

Supplementary Information

Preparation of a Cross-Linked Cartilage Acellular-Matrix Film and its in vivo Evaluation as an Antiadhesive Barrier

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Determination of the swelling property of Cx-CAM

The prepared Cx-CAM or Seprafilm (6 mg) were individually added into 80 mL vial, then we added 10 mL of PBS and incubated the mixtures at 37 °C. At predetermined time points, PBS that was not absorbed by Cx-CAM or Seprafilm was removed from the vials. The remaining PBS on the surface of vials was eliminated by clean wipers (Yuhan-Kimberly, Seoul, Korea). After that, the vial was weighed to measure the weight of wet Cx-CAM or Seprafilm. After that, Then each Cx-CAM or Seprafilm was lyophilized until the residue reached a constant weight in a freeze dryer. The vial was weighed to determine the weight of dry Cx-CAM or Seprafilm.

The swelling ratio was defined as follows: Swelling ratio (%) = [(weight of wet Cx-CAM or Seprafilm – weight of dry Cx-CAM or Seprafilm) ÷ (weight of dry Cx-CAM or Seprafilm)] × 100.

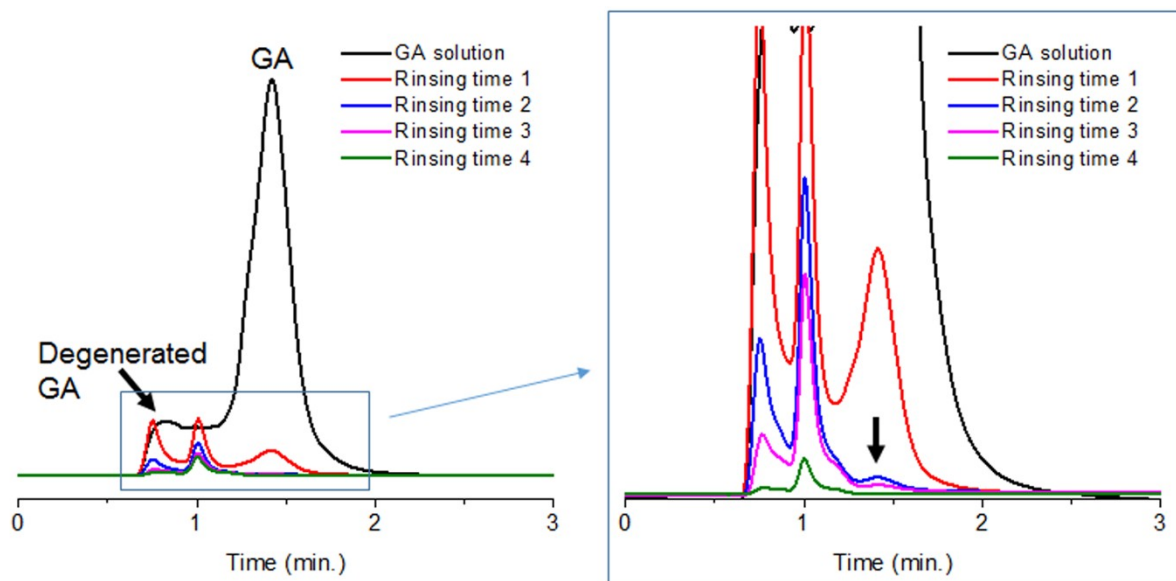


Figure S1. GA amount remained in PBS after washing of Cx-CAM films.

