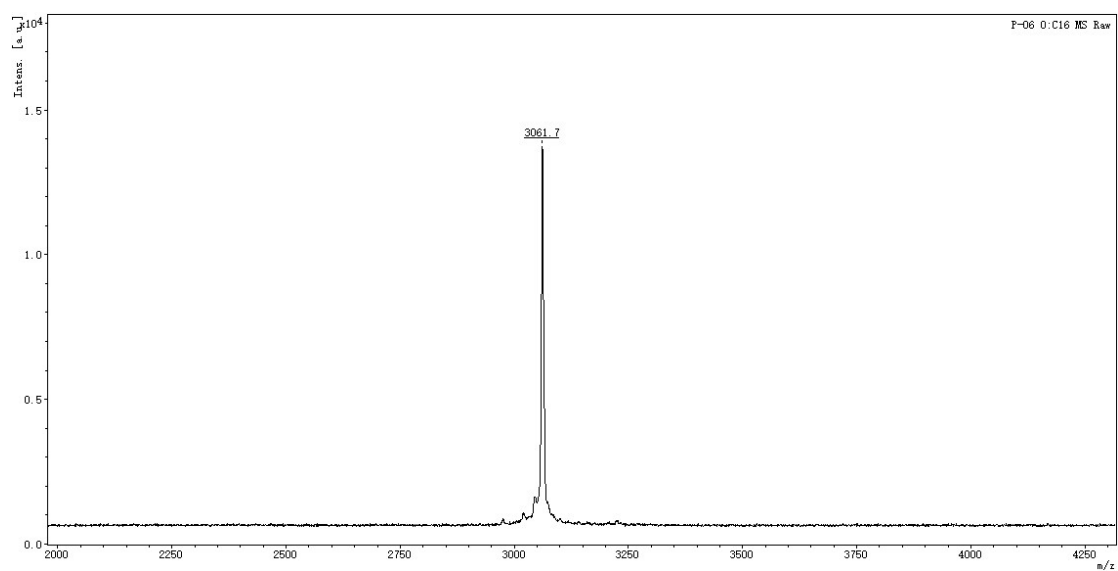
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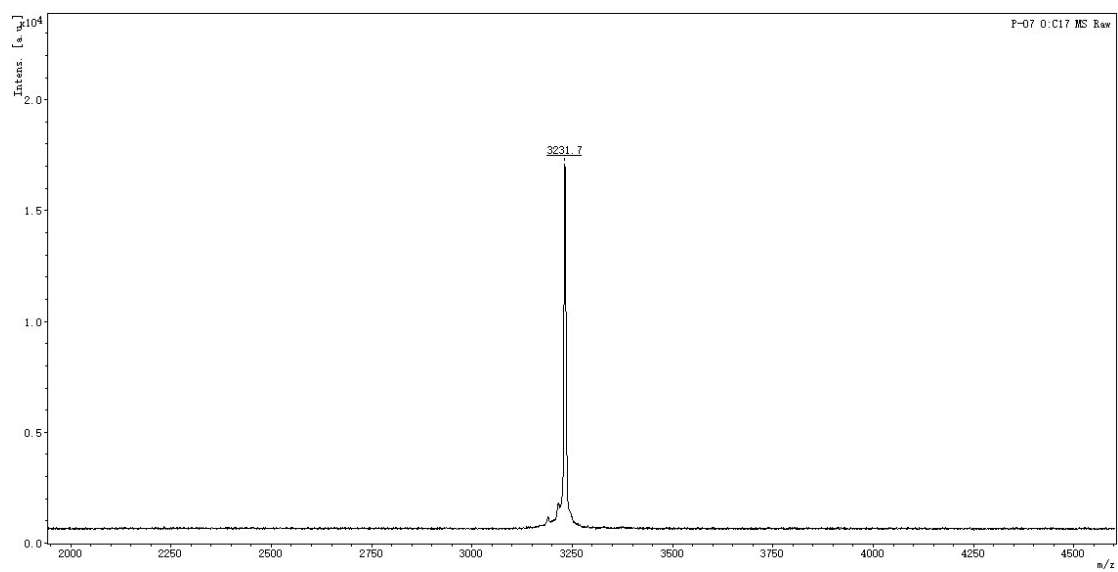
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P-06



