



**Figure S4.** Effect of VRK1 depletion of epigenetic modifications of H3K27 in the presence or absence of serum in U2OS osteosarcoma cells. **A.** Effect of VRK1 depletion on histone H3K27 methylation in U2OS osteosarcoma cells. **B.** Effect of VRK1 depletion on histone H3K27 acetylation in U2OS cells. The quantification of H3K27 methylation (left) and acetylation (right) from 50 cells are shown below. The immunoblots of the cell extracts from the experiment are shown at the bottom. The lysate was divided in two for loading in gels to determine each of the H3K27 modifications. \*\*\*  $P < 0.001$ . siCtrl: siControl; siV-02: siVRK1-02; siV-03: siVRK1-03.