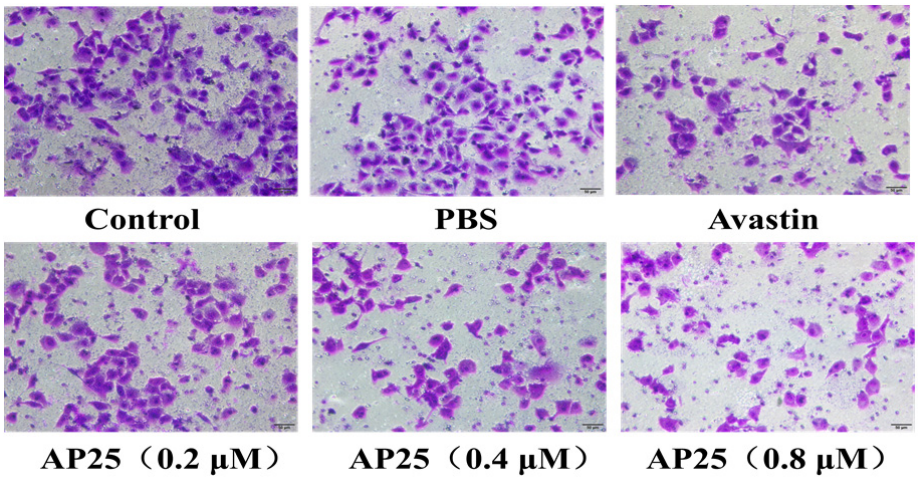
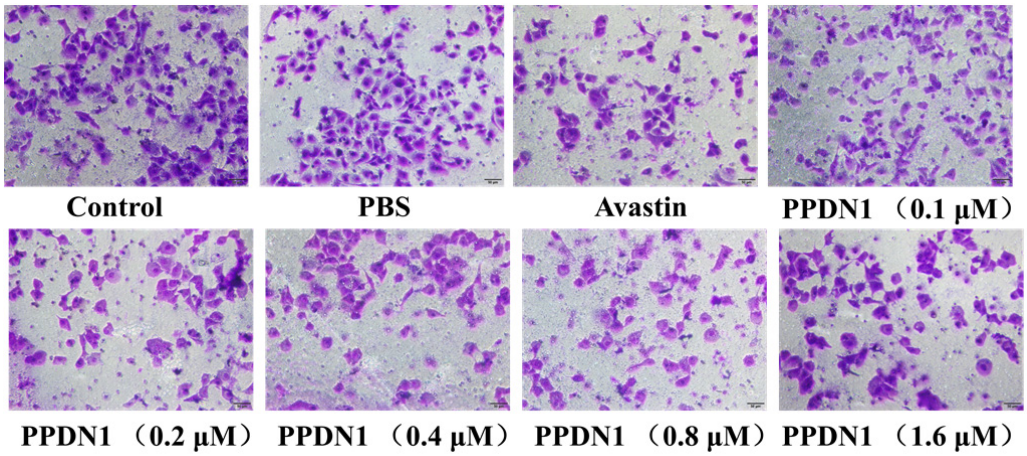
Supplementary Materials

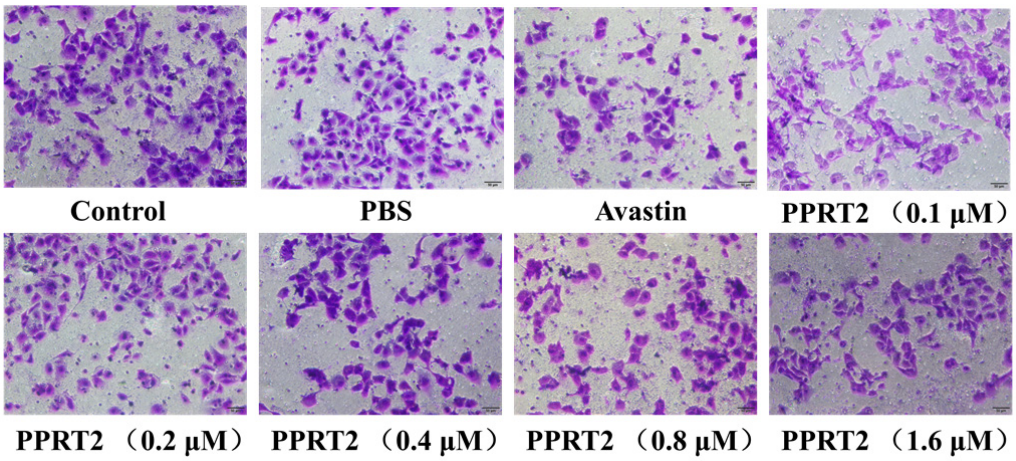


Supplementary Figure S1. Typical images of migrating cells under the treatment of different concentrations of AP25. Transwell upper chambers were coated with a thin film of serum-free matrigel. 100 μL HUVECs (1×10^8 cells/l) in serum-free ECM were added to each chamber. The chambers were then supplied with 100 μL AP25 (0.2, 0.4 or 0.8 μmol/L), the positive control Avastin (0.17 μmol/L), PBS solvent control, respectively. 100 μl serum-free ECM was used as a negative control. The 24-well plate was incubated at 5% CO_2 and 37 ˚C for 24 hours. Then the lower surfaces of the membranes were fixed at room temperature with absolute ethanol for 30 minutes, stained with 0.1% crystal violet for 10 minutes and observed under a microscopic. Four fields were randomly selected and photographed for cell counting. Five pictures were selected and the migrating cells were calculated by Photoshop software.

