

Collagen content of tendon assay: Hydroxyproline method was used to measure the collagen content of tendon, a standard curve must first be formulated, as shown in Fig. 1, and the regression equation is obtained: $Y=0.018 X+0.0036$ ($R^2=0.9994$) (Y: OD value, X: collagen concentration($\mu\text{g/mL}$)). The collagen content equal to collagen concentration multiply by volume divide by fresh weight of tendon.

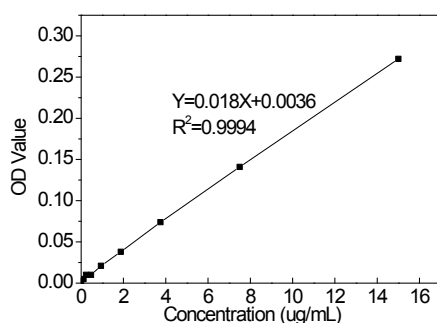


Table
 S-1 Grading
 criteria of
 adhesions in



macroscopic evaluation

<i>Points</i>	<i>Features of adhesions</i>
0	No apparent adhesion
2	Slight adhesions (< 33%)
3-4	Moderate adhesions (33%-66%)
5-6	Severe adhesions (> 66%)

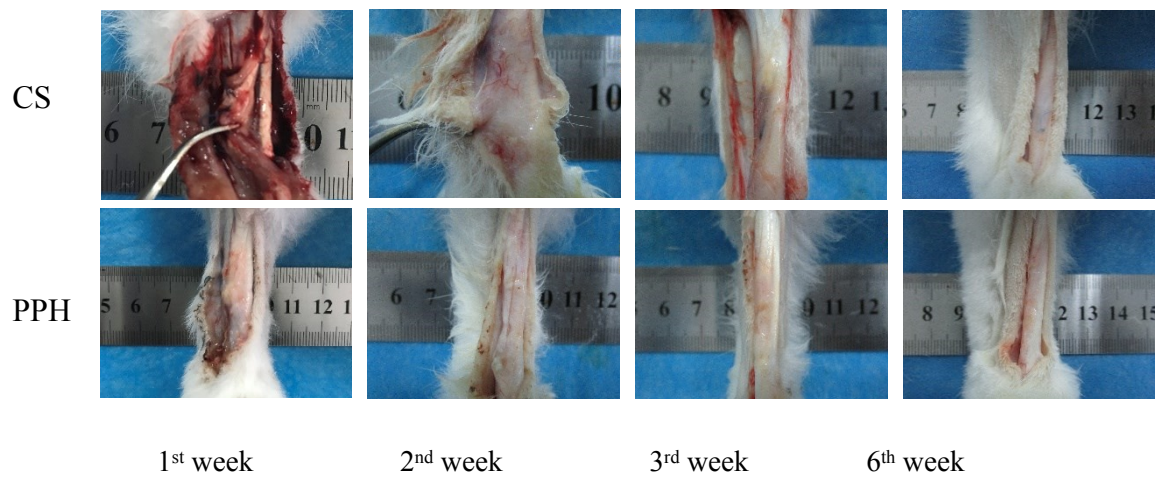


Fig. S-1 Photos of adhesion evaluation of Achilles tendon in CS group and PPH group at 1st to 6th week post operation