

Supplemental Digital Content 1. Ipsilateral hind paw volume after intraplantar administration of preproenkephalin (PPE) virus, mu opioid receptor and preproenkephalin (MOR+PPE) virus combination is larger than mu opioid receptor (MOR) virus or control virus (CON). (A) PPE virus-infected mice (hsvPPE) had the largest increase in paw volume compared to control infection. The virus combination of MOR+PPE increased paw volume at 1 and 3 days post-virus administration compared to control infection (hsvCON). Percent paw volume (%PV) was calculated as (measured paw volume / pre-virus paw volume) × 100. PPE. **P<0.001 vs. control; ***P<0.001 vs. control (B) MOR+PPE mice had the largest inflammatory response after virus inoculation. \$\$\$P<0.001 vs. sham, ***P<0.001 vs. control. (C-G) Histological photomicrographs of skin biopsies for all treatment groups.