P-07



P-08

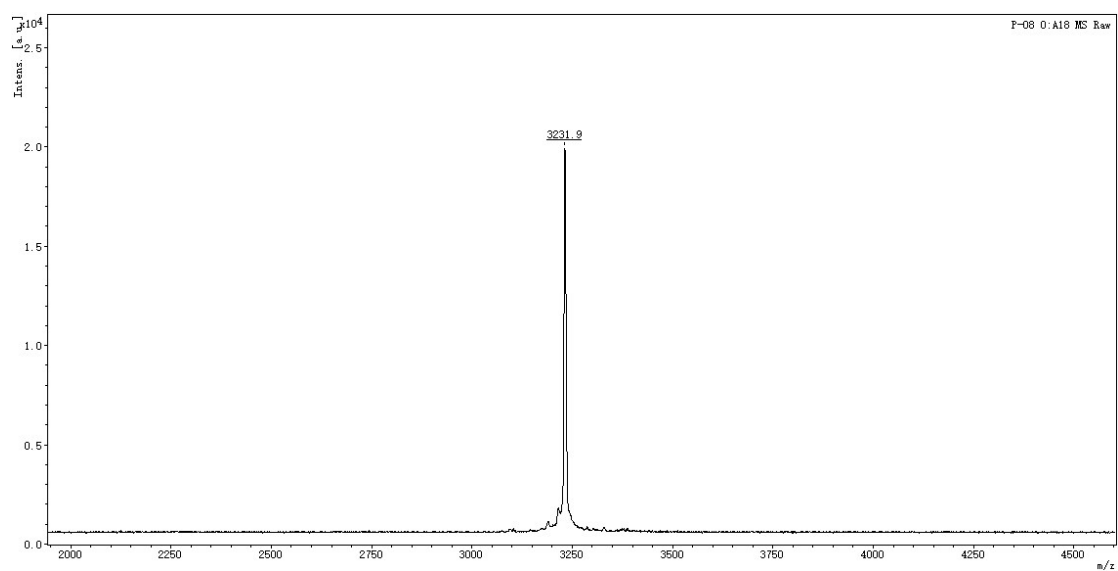
