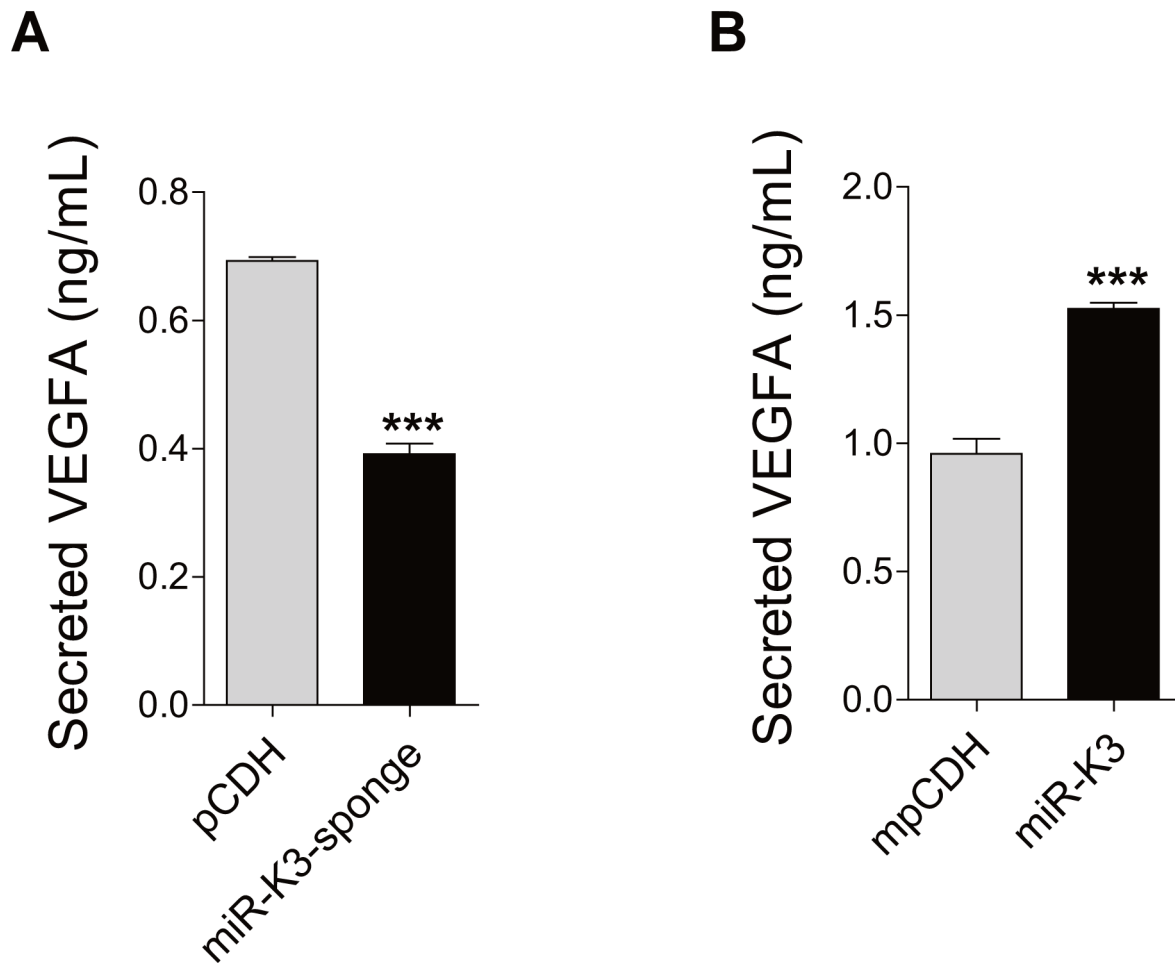
