

Electronic Supporting Information

**Phenylboronic acid-incorporated elastin-like polypeptide nanoparticle drug delivery system**

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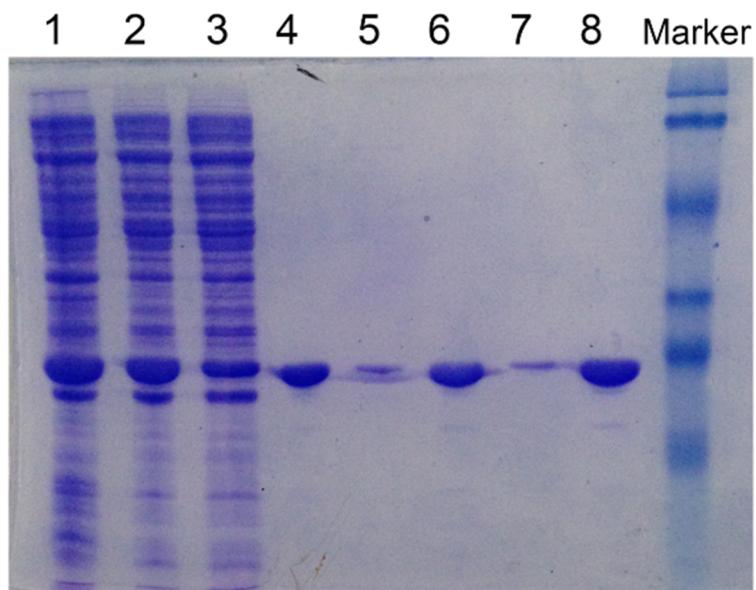
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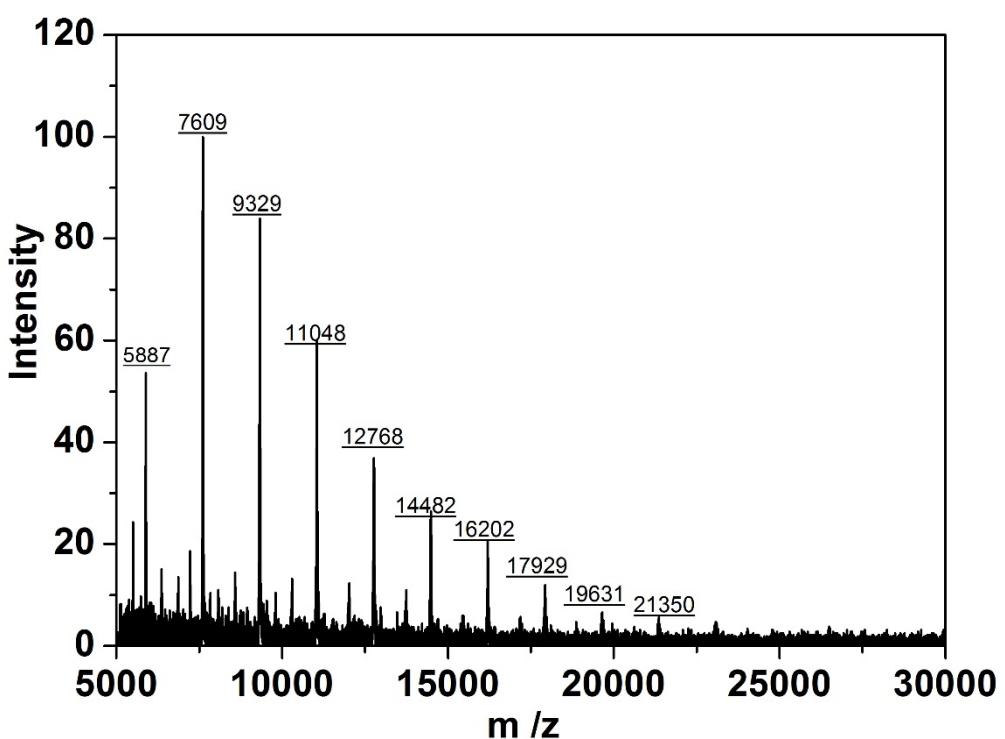
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ATG AGC AAA GGG CCG GGC (GTG GGC GTA CCG GGT AAA GGT GTT CCT  
(M) S K G P G V G V P G K G V P  
GGC GTG GGT GTT CCG GGT TTC GGC GTG CCG GGC GTG GGC GTA CCG  
G V G V P G F G V P G V G V P  
GGT AAA GGT GTT CCT GGC GTG GGT GTT CCG GGC TTC GGC GTG CCG  
G K G V P G V G V P G F G V P  
GGC GTG GGC GTA CCG GGT AAA GGT GTT CCT GGC GTG GGT GTT CCG  
G V G V P G K G V P G V G V P  
GGC TTC GGC GTG CCG GGC)<sub>4</sub> TGG CCG TGA  
G F G V P G W P ter