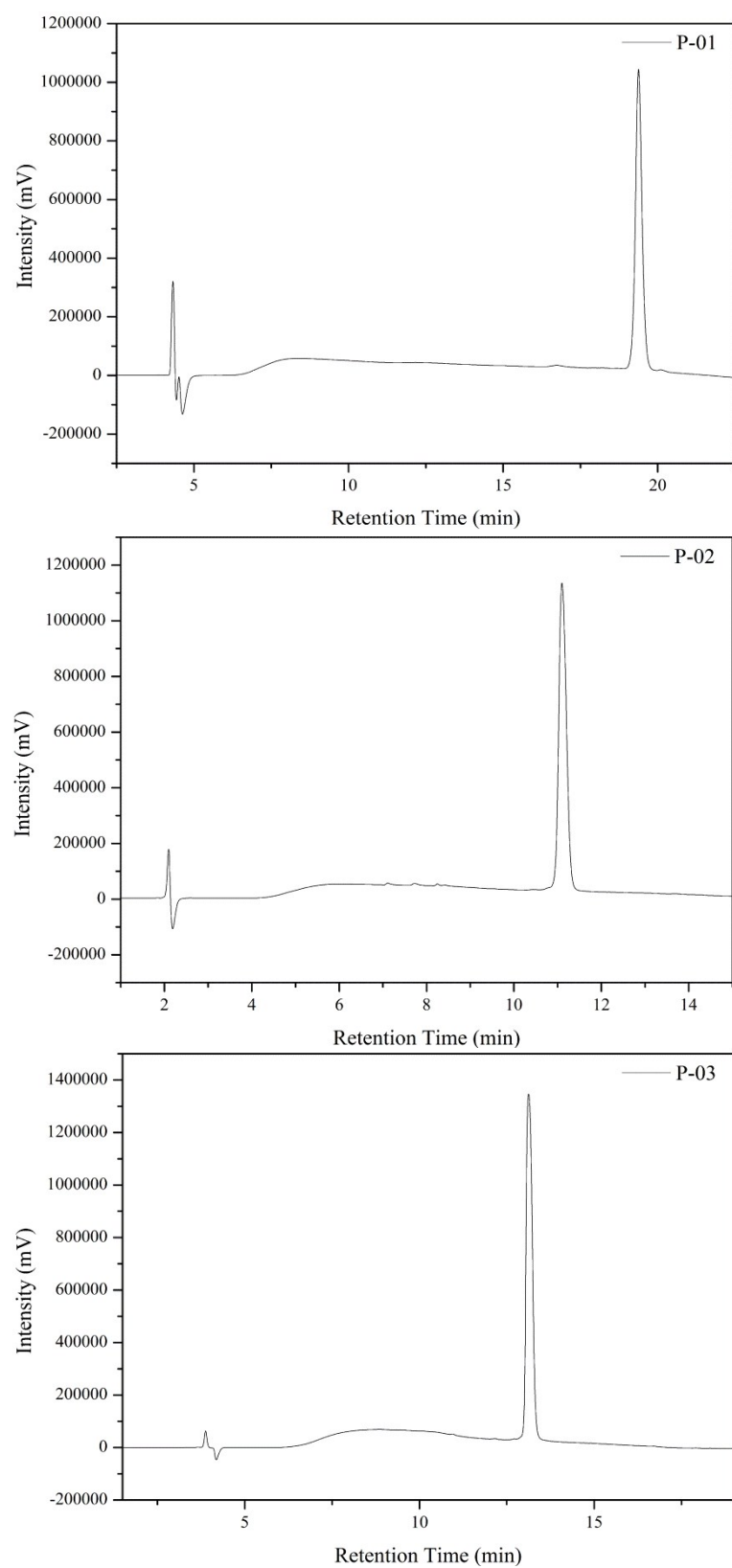
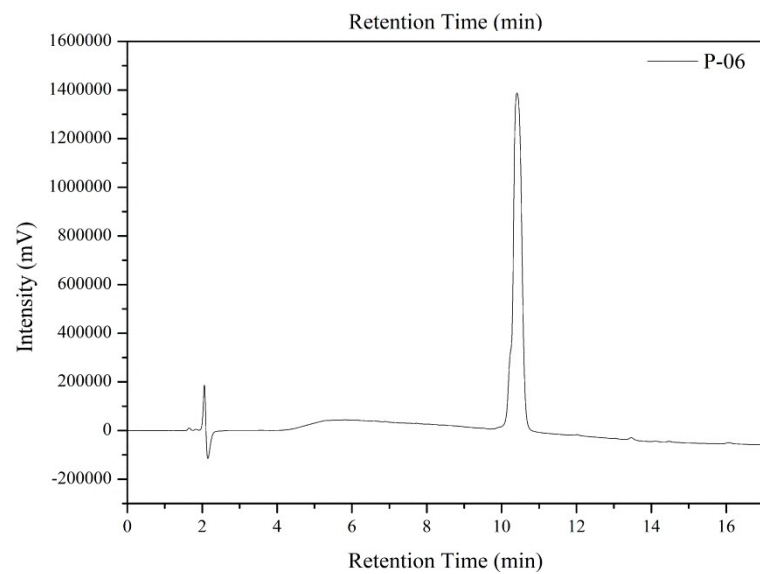
