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2 **Zein-induced Polyelectrolyte Complexes for Encapsulating Triterpenoid Phytochemicals**

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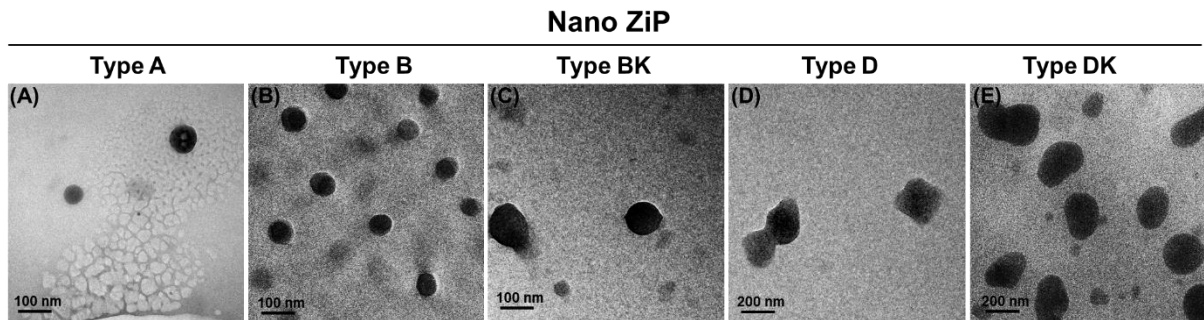
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10 **SUPPLEMENTARY MATERIALS**

11 **Figure S1.** Representative TEM image of nano ZiP complexes.

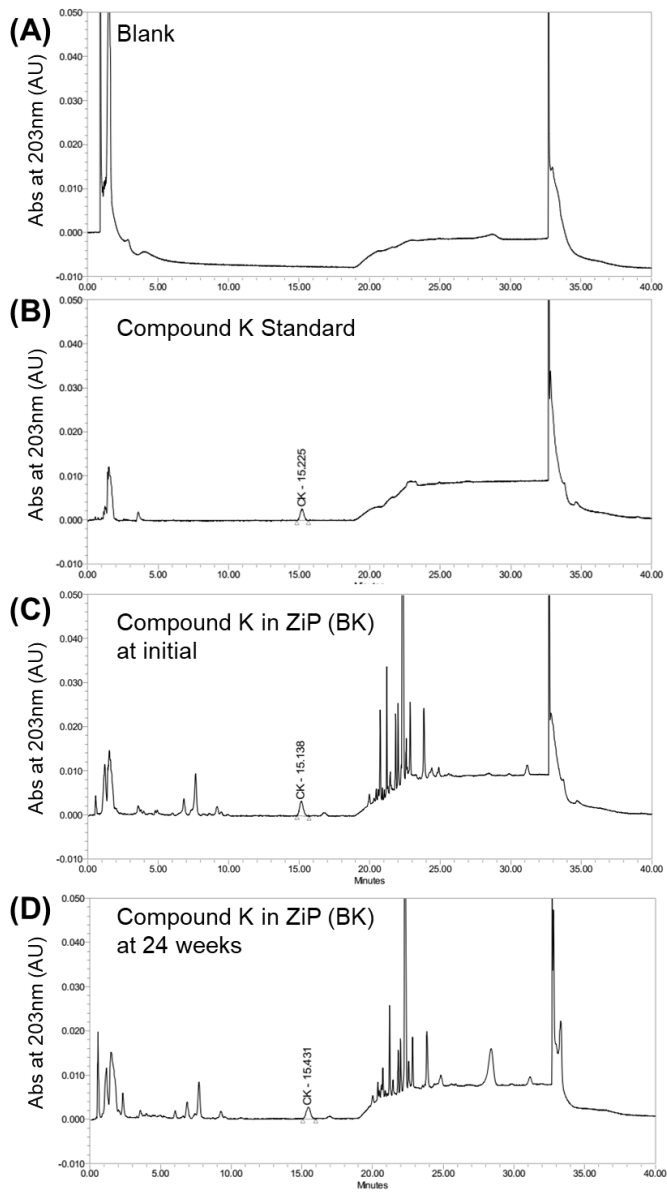


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13 Transmission electron microscopy (TEM) images of nano-sized ZiP complex type A (A), type B (B),  
14 type BK (C), type D (D) and type DK (E). The scale bar indicates 100 nm in A–C and 200 nm in D and  
15 E.

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17 **Figure S2. The phytochemical profiles of Compound K in hydrolyzed ginseng saponin were**  
18 **analyzed using HPLC.**



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20 The quantification analysis of Compound K was performed for Blank (A), single molecules as a  
21 standard molecule (B), Compound K in ZiP at initial (C), and after 24 weeks (D).

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23 **Figure S3. Wound scratch assay comparing the quantitative regeneration of cells in the presence**  
 24 **of ZiP complexes (B type) and under untreated conditions, at time points ranging from 2 to 48**  
 25 **hours.**

Wound Healing Area (%)						
Samples		2hrs	12hrs	16 hrs	32 hrs	48 hrs
Control	No treatment	5.86 ± 0.64	15.56 ± 2.07	18.88 ± 2.13	27.14 ± 2.05	30.06 ± 0.77
ZiP (%)	0.25	7.38 ± 2.01	19.08 ± 4.84	24.39 ± 5.36	36.87 ± 5.43 (*)	41.88 ± 5.98 (*)
	0.50	7.24 ± 0.34 (*)	19.31 ± 1.45 (*)	24.06 ± 2.19 (*)	33.33 ± 4.42	37.35 ± 6.22
	1.00	7.81 ± 3.41	17.68 ± 4.71	21.15 ± 4.81	27.38 ± 5.75	29.49 ± 6.72

26 \*Significant differences compared to the wound healing area of untreated conditions with ZiP  
 27 complexes at each time point (p < 0.01).

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