

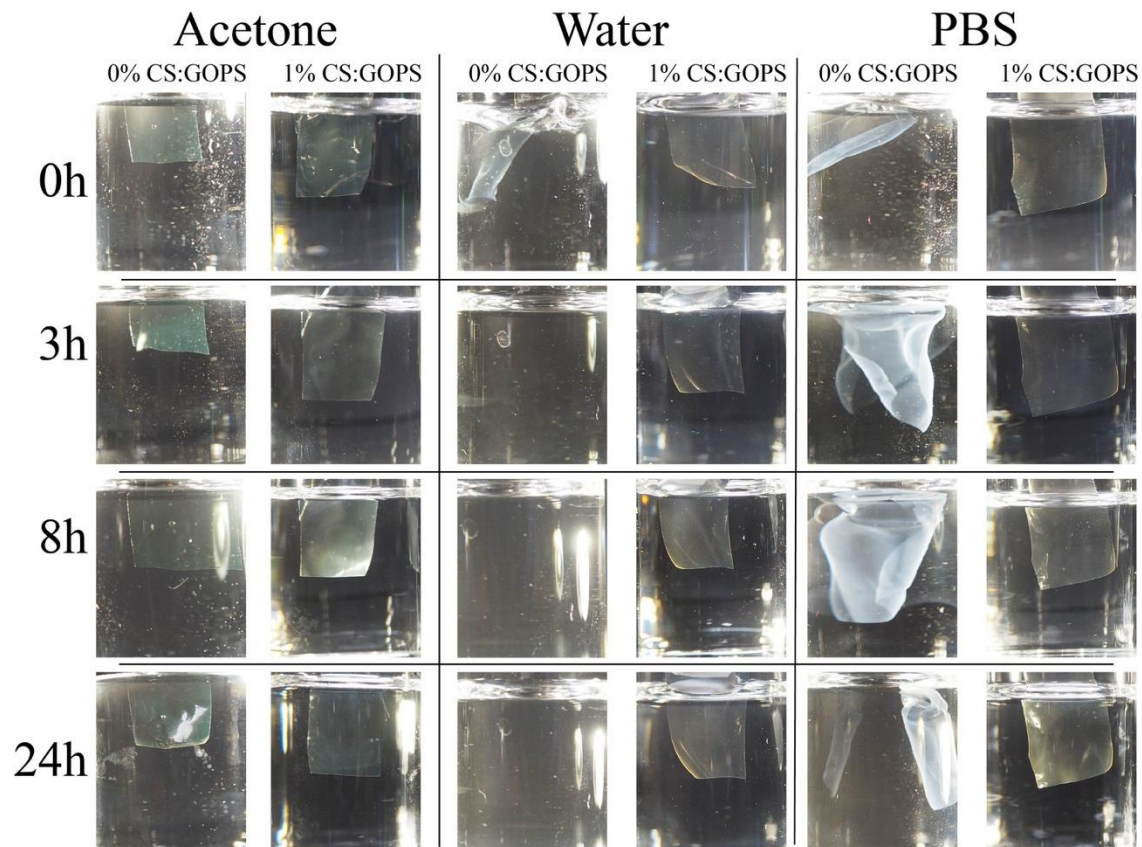


Supporting Information

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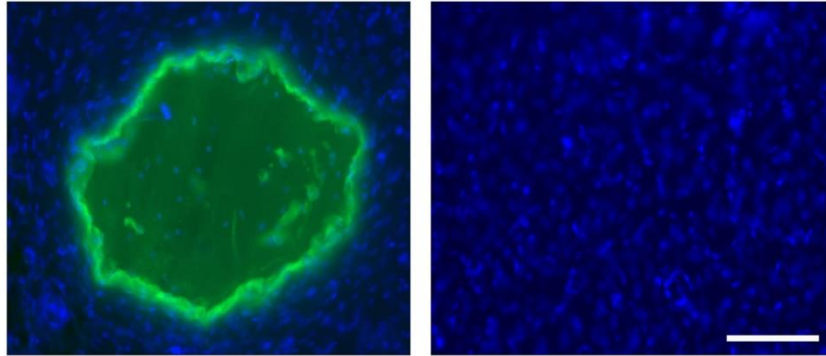
**Chitosan-Based, Biocompatible, Solution Processable Films
for In Vivo Localization of Neural Interface Devices**

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Supplementary Figure 1: Visual comparison between a film of pure CS and 1% CS:GOPS immersed in acetone, DI water and PBS.

Immersion was continuous for 24 hours. Images taken at time of immersion (0 h) and at 3 h, 8 h and 24 h post-immersion. The three main vertical columns show solvent type and sub-columns the type of film immersed. Per each solvent, pure CS film (0% CS:GOPS) is shown on the left and CS:GOPS film (1% CS:GOPS) on the right. GOPS stabilized CS films in all solvents; this result was consistent when 2-4% GOPS was used (data not shown). CS films without GOPS were fully soluble in DI water and partially soluble in PBS.



Supplementary Figure 2: Chitosan does not induce an acute histological response in neural tissue.
High-resolution fluorescence microscopy images from region where chitosan was introduced into neural tissue (left) and adjacent control region. Scale bar 100 μm .