

**ADVANCED  
HEALTHCARE  
MATERIALS**

Supporting Information

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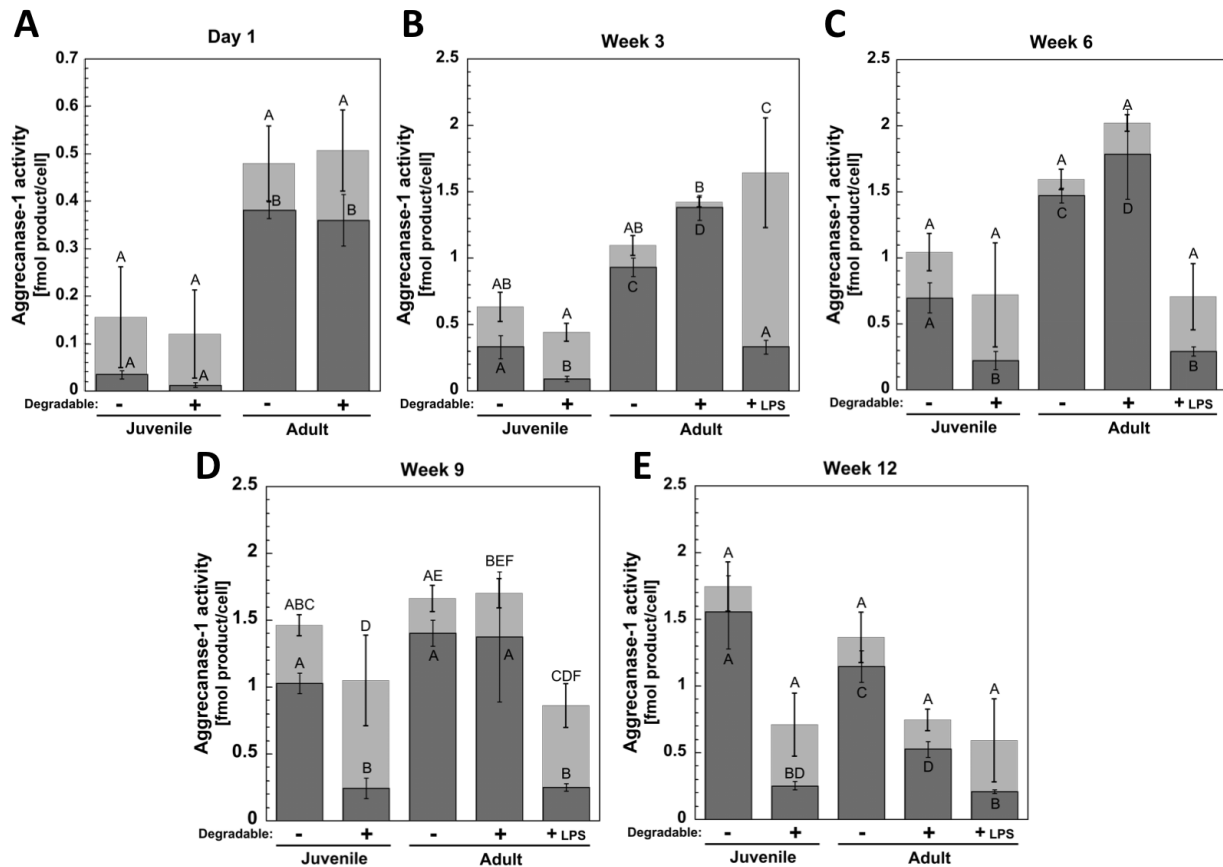
**An Enzyme-Sensitive PEG Hydrogel Based on Aggrecan  
Catabolism for Cartilage Tissue Engineering**

