



**Figure W1.** (A) Diagram displaying construction of vvCCL19 (TKR, thymidine kinase right-hand region; TKL, thymidine kinase left-hand region; VGF, vaccinia growth factor; pSe/L, synthetic early/late promoter; p7.5 E/L, 7.5 promoter early/late). (B) Production of CCL19 under different conditions (detected by ELISA in media 24 hours after infection of MC38 cell layer at MOI of 1.0). (C) Replication of vvDD and vvCCL19 in MC38 cells as determined by plaque assay on CV-1 cells (MOI of 1.0).