Supplemental Document

Submission ID: 12081

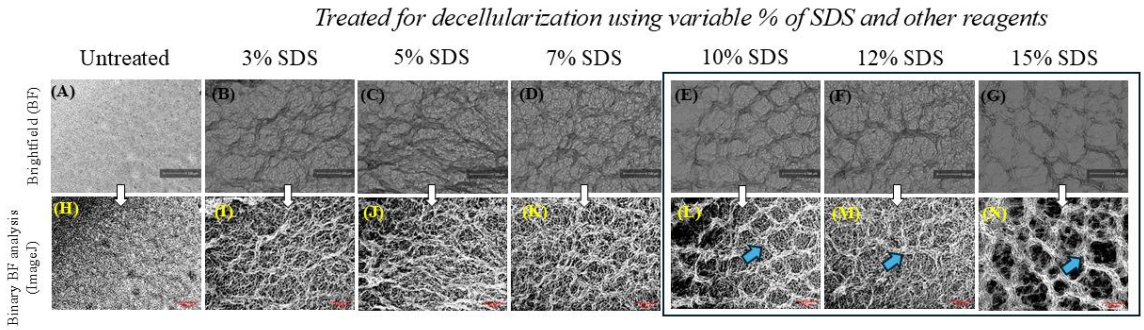

Figure S1. Shown are the brightfield images of Untreated (A) and Treated (B-G) seaweed in panels (A-G) and the corresponding processed images in the bottom panel (H-N). Scale bar-100µm. The blue arrows point to the distinct decellularized scaffold structure obtained after the procedure was completed.

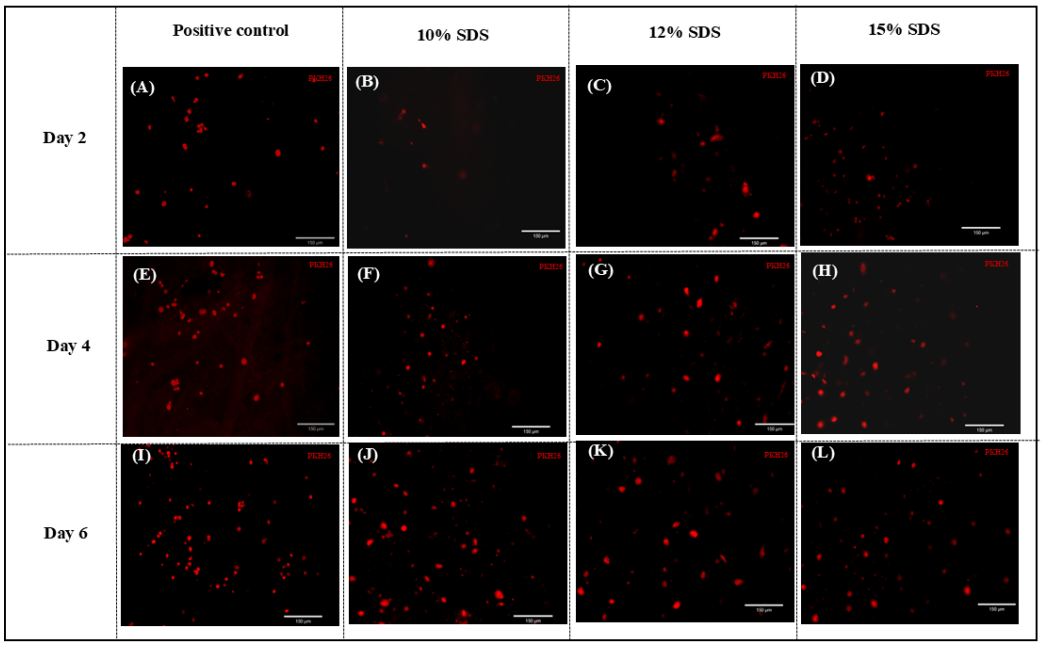

Figure S2. Confirmation of cell adhesion and growth of AC16 cardiomyocytes (pre-stained using PKH26, red) atop decellularized scaffolds (10%, 12% and 15% SDS treated) with images captured at every 2-day interval: Day 2 (A, B, C, D), Day 4 (E, F, G, H), and Day 6 (I, J, K, L). The positive controls were electrospun scaffolds made using f-gelatin based on prior published works from our lab. All samples supported cell adhesion and growth. Scale bar is a 150µm in all images.

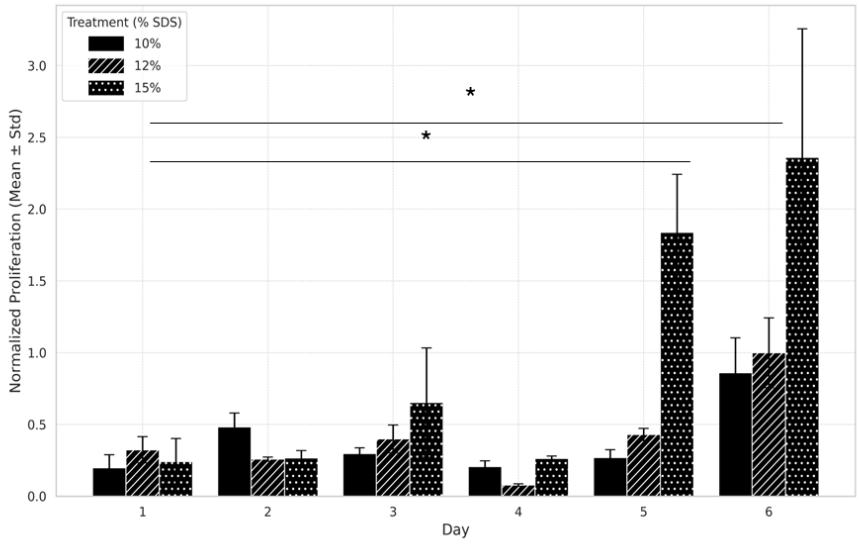

Figure S3. AC16 CM cell adhesion and proliferation on decellularized scaffolds (10%, 12%, and 15% SDS treated) over 6 days: with cells being quantified at every 24-hr. interval. Statistical analysis was performed using one way ANOVA and Tukey's post hoc test. Asterisks (*) indicate statistically significant differences($p<0.05$), n=2