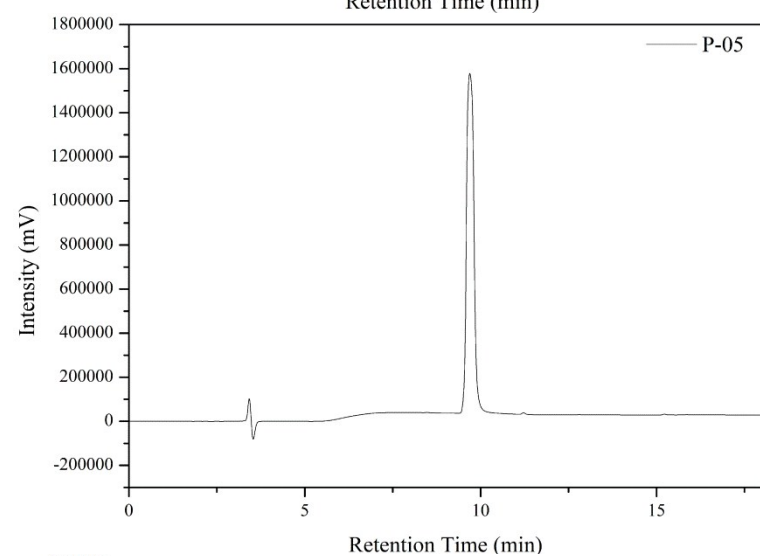
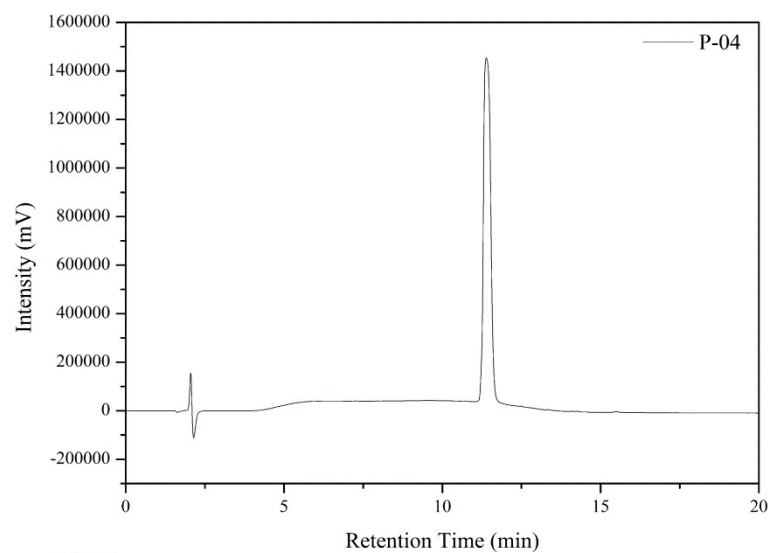