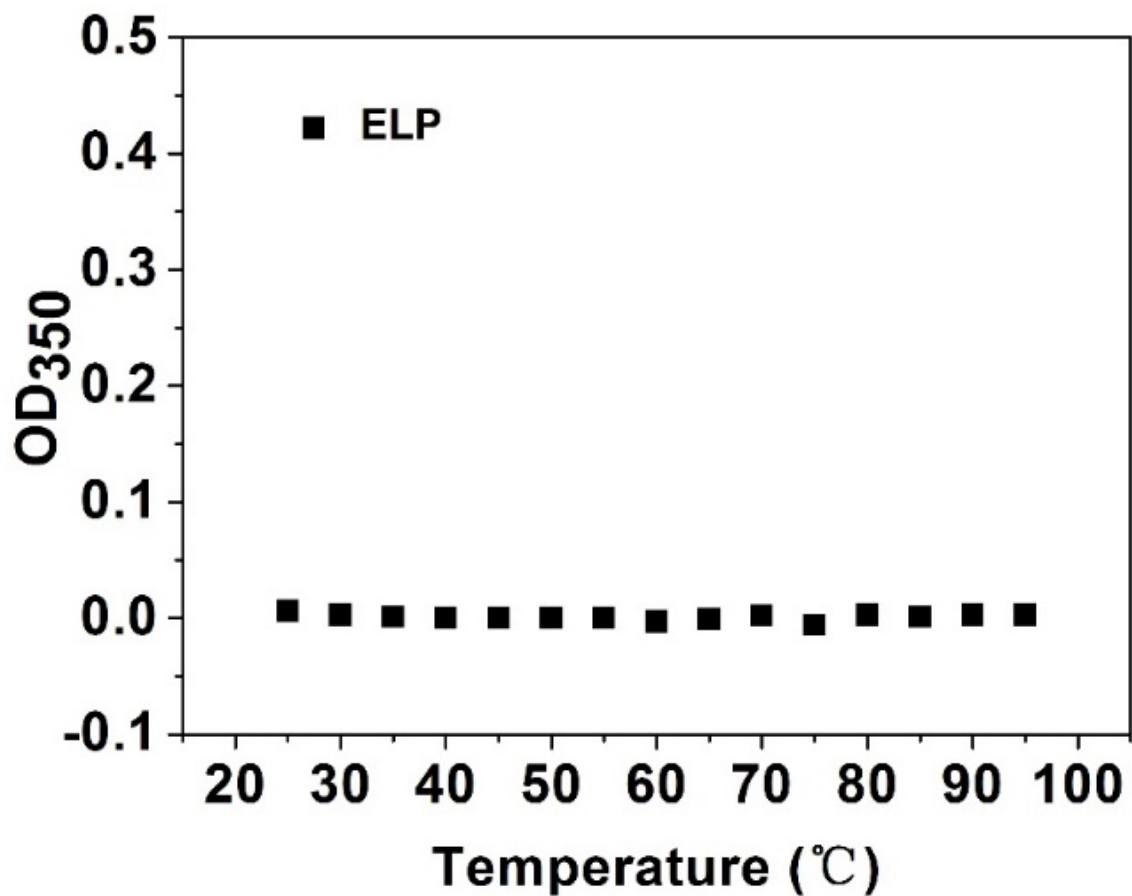
**Figure S1.** The coding DNA strand and the corresponding amino acid sequence of ELP in pET-25b vector.



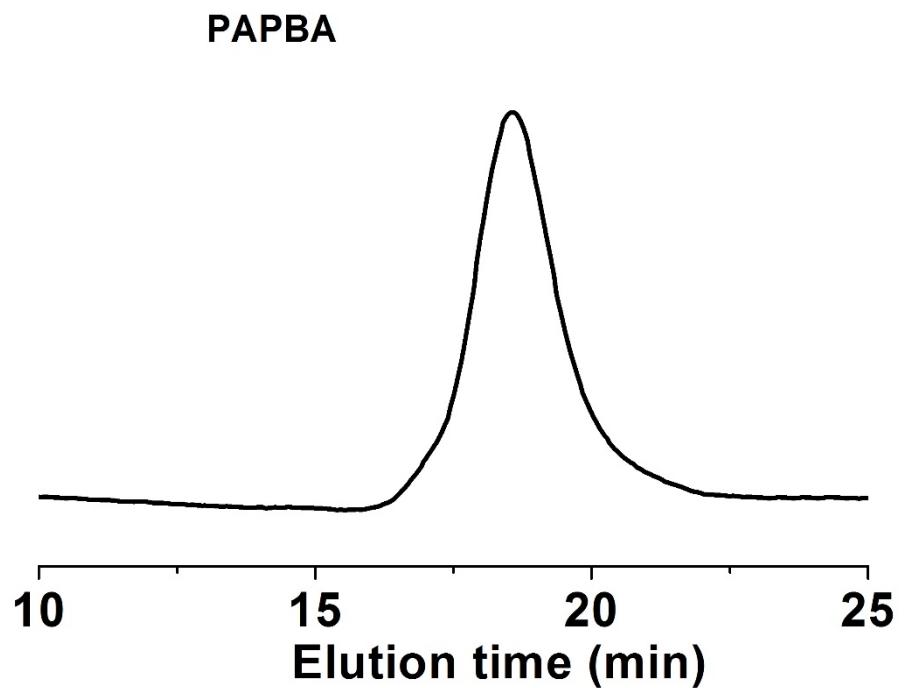
**Figure S2.** Coomassie brilliant blue stained SDS-PAGE of ELP. Lane 1: bacterium before ultrasonic; Lane 2: the supernatant after ultrasonic; Lane 3: the supernatant of the first hot round of ITC; Lane 4: the supernatant of the first cold round; Lane 5: the supernatant of the second hot round; Lane 6: the supernatant of the second cold round; Lane 7: the supernatant of the third hot round; Lane 8: ELP after three rounds of ITC; Lane9: protein molecular mass marker (120, 85, 50, 35, 25, 20 kDa from top to bottom).



**Figure S3.** MALDI-TOF analysis of ELP in an 50% acetonitrile solution containing 0.1% trifluoroacetic acid using a sinapinic acid matrix.



**Figure S4.** OD<sub>350</sub> of ELP solution under similar particle preparation condition.



**Figure S5.** GPC spectrum of PAPBA extracted from ELP-PAPBA nanoparticles in PBS with pH 9.5.