

*Supporting information*

## **Enzymatic functionalization of decellularized tilapia skin scaffolds with enhanced skin regeneration**

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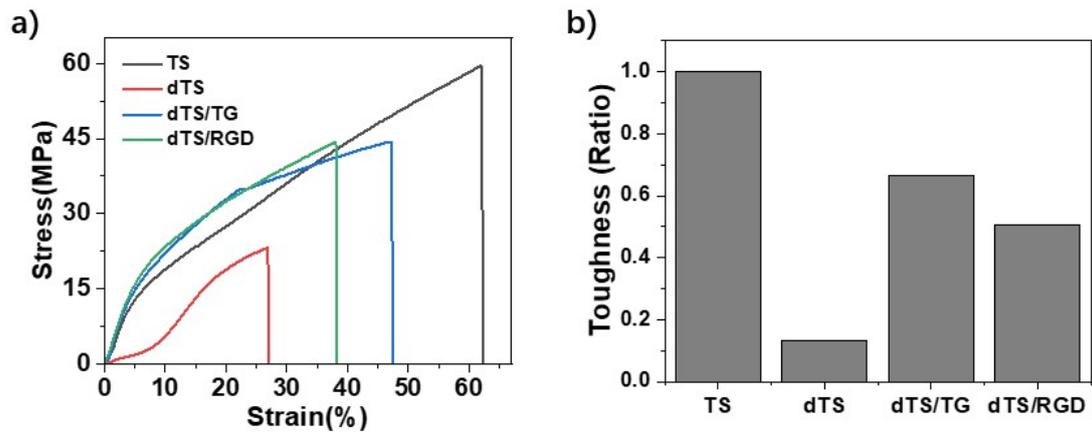


Figure S1. a) Stress-strain curve of TS and all dTS scaffolds; b) The ratio of toughness of TS, dTS, dTS/TG, and dTS/RGD, respectively.

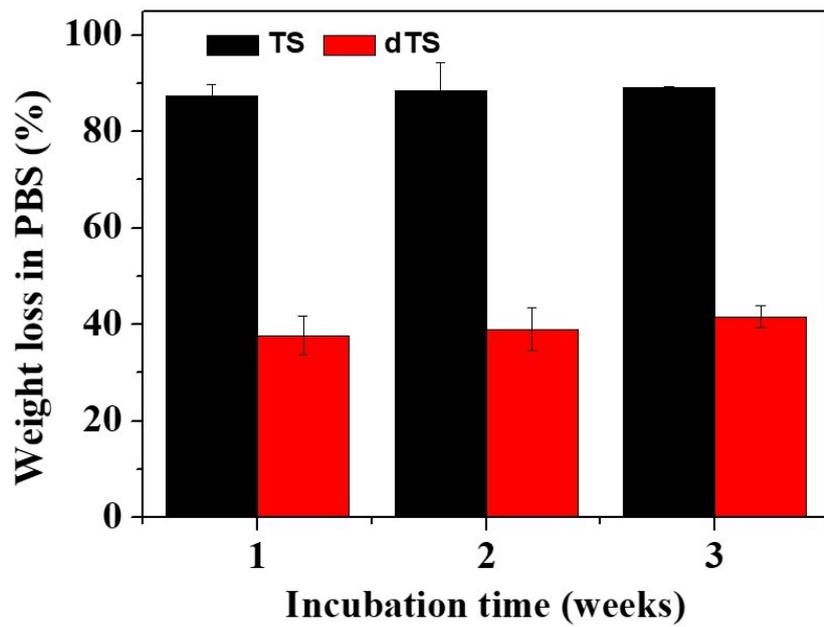


Figure S2. Degradation of TS and dTS with incubation time. All scaffolds were immersed in PBS for different time intervals.