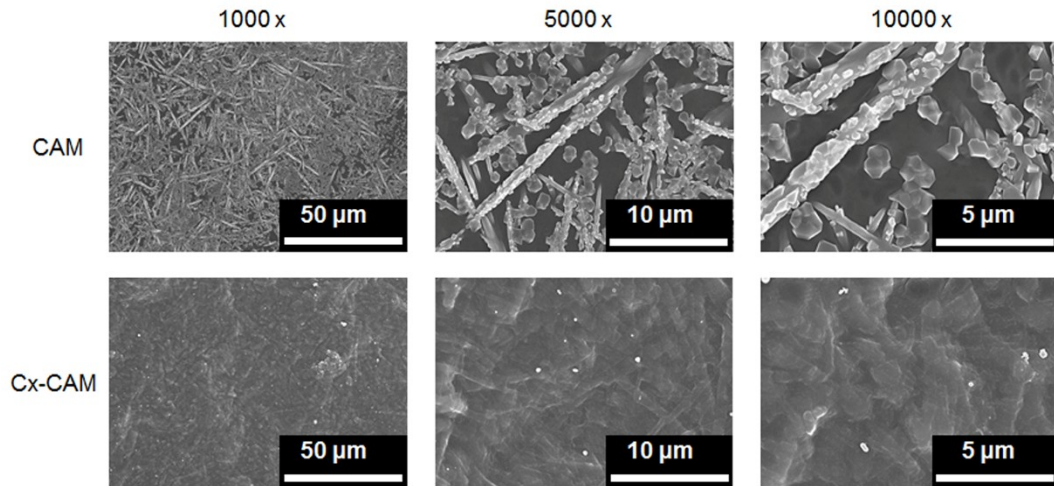


Figure S2. SEM images of CAM and Cx-CAM.

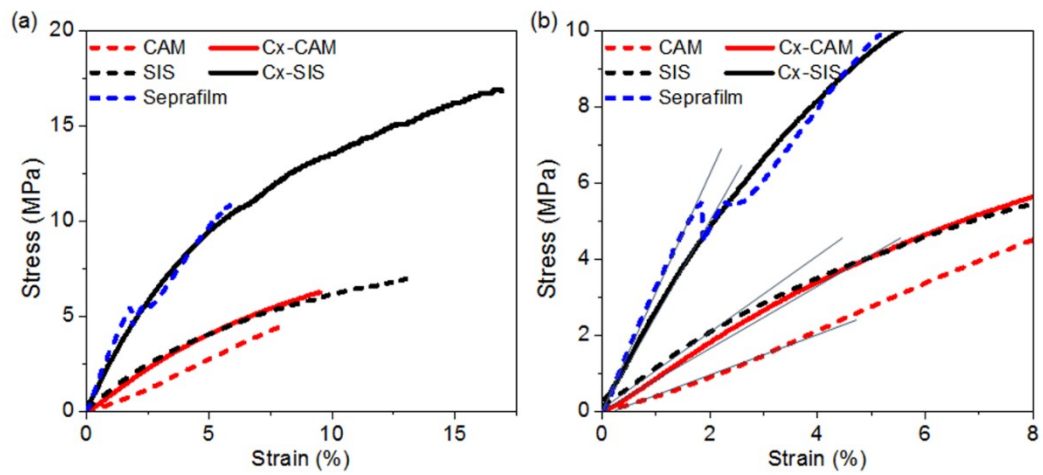


Figure S3. (a) Stress-strain curves and (b) enlarged curve of CAM, Cx-CAM, SIS, Cx-SIS films and Seprafilm.

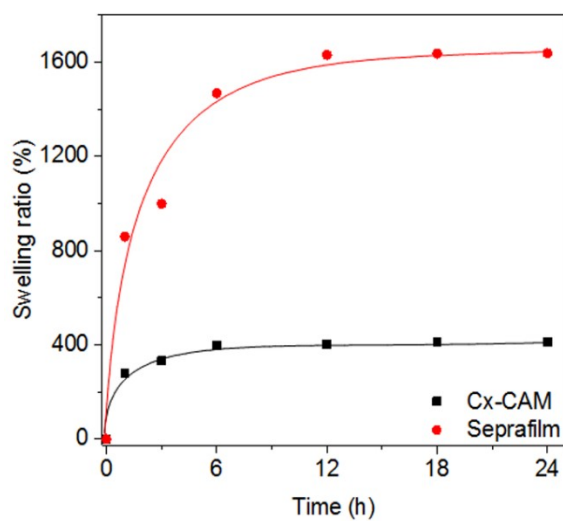


Figure S4. The swelling ratios of obtained Cx-CAM film and Seprafilm.