

Electronic Supporting Information

A Self-assembled Peptide Hydrogel for Cytokine Sequestration

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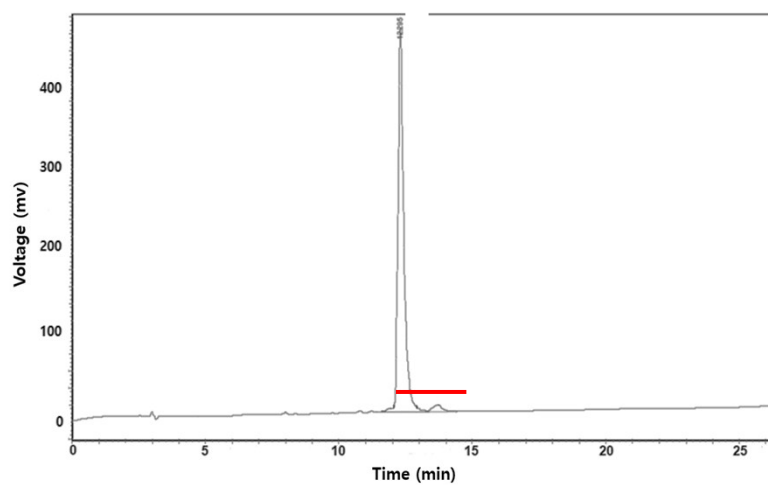


Fig. S1. HPLC trace of SLAM peptide shows a sharp peak and indicates >95% purity.

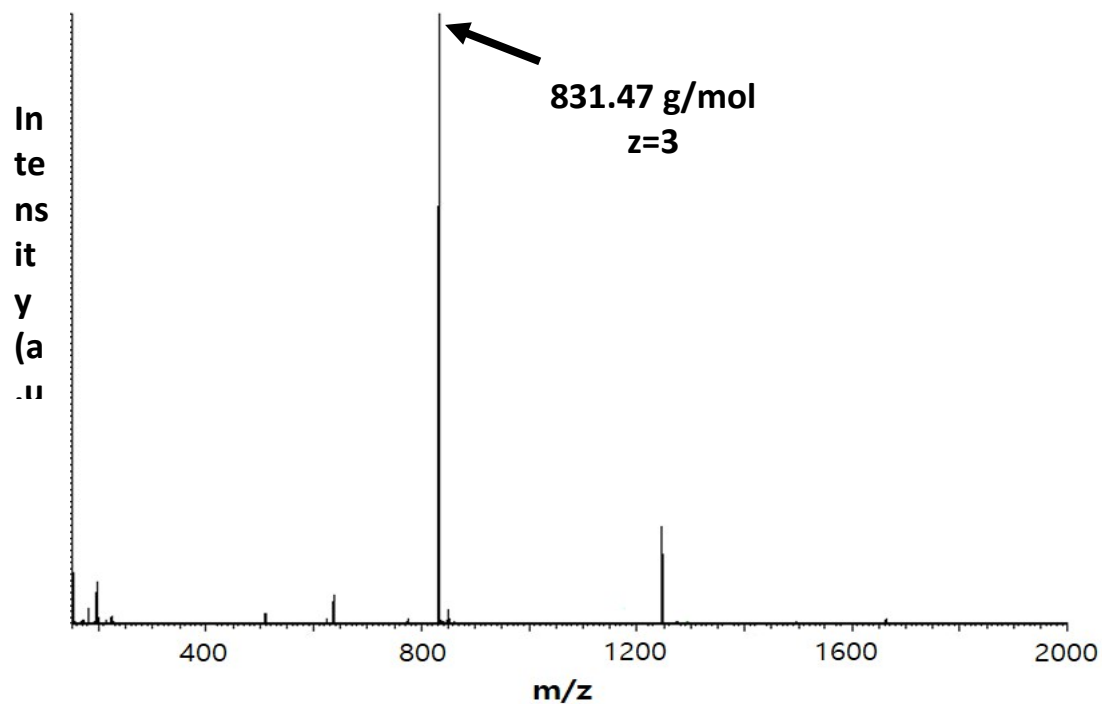


Fig. S2. Mass spectrum of the peptide SLAM. The expected average mass of the peptide is 2491.9 Da. The expected $[M+3H]^{3+}$ peak is at 831.6 Da and the peak was observed at 831.47 Da.