Figure S2 RP-HPLC of peptide vectors





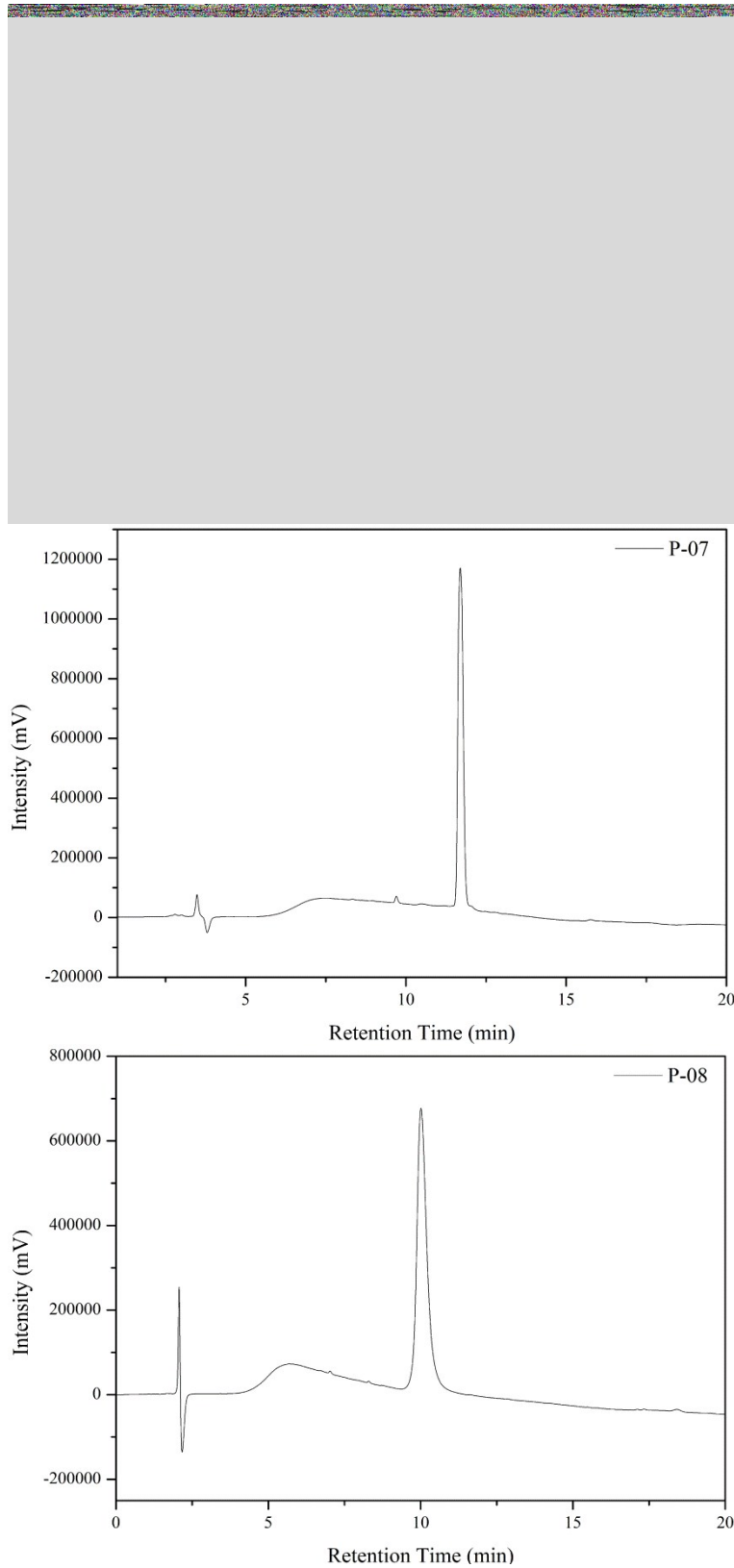


Figure S3 Agarose gel electrophoresis assay of naked DNA and P-01/DNA complexes in the presence of DNase I at different incubation time. Naked DNA

without the addition of DNase I was used as control.

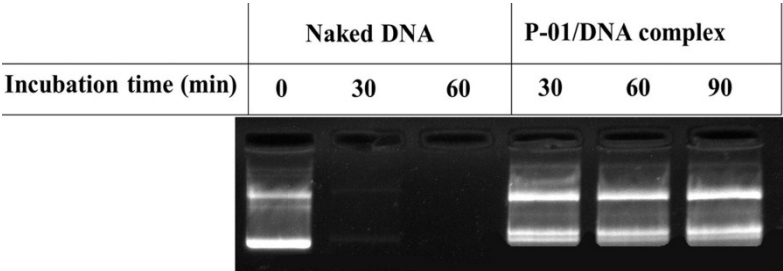


Figure S4 TEM photographs of peptide/DNA complexes at an N/P ratio of 6. (A) P-02, (B) P-03, (C) P-04, (D) P-08. Scale bar was 100 nm.

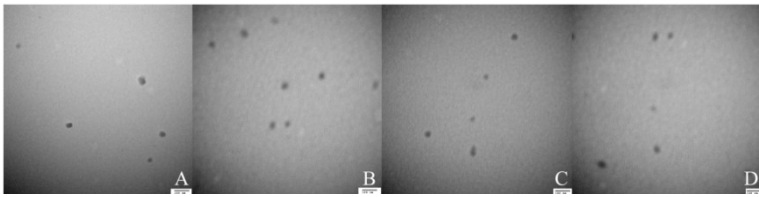


Figure S5 In vitro luciferase expression levels in 293T cells of P-01/DNA complexes at different N/P ratios. Data are mean \pm SD (n = 3).

