



Supplemental Digital Content 3: Morphine application causes a significant decrease in mechanically evoked A β -fiber activity in mu opioid receptor viral vector-inoculated fibers (hsvMOR). (A) Overall, evoked responses of hsvMOR-inoculated A β -fibers decreased after morphine application, but the change was not statistically significant (repeated measures ANOVA, factor: pre- or post-application, $F(1, 58) = 3.7$, $P = 0.06$). (B) The total number of mechanically evoked action potentials (APs) in uninjured and injured nerve fibers from hsvMOR animals was significantly decreased by morphine application (paired t-test: $P = 0.013$ and $P = 0.027$, respectively). (C) Pre- and post-morphine evoked

responses did not differ significantly across forces in either uninjured (naïve and hsvCON) or injured (SNL and SNL hsvCON) fibers from control animals. (D) Differences between pre- and post-morphine evoked mechanical responses across increasing applied forces. There was a significant change in evoked responses across time in hsvMOR-inoculated groups of animals, but not in the control vector group (repeated measures ANOVA, factor: vector, $F(1,80) = 8.4$, $P = 0.005$).