Fig. S1. Antisense against COX-1 administered in the L5-dorsal root ganglion (DRG) does not alter the COX-1 protein expression in spinal cord. Treatment (20 μg/5 μL per day, for 4 d) with oligodeoxynucleotide-antisense (ODN-AS) against COX-1 or saline (Sal; 5 μL/d, for 4 d) administered in the L5-DRG, do not modified the COX-1 expression in L1-T13 spinal cord segment (P > 0.05; unpaired t test) (A). (B) A representative image of COX-1 expression in spinal cord of one rat treated with ODN-AS or saline. The results are expressed as the mean ± SEM of five rats per group.

Fig. S2. L5-peripheral field of the rat’s hindpaw. Lidocaine (40 μg in 2 μL) administered in the L5-DRG significantly increased the mechanical nociceptive threshold in the hind-paw. The asterisk (*) (P < 0.05, one-way ANOVA followed by the Bonferroni test) indicates a response significantly greater than that of the baseline measurements (A). The effect of lidocaine administered in L5-DRG was mapped in the hind-paw to determine the L5-peripheral field (B). Results are expressed as the mean ± SEM of five rats per group.
Fig. S3. Microcomputed tomography (Micro-CT) of the needle inserted in space of the L5 dorsal root ganglion. (A–D) Micro-CT was performed using a SkyScan 1176 scanner (SkyScan) in anesthetized rats. Scanning was done at 90 kV, 278 μA using an aluminum-cooper filter and exposure set to 300 ms. Reconstruction of sections was achieved using a modified Feldkamp cone-beam algorithm with beam hardening correction set to 50%. Micro-CT data were batch sorted, processed, and reconstructed using the N-Recon program as per manufactures’ instructions (SkyScan). According to the needle position, the injection is performed in the distal nerve insertion of L5-DRG.
Fig. S4. Effect of ganglionic administration of Dextran conjugated with Alexa 488 in L5-DRG. To demonstrate the efficacy of L5-DRG injection, dextran (Alexa Fluor 488; 250 μg/5 μL) that does not cross cellular membranes by itself was administered in L5-DRG according to the technique previously described (1). Three hours after the injection, the L5 ganglion (ipsi- and contralateral) and L1-T13 segment of spinal cord were removed and analyzed by fluorescence assay. The dextran administration labeled the ipsilateral L5-DRG (A), but neither the contralateral L5-DRG (B) nor the L1-T13 segment of the spinal cord (C) were labeled. The L1-T13 segment of the spinal cord is the cellular bodies region of secondary afferent neurons of L5-DRG peripheral field. (Scale bar, 250 μm.)