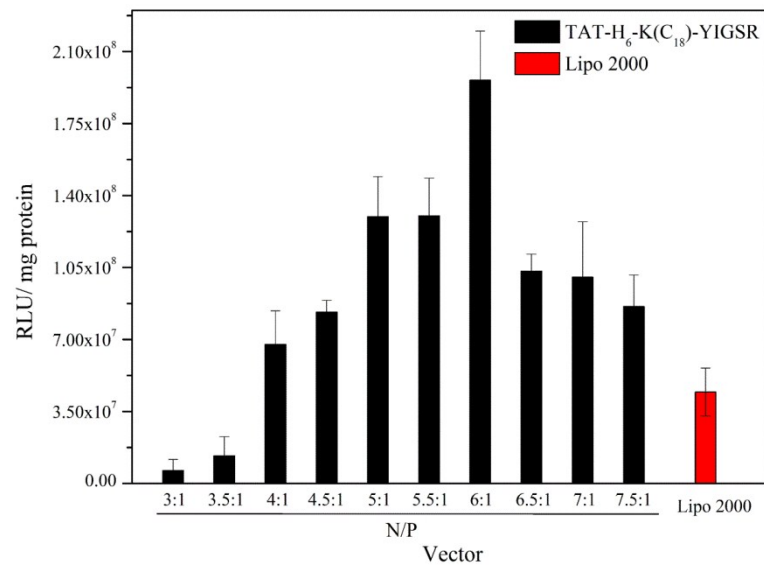


Figure S6 In vitro luciferase expression levels in B16F10 cells of Lipo 2000/DNA complexes with different molar weight ratio of YIGSR.

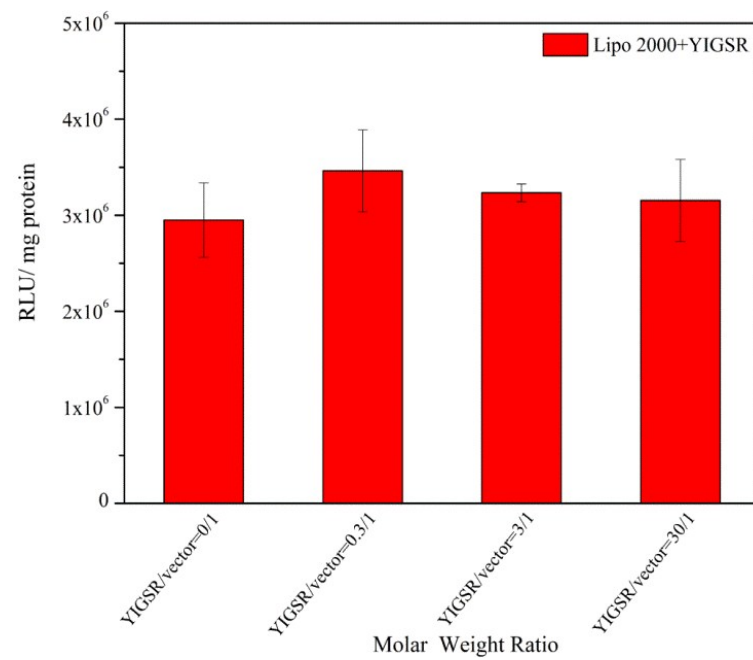


Figure S7 CD spectra of peptide vectors at 50 $\mu\text{mol L}^{-1}$ in 50% trifluoroethanol/PBS solution.

