Host Response to Microgel Coatings on Neural Electrodes Implanted in the Brain

curves (c) were generated in a similar manner to those for GFAP and indicate changes in parameter values over time for the experimental groups. Symbols indicate: * significant differences between the groups at one time point, ‡ significant differences over time between the indicated and preceding time-point for uncoated samples, # significant differences over time between the indicated and preceding time-point for microgel-coated samples.

Figure 7: Immunohistochemistry images (a) from each time point and experimental group stained with NeuN, a marker for neuronal. Graphs for each time point (b) indicate the average number of neuronal nuclei in each 100µm bin for uncoated and microgel-coated samples as a percentage of the cells found in the contralateral uninjured control. Symbols indicate: * significant differences between uncoated and microgel-coated samples, ‡ significant differences between uncoated and contralateral samples, # significant differences between microgel-coated and contralateral samples, ^ significant differences between the indicated and preceding time-point for microgel-coated samples.

Figure S1: Representative images of the *in vitro* assay showing cell adhesion on the uncoated (left) and microgel-coated (right) electrodes and underlying coverslips, indicating continuity of cell density and cell spreading on the coverslip beneath each electrode.

Figure S2: Intensity curves for each time point showing the staining intensity for each individual sample using GFAP (top row), OX42 (middle row), and ED1 (bottom row) at 1 week (left column), 4 weeks (middle column), and 24 weeks (right column).



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