



**Supplementary Figure 1.** ROCKII-/- raphe spinal fiber length is not significantly different from ROCKII<sup>+/+</sup> and ROCKII<sup>+/-</sup> fiber length in naive mice. (A-C) Photomicrographs of 5-HT-immunopositive serotonergic raphe spinal tract axons in transverse sections of ROCKII<sup>+/+</sup> (A), ROCKII<sup>+/-</sup> (B) and ROCKII<sup>-/-</sup> (C) lumbar spinal cord. (D-F) High power photomicrographs of ventral horn gray matter 5HT-immunoreactivity in ROCKII<sup>+/+</sup> (D), ROCKII<sup>(+/-)</sup> (E) and ROCKII<sup>(-/-)</sup> (F) mice. Images correspond to highlight box areas in A-C. (G) Analysis of 5-HT immunopositive serotonergic raphe spinal axon length in ventral horn gray matter. Fiber length is not significantly different between genotypes. Data are mean  $\pm$  sem from 5 mice of each genotype. Scale bar, A-C = 500  $\mu$ m, D-F = 50  $\mu$ m.