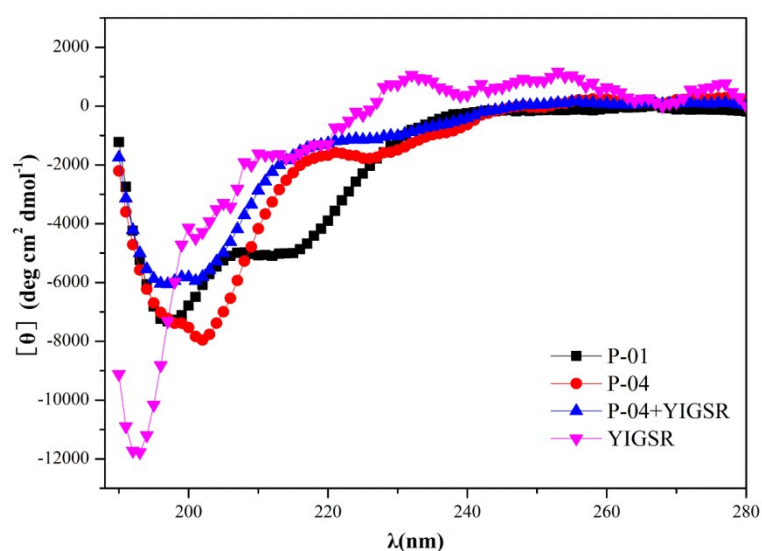


Figure S8 FACS assays of cellular uptake of different peptide/DNA complexes at an N/P ratio of 6 and Lipo2000 in B16F10 cells. DNA was labelled with YOYO-1.

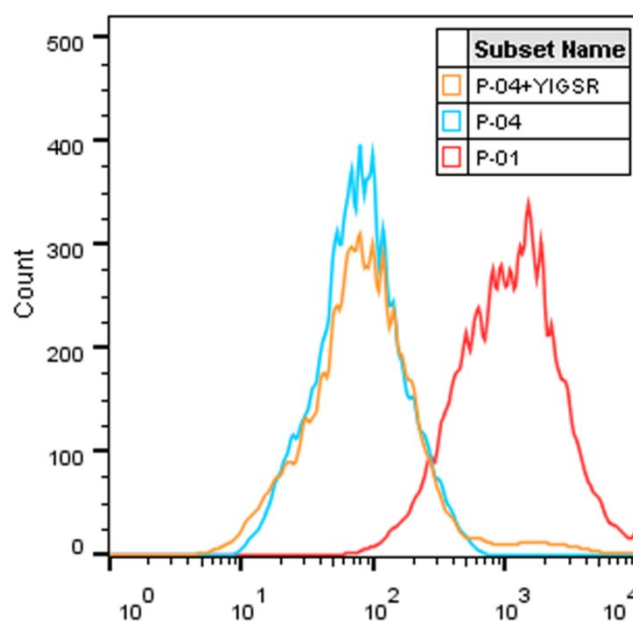


Figure S9 In vivo fluorescence imaging of the Zebrafish microinjected with P-01/PGL3 at N/P ratio 6 (left) and naked PGL3 (right). The control (middle) is the Zebrafish without any administration.

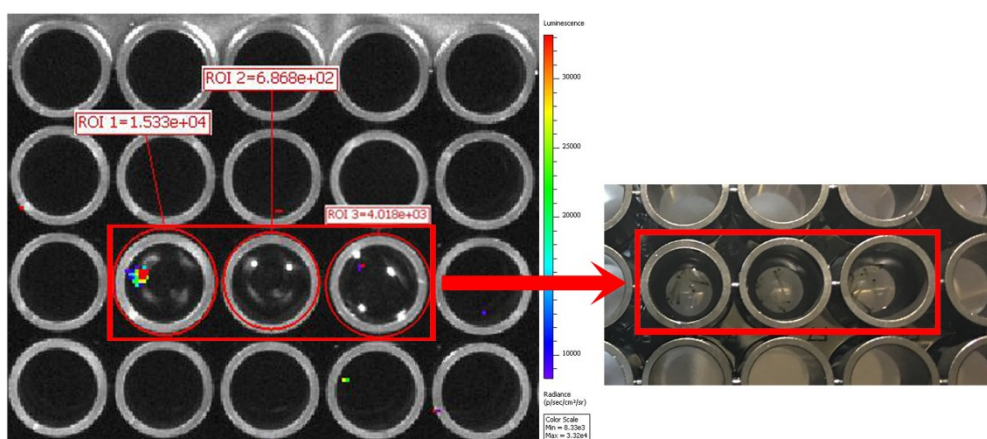


Table S1 Percentage of α -helix for peptide vectors

Compounds	Percentage of α -helix (%)
P-01	34.87
P-02	20.05
P-03	30.1
P-04	26.7
P-05	N.C. *
P-06	16.6
P-07	35.84
P-08	23.4

* Not Calculated