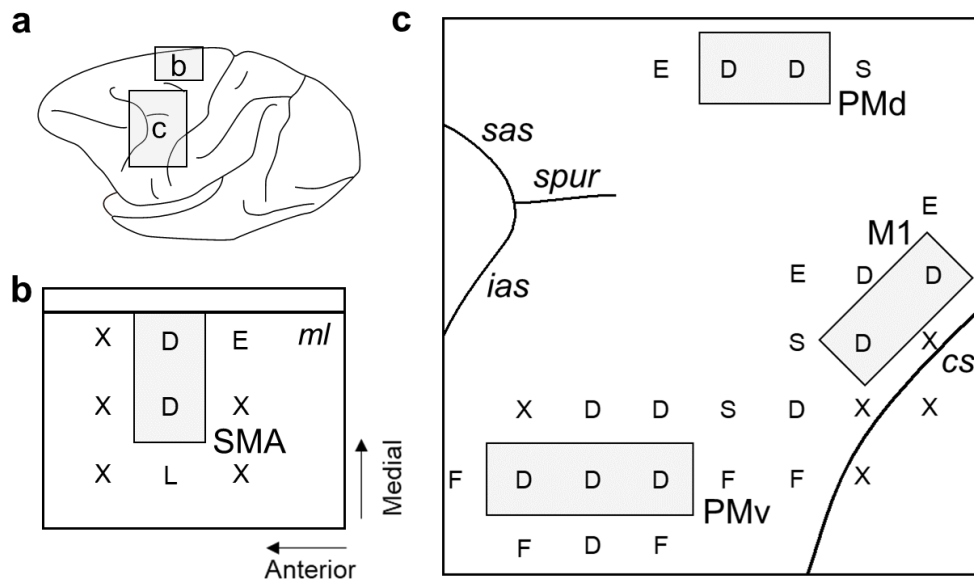
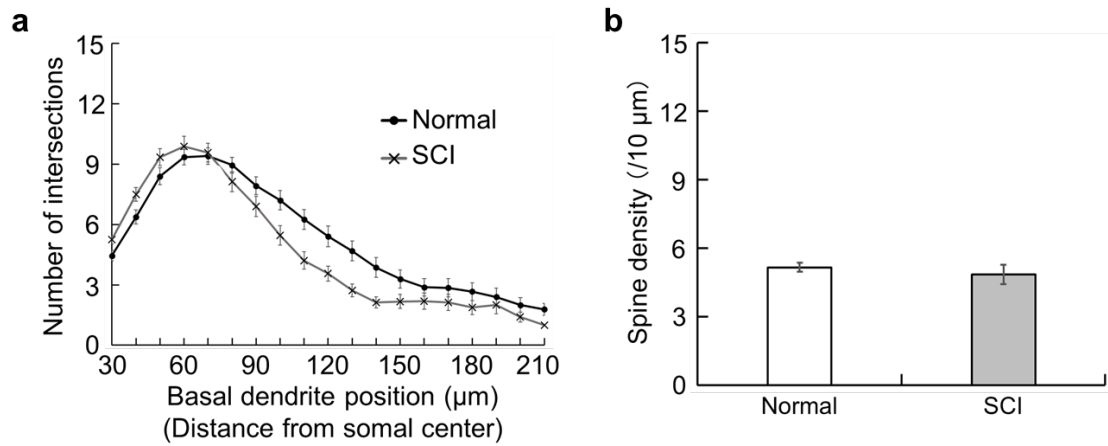




Supplementary figure 1. ICMS mapping of frontal motor-related areas in a normal control

(a) Lateral view of the monkey brain showing the frontal regions examined for ICMS mapping. (b,c) Results of ICMS mapping for identification of the digit representations of the SMA (b), and of the M1, PMd, and PMv (c). All conventions are as in Figure 1.



Supplementary figure 2. Comparison of basal dendrite morphology of large layer V pyramidal neurons in M1 face region before and after SCI

(a) Histogram showing the intersection number of basal dendrites at every 10- μm position. All conventions are as in Figure 3. Two-way ANOVA. (b) Histogram showing the spine density of basal dendrites in a normal control (in white) and an SCI model (in gray). All conventions are as in Figure 4. Student t-test.