Fisher's PLSD *post hoc* test applied to main effects), ${}^{XX}P < 0.01$, ${}^{X}P < 0.05$ versus all groups (ANOVA, Greenhouse-Geisser correction applied to interaction term of all repeated factors; N = 8 per group).

Supplementary Figure 1. DGL- α and CB₁ cannabinoid receptor are present on opposite sides of primary nociceptive synapses in the rat dorsal spinal cord

(A,B) Light micrographs of peroxidase-based immunocytochemistry illustrate high density of DGL- α -immunoreactivity (A) and strong CB₁-immunolabeling (B) in the dorsal horn of the rat spinal cord. (C,D) High-resolution electron microscopic analysis of DGL-a-immunostaining reveals that DGL- α is located perisynaptically, in the heads of dendritic spines (s₁, s₂) and in dendritic shafts (d_1, d_2, d_3) , demonstrated by the dense end product of the immunoperoxidase reaction (DAB, depicted by double arrowheads) in the rat spinal dorsal horn. These postsynaptic profiles receive innervation from DGL- α -immunonegative type I synaptic glomeruli (Cnociceptive terminal in C) and type II synaptic glomeruli (A δ -nociceptive terminal in D) (asymmetrical synapses are marked by arrowheads). (E₁-G) High-power electron micrographs of immunoperoxidase staining for CB₁ confirm presynaptic localization of the receptor (DAB precipitate, indicated by double arrowheads) in small axon terminals (b1 and b2 in E1-E2, and b in F), and C- (type I synaptic glomerulus in F, dense core vesicles are depicted by arrows) and Aδfiber (type II synaptic glomerulus in G, 't' labels a neighboring axon terminal) nociceptive terminals forming asymmetric, excitatory synapses (arrowheads) in the rat dorsal spinal cord. Scale bars: A-B, 100 μm; C-F, 0.1 μm.



Supplementary Figure 1. Nyilas et al, 2009 EJN