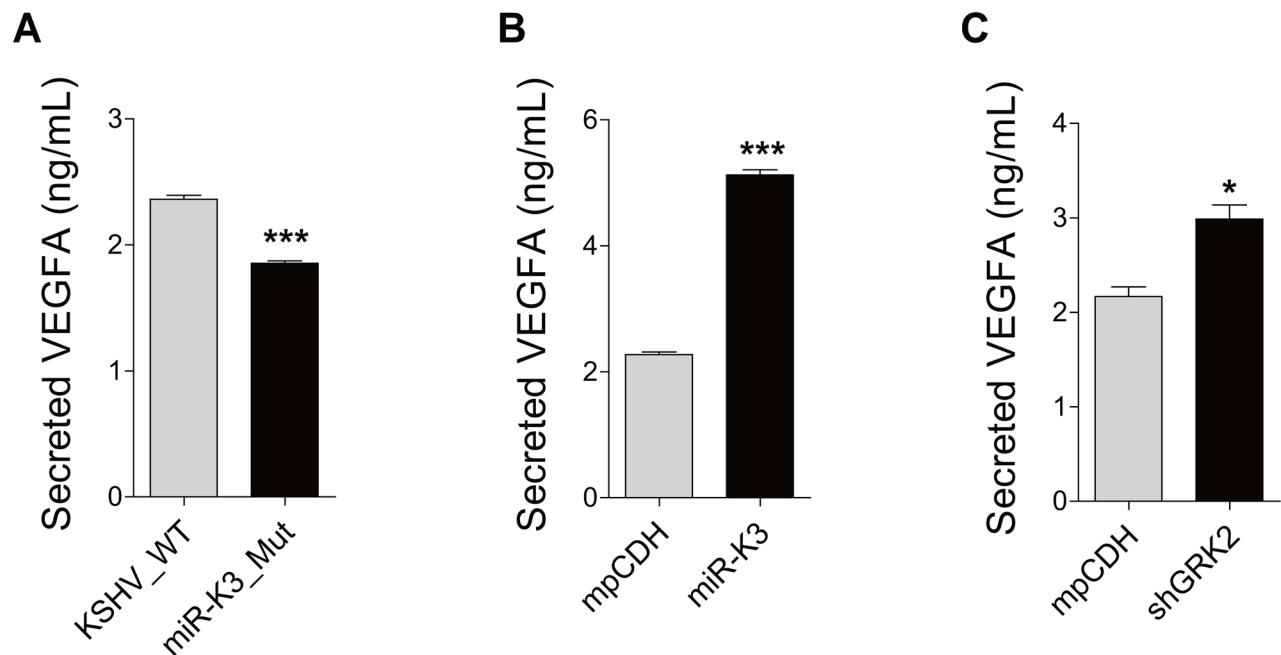


