Supplemental Figure 1. Development of neuropathic pain in female CB2 $^{-/-}$ (n = 16) and CB2 $^{+/+}$ mice (n = 16) after sciatic nerve injury. A single tight ligature around 1/3 or a half of sciatic nerve was made to induce the neuropathic pain. Mice were tested in the ipsilateral and contralateral paw for evaluating mechanical allodynia (von Frey model, percentage of the basal CB2$^{+/+}$ sham-operated values), thermal hyperalgesia (plantar test, withdrawal latency in sec) and thermal allodynia (cold plate test, number of paw elevations) on days 3, 6, 8, 10 and 15 after surgery. All experiments were performed under blind conditions. Data were compared each experimental day by using a two-way ANOVA (surgery and genotype as between group factors) followed by corresponding one-way ANOVA when appropriate. Filled squares represent sham-operated CB2$^{+/+}$ mice, open squares represent sham-operated CB2$^{-/-}$ mice, filled diamonds represent sciatic nerve injury CB2$^{+/+}$ mice and open diamonds represent sciatic nerve injury CB2$^{-/-}$ mice. Black stars represent comparison between sciatic nerve injury and sham-operated animals. White stars represent comparison between genotypes. One star: $P < 0.05$; two stars: $P < 0.01$.

Supplemental Figure 2. Development of neuropathic pain in female transgenic mice overexpressing CB2 receptors (n = 12) and CB2 $^{+/+}$ mice (n = 12) after sciatic nerve injury. A single tight ligature around 1/3 or a half of sciatic nerve was made to induce the neuropathic pain. Mice were tested in the ipsilateral and contralateral paw for evaluating mechanical allodynia (von Frey model, percentage of the basal CB2$^{+/+}$ sham-operated values), thermal hyperalgesia (plantar test, withdrawal latency in sec) and thermal allodynia (cold plate test, number of paw elevations) on days 3, 6, 8, 10 and 15 after surgery. All experiments were performed under blind conditions. Data were compared each experimental day by using a two-way ANOVA (surgery and genotype as

between group factors) followed by corresponding one-way ANOVA when appropriate. Filled squares represent sham-operated wild-type mice, open squares represent sham-operated transgenic mice, filled diamonds represent sciatic nerve injury wild-type mice and open diamonds represent sciatic nerve injury transgenic mice. Black stars represent comparison between sciatic nerve injury and sham-operated animals. White stars represent comparison between genotypes. One star: $P < 0.05$; two stars: $P < 0.01$.