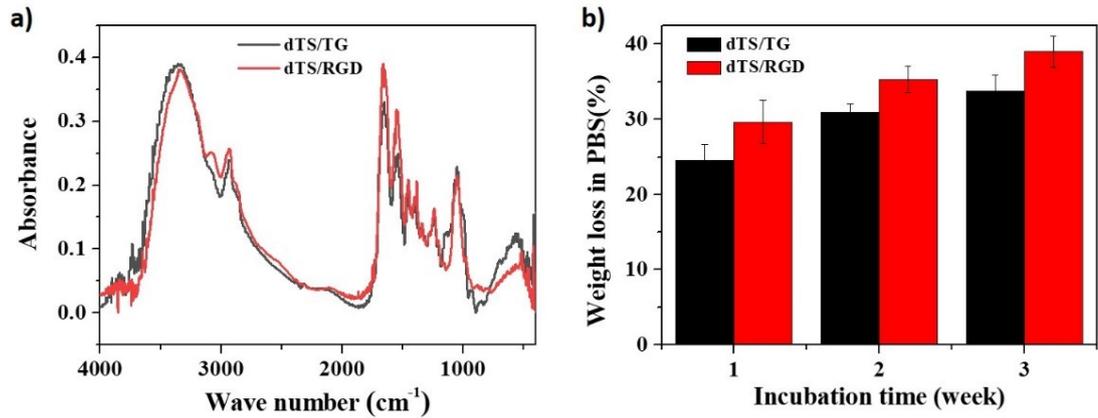


Figure S3. (a) FTIR spectra of dTS/TG and dTS/RGD, and (b) the degradation activity of dTS/TG and dTS /RGD scaffolds.

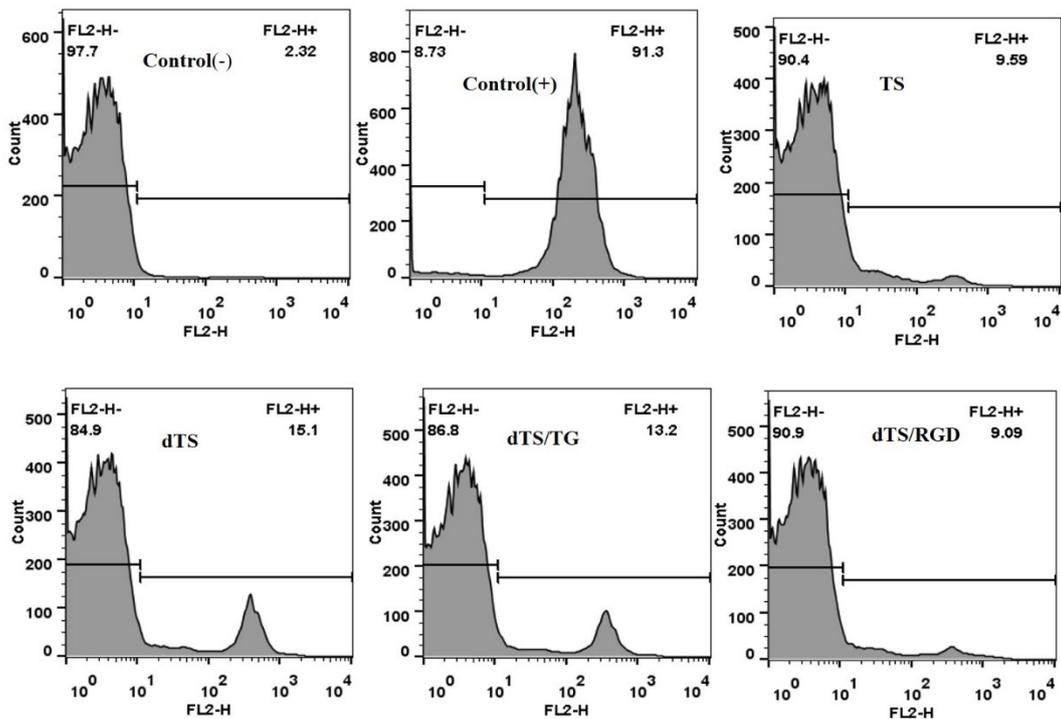


Figure S4. Antibacterial activity of TS, dTS, dTS/TG, and dTS/RGD against *E. coli*.

Table S1 the porosity of the dTS/TG scaffolds

Sample	Porosity
0.1 U/mL	61.58%
0.5 U/mL	59.22%
1 U/mL	57.74%
2 U/mL	57.86%

Table S2 the characters of dTS/TG and dTS/RGD

Sample	Porosity	Maximum tensile (MPa)	Elongation at break (%)
dTS/TG	57.74%	46.64±2.34	47.81±12.15
dTS/RGD	56.22%	46.36±8.30	41.68±0.66