*Stacey C. Skaalure, Stanley Chu, and Stephanie J. Bryant\**

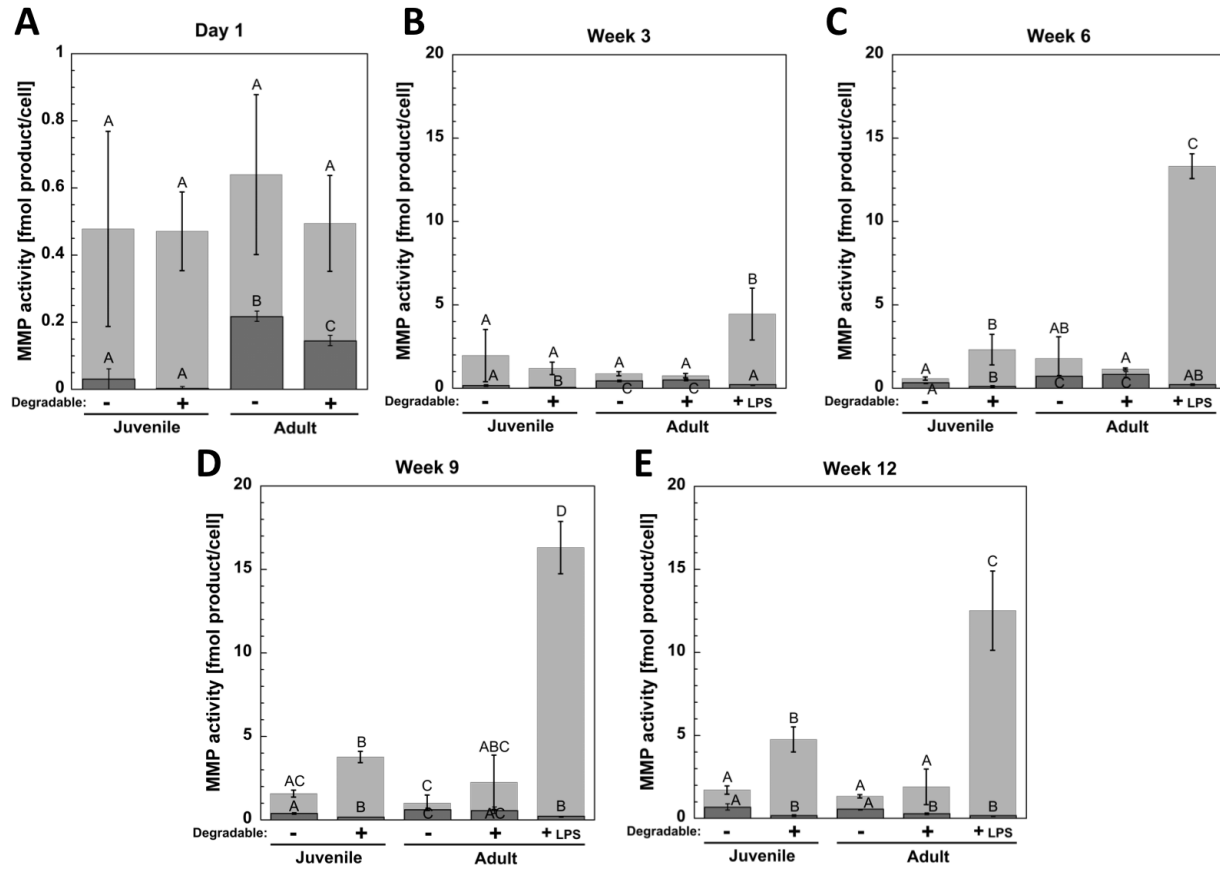
## Supporting Information

# An Enzyme-sensitive PEG Hydrogel Based on Aggrecan Catabolism for Cartilage Tissue Engineering

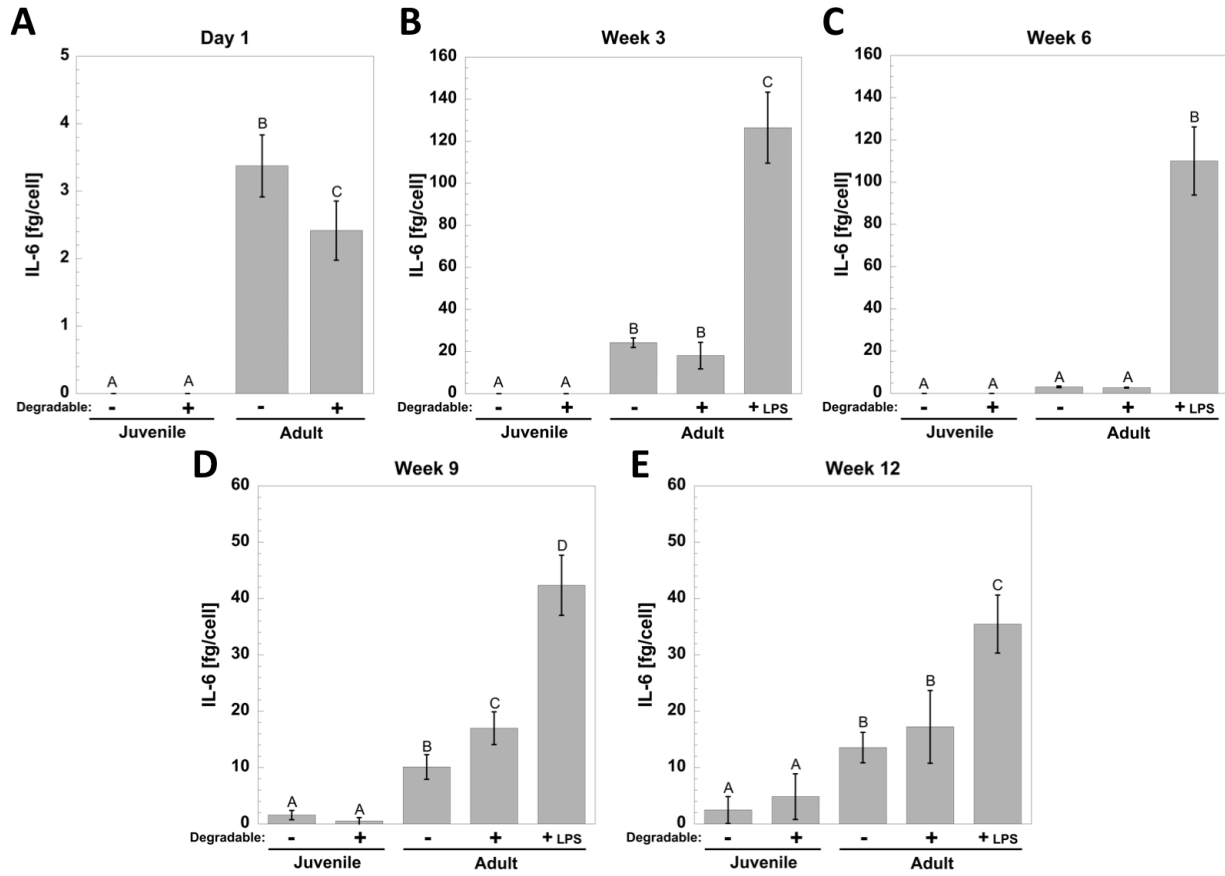
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**Figure S1.** Aggrecanase-1 activity per cell, shown as the activity measured in both the constructs (■) and culture medium (▒) at (A) 1 day, and (B) 3, (C) 6, (D) 9, and (E) 12 weeks, where conditioned culture medium was pooled in 3 week increments. Note that the y-axis is different for day 1. Letter groupings show statistical similarities (same letter) and differences (different letters) ( $p < 0.05$ ). Top letters are for activity in the medium and lower letters are for activity in constructs. Error bars are standard deviation ( $n = 3$ ).



**Figure S2.** MMP activity per cell, shown as the activity measured in both the constructs (■) and culture medium (■) at (A) 1 day, and (B) 3, (C) 6, (D) 9, and (E) 12 weeks, where conditioned culture medium was pooled in 3 week increments. Note that the y-axis is different for day 1. Letter groupings show statistical similarities (same letter) and differences (different letters) ( $p < 0.05$ ). Top letters are for activity in the medium and lower letters are for activity in constructs. Error bars are standard deviation ( $n = 3$ ).



**Figure S3.** IL-6 produced per cell and released to the culture medium at (A) 1 day, and (B) 3, (C) 6, (D) 9, and (E) 12 weeks, where conditioned culture medium was pooled in 3 week increments. Note that the y-axis is different for different time points. Letter groupings show statistical similarities (same letter) and differences (different letters) ( $p < 0.05$ ). Error bars are standard deviation ( $n = 3$ ).