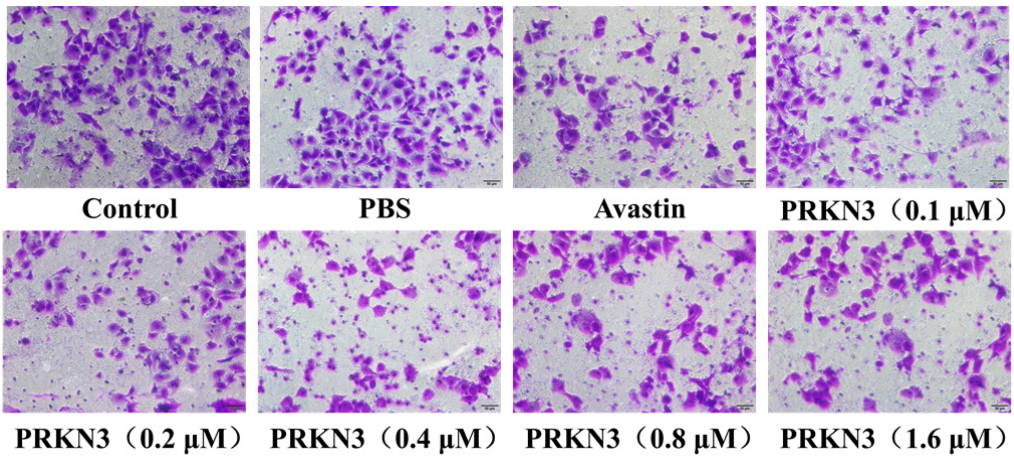


Supplementary Figure S2. Typical images of migrating cells under the treatment of different concentrations of PPDN1. Expreimental conditions and counting method were described as in the legend of Supplementary Figure 1. The chambers were then supplied with 100 μL PPDN1 (0.1, 0.2, 0.4, 0.8, 1.6

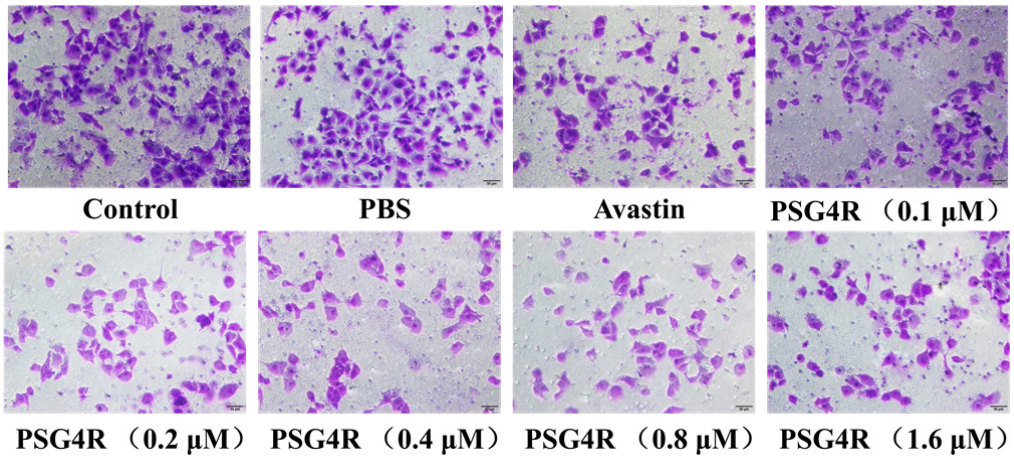
μmol/L), the positive control Avastin (0.17 μmol/L), PBS solvent control, respectively. 100 μl serum-free ECM was used as a negative control.



Supplementary Figure S3. Typical images of migrating cells under the treatment of different concentrations of PPRT2. Expreimental conditions and counting method were described as in the legend of Supplementary Figure 1. The chambers were then supplied with 100 μL PPRT2 (0.1, 0.2, 0.4, 0.8, 1.6 μmol/L), the positive control Avastin (0.17 μmol/L), PBS solvent control, respectively. 100 μl serum-free ECM was used as a negative control.



Supplementary Figure S4. Typical images of migrating cells under the treatment of different concentrations of PRKN3. Expreimental conditions and counting method were described as in the legend of Supplementary Figure 1. The chambers were then supplied with 100 μL PRKN3 (0.1, 0.2, 0.4, 0.8, 1.6 μmol/L), the positive control Avastin (0.17 μmol/L), PBS solvent control, respectively. 100 μl serum-free ECM was used as a negative control.



Supplementary Figure S5. Typical images of migrating cells under the treatment of different concentrations of PSG4R. Expreimental conditions and counting method were described as in the legend of Supplementary Figure 1. The chambers were then supplied with 100 μL PSG4R (0.1, 0.2, 0.4, 0.8, 1.6 μmol/L), the positive control Avastin (0.17 μmol/L), PBS solvent control, respectively. 100 μl serum-free ECM was used as a negative control.