Supplemental figure legend

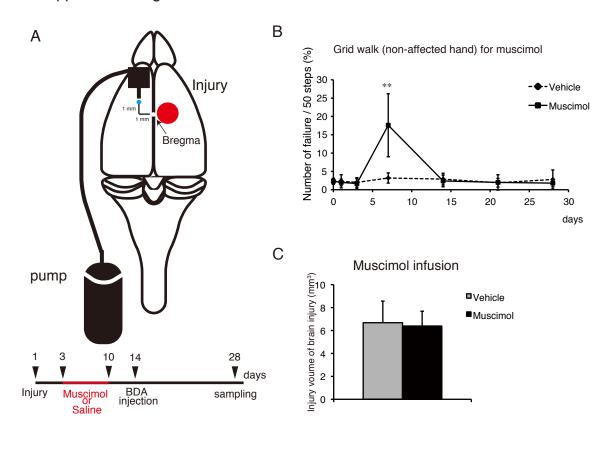
Supplemental figure 1. Influence of muscimol infusion on motor function and cortical cells. *A*, Illustration of the experimental procedure for muscimol infusion after brain injury. Brain contusion injury was induced in the right sensorimotor cortex (red). A cannula was implanted into the left hemisphere. Muscimol or saline was infused for 7 days starting at day 3 after the injury. At day 10, the pump was removed. BDA was injected into the left hemisphere at 14 days and the animals were sacrificed at 28 days. *B*, Temporal impairment of motor function of the unaffected (right) forelimb by muscimol infusion during the grid walk test after the injury (saline-treated group, dotted line; muscimol-treated group, solid line). *C*, The cortical lesion volume did not differ between the groups after the injury. *D*, No apparent damage to the cortical cells by saline or muscimol infusion in the contralesional cortex. The arrows indicate the infused region. Scale bar: 200 µm. The data represented the mean \pm SD (n = 6); **p < 0.01 versus the saline-treated group (Mann-Whitney *U*-test). *E*, Expression of alivin-1, a neuronal activity-dependent gene, increased in the contralesional cortex at 7 days after the injury. The data represent the mean \pm SD (n = 3); *p < 0.05 (Mann-Whitney *U*-test).

Supplemental Table

Primer sequences for Alivin1

name		Primer sequence
Alivin1	Forward Reverse	GCTTCCCAGCGCTGTGA ATCAGCTCAGTCTCCCACCAA

Supplemental Figure 1



Е

