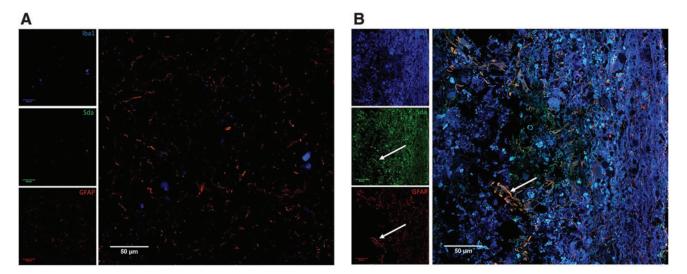


**SUPPLEMENTARY FIG. S4.** MALDI-TOF mass spectra of O-linked glycosylation from 3 DPI rat spinal cord sample. Permethylated O-linked glycosylation derived from the 35% acetonitrile fraction (see Methods section). Indicated areas (*m/z* 1300–2300) in the spectra have a 10-fold magnification. All molecular ions are [M+Na]<sup>+</sup>. Putative structures are based on composition, tandem MS, and biosynthetic knowledge. DPI, days post-injury; MALDI-TOF, matrix-assisted laser desorption ionization time-of-flight; MS, mass spectrometry.



**SUPPLEMENTARY FIG. S5.** Limited co-localization of Sda with GFAP-positive cells. (A) High-magnification image to show co-labeling Iba1 (blue), Sda (green), and GFAP (red) for sham. (B) High-magnification image to show co-labeling Iba1 (blue), Sda (green), and GFAP (red) for 14 DPI. Arrow points to a GFAP-positive cell with Sda. DPI, days post-injury; GFAP, glial fibrillary acidic protein; Iba1, anti-ionized calcium-binding adapter molecule 1.