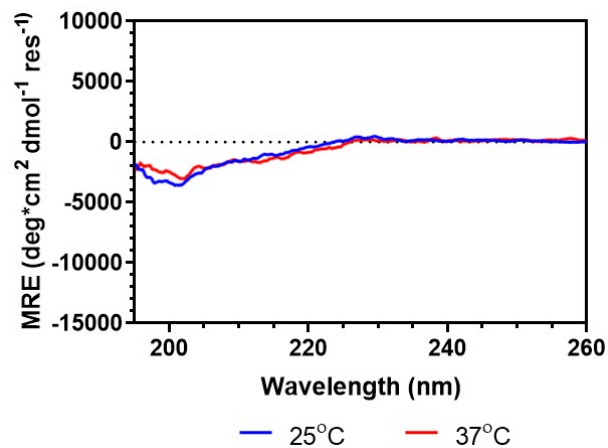


Fig. S3. Circular dichroism spectroscopy of peptide CCL2-binding mimic. Unlike SLaM, secondary structure of the mimic (peptide sequence: WKNFQTI) was confirmed to be random coil.

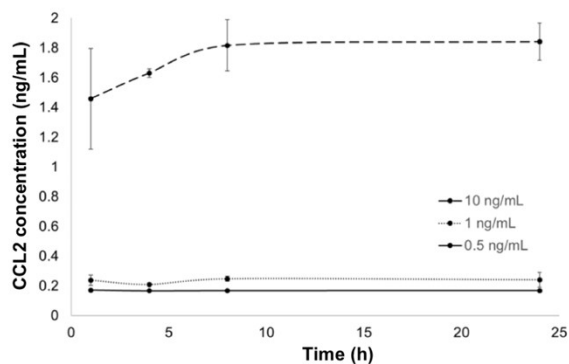
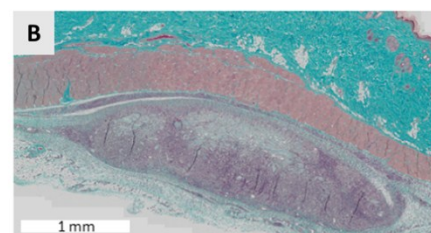
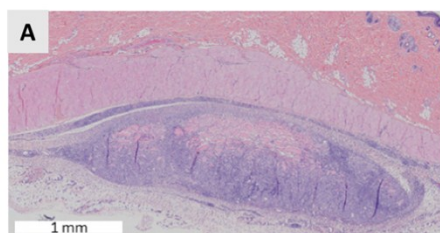


Figure S4: CCL2 sequestration of SLaM over 24 hours. CCL2 sequestration of SLaM over multiple time points (1, 4, 8 and 24 h) was observed with human MCP-1/CCL2 ELISA kit (Sigma-Aldrich). Initial CCL2 condition media displayed lower concentration in presence of SLaM over the 24 h period.

SLaM 7-Day:



SLaM 14-Day:

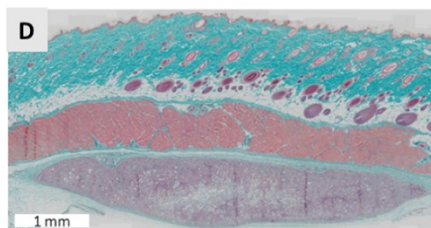
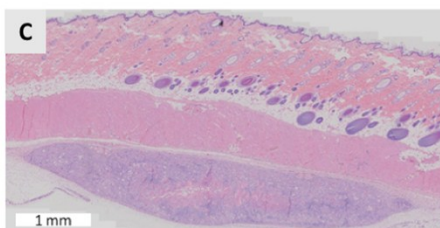


Fig. S5. Histology of SLaM implant in rat subcutaneous pocket. (A and C) Hematoxylin & eosin staining shows cellular infiltration within the implant with the bulk of the hydrogel bolus remaining undegraded over 2 weeks. (B and D). Masson's trichrome staining illustrates limited fibrous encapsulation around the hydrogel bolus.