## A KSHV microRNA enhances viral latency and induces angiogenesis by targeting GRK2 to activate the CXCR2/AKT pathway

### SUPPLEMENTARY FIGURES

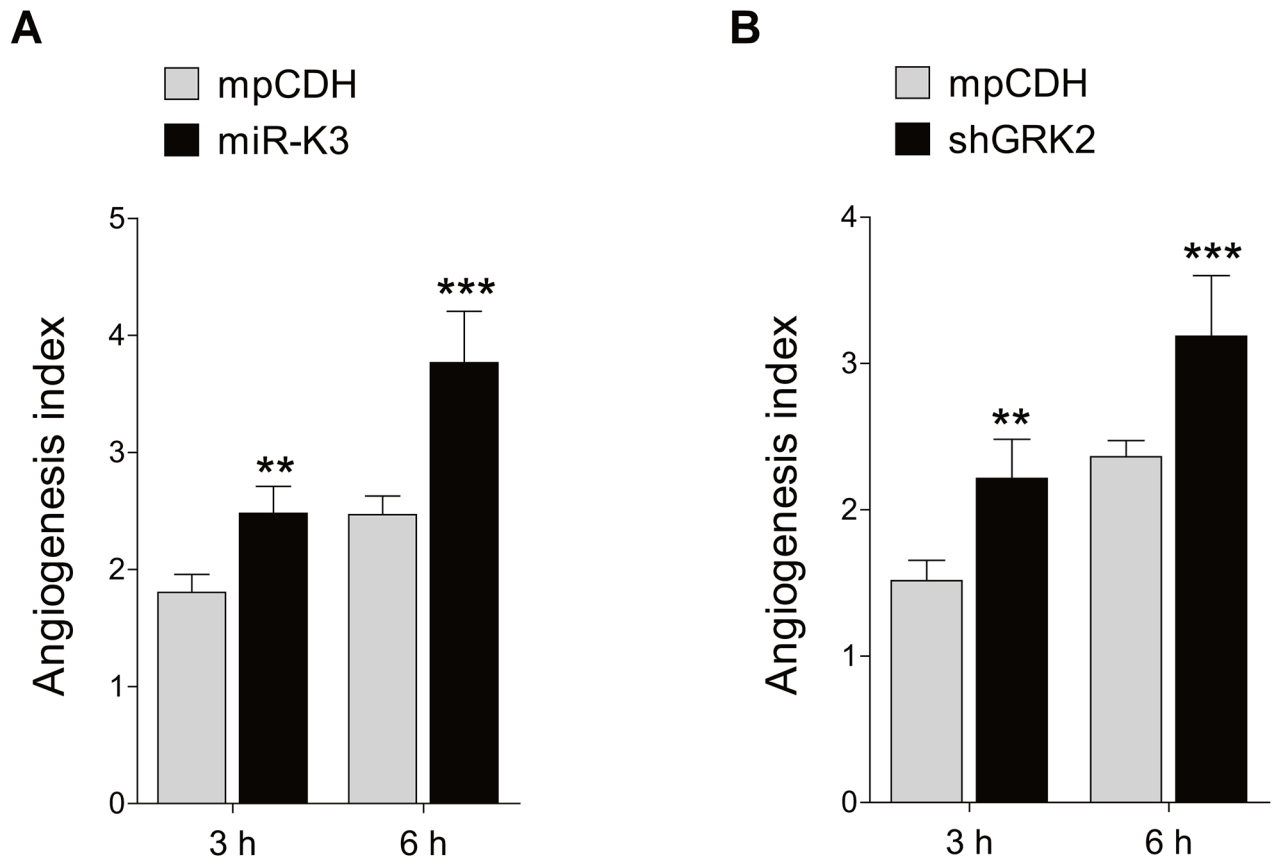


**Supplementary Figure S1: KSHV-encoded miR-K3 induces VEGFA secretion by BC3 cells in vitro.** **A.** Enzyme-linked immunosorbent assay (ELISA) measurement of secreted VEGFA in the supernatants from BC3 cells transduced with miR-K3 sponge (miR-K3 sponge) or the control (pCDH) for 48 h, respectively. \*\*\* $P < 0.001$  for Student's  $t$ -test. **B.** Enzyme-linked immunosorbent assay (ELISA) measurement of secreted VEGFA in the supernatants from BC3 cells transduced with lentivirus-miR-K3 (miR-K3) or the control lentivirus (mpCDH) for 48 h, respectively. \*\*\* $P < 0.001$  for Student's  $t$ -test.



**Supplementary Figure S2: Deletion of miR-K3 from KSHV genome reduces VEGFA secretion by HUVEC in vitro.**

**A.** Enzyme-linked immunosorbent assay (ELISA) measurement of secreted VEGFA in the supernatants from HUVECs infected with BAC16 KSHV wild type virus (KSHV\_WT) or BAC16 miR-K3 deletion mutant virus (miR-K3\_Mut). \*\*\* $P < 0.001$  for Student's  $t$ -test. **B.** Enzyme-linked immunosorbent assay (ELISA) measurement of secreted VEGFA in the supernatants from HUVECs transduced with lentivirus-miR-K3 (miR-K3) or its respective control (mpCDH) after infection with BAC16 KSHV miR-K3 deletion mutant virus. \*\*\* $P < 0.001$  for Student's  $t$ -test. **C.** Enzyme-linked immunosorbent assay (ELISA) measurement of secreted VEGFA in the supernatants from HUVECs transduced with lentivirus-mediated shGRK2 (shGRK2) or its respective control (mpCDH) after infection with BAC16 KSHV miR-K3 deletion mutant virus. \* $P < 0.05$  for Student's  $t$ -test.



**Supplementary Figure S3: MiR-K3/GRK2 pathway is necessary for KSHV-induced angiogenesis.** **A.** Microtubule formation assay for HUVECs transduced with lentivirus-miR-K3 (miR-K3) or its respective control (mpCDH) after infection with BAC16 KSHV miR-K3 deletion mutant virus.  $**P < 0.01$ , and  $***P < 0.001$  for Student's t-test. **B.** Microtubule formation assay for HUVECs transduced with lentivirus-mediated shGRK2 (shGRK2) or its respective control (mpCDH) after infection with BAC16 KSHV miR-K3 deletion mutant virus.  $**P < 0.01$ , and  $***P < 0.001$  for Student's t-test.