

## **Supplementary Materials for**

### **Chirality-dependent anti-inflammatory effect of glutathione after spinal cord injury in an animal model**

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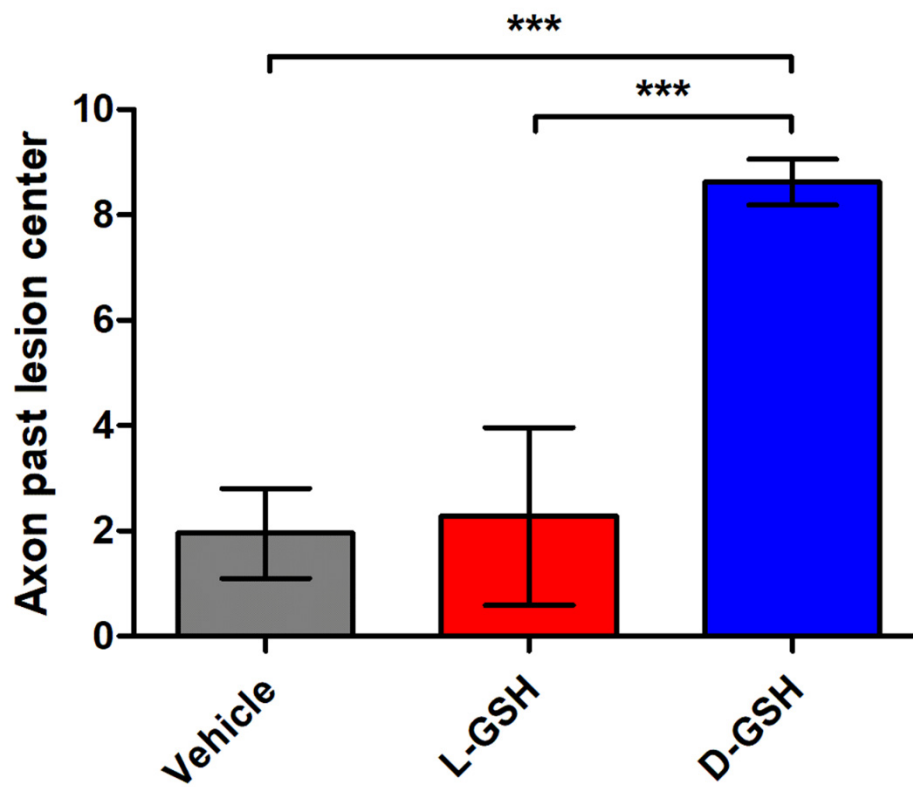
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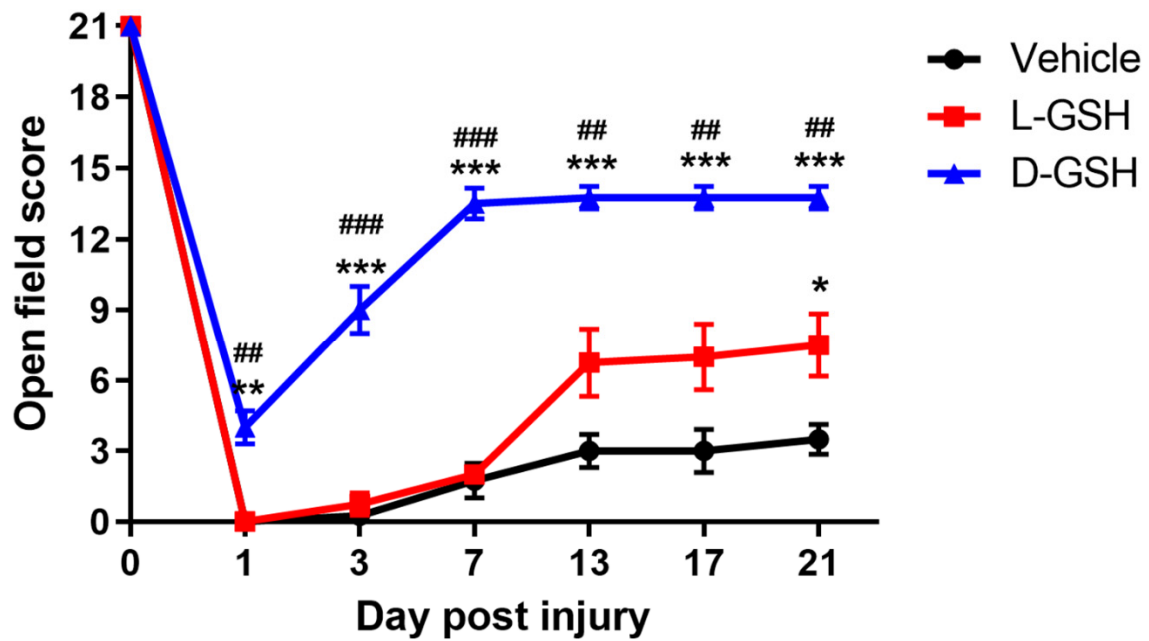
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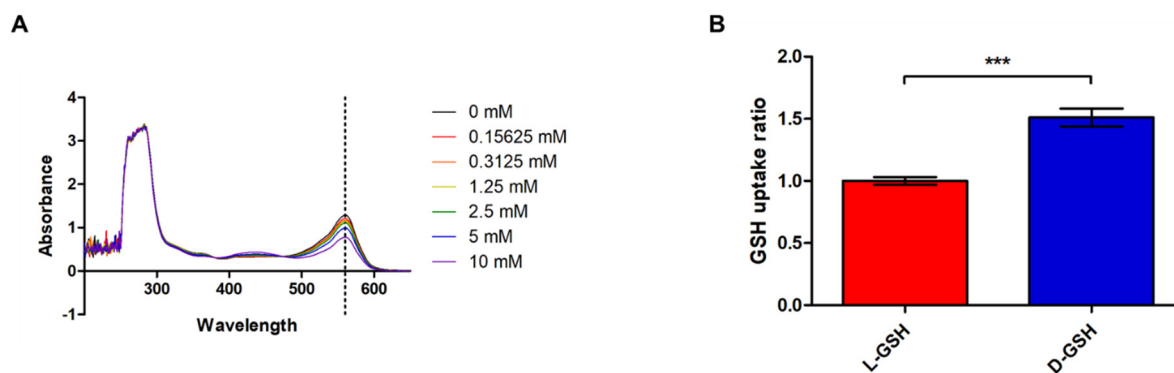
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**Figure S1.** Quantitative analyses of BDA-labelled axons past the lesion center in the vehicle, L-GSH, and D-GSH groups are shown. Results are the mean  $\pm$  SEM; \* $p < 0.05$ , \*\* $p < 0.01$ , and \*\*\* $p < 0.001$ ; one-way ANOVA with Tukey post-hoc test.



**Figure S2.** Comparison of BBB locomotor scores in the vehicle, L-GSH, and D-GSH groups. The BBB scores were evaluated for 21 days after SCI. \* denotes a significant difference between the vehicle group and the D-GSH group. # denotes a significant difference between the L-GSH group and the D-GSH group. Results are the mean  $\pm$  standard deviation (SD); \* $p < 0.05$ , \*\* $p < 0.01$ , and \*\*\* $p < 0.001$ . Unpaired two-tailed Student's t-tests.



**Figure S3.** Comparative evaluation of the intracellular uptake ratios of the chiral GSHs. **(A)** Absorbance of various GSH concentrations. **(B)** Intracellular uptake ratios of macrophages treated with L- or D-GSH based on (A). The fold ratio of the L-GSH group was set to 1-fold and the relative fold change was calculated. Results are the mean  $\pm$  SEM; \*  $p < 0.05$ , \*\*  $p < 0.01$ , and \*\*\*  $p < 0.001$ ; one-way ANOVA with Tukey post-hoc test.