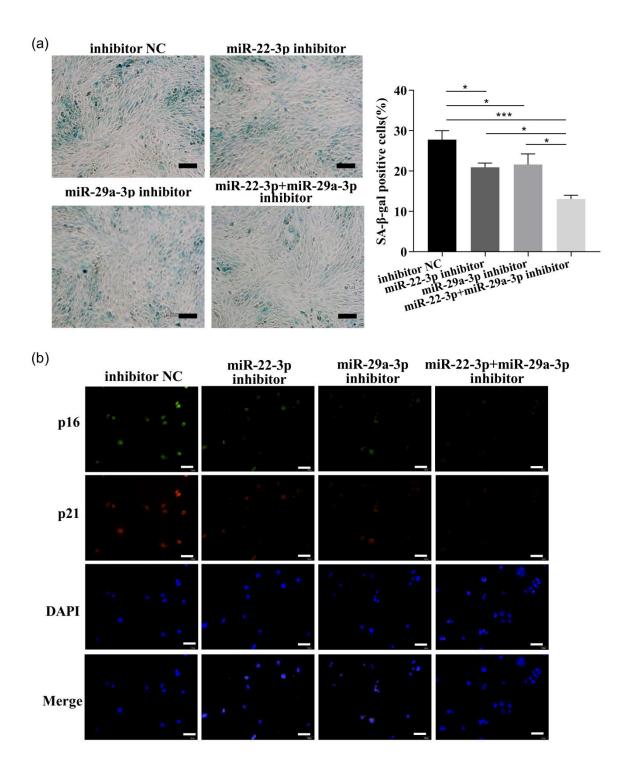
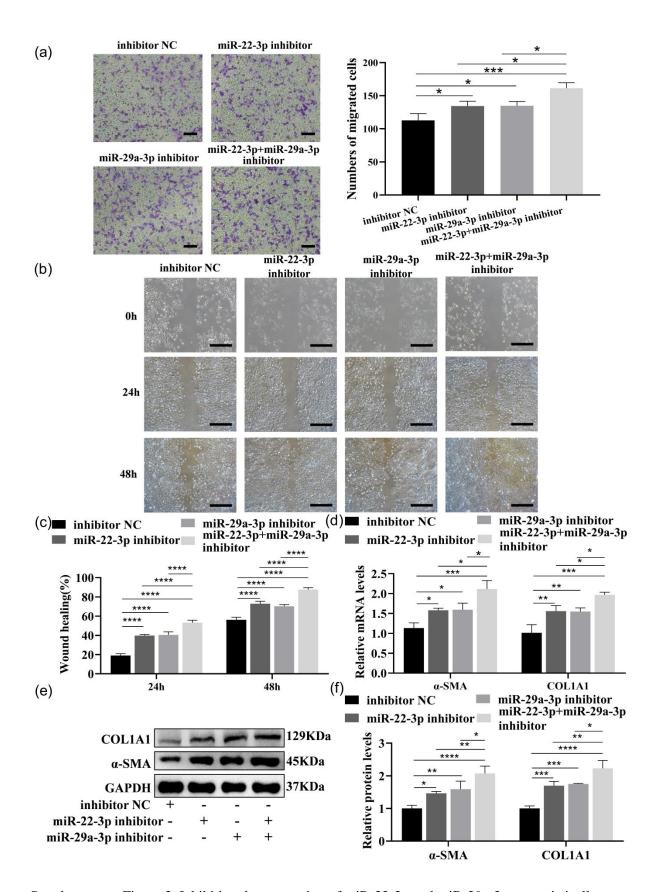


Supplementary Figure 1. Inhibiting the expression of miR-22-3p and miR-29a-3p synergistically enhances LX-2 proliferation. (a) These two miRNA expressions were detected by qRT–PCR in LX-2 transfected with their inhibitors. (b) The proliferation ability of LX-2 was detected by CCK-8 assay. (c) Colony forming ability was tested.



Supplementary Figure 2. Inhibiting the expression of miR-22-3p and miR-29a-3p synergistically inhibits cellular senescence. (a) The function of these two miRNA inhibitors on cellular senescence was detected by SA- β -gal staining analysis. Scale bars = 200 μ m. (b) The p16 and p21 expressions were examined by co-IF (p16: green, p21: red, nuclear: blue; 200 \times , Scale bars = 50 μ m).



Supplementary Figure 3. Inhibiting the expression of miR-22-3p and miR-29a-3p synergistically promotes LX-2 migration and activation. (a) The migration ability of each group of cells transfected

with these two miRNA inhibitors was tested by Transwell assays. Scale bars = $200 \, \mu m$. (b and c) The migration ability was tested in each group of cells transfected with these two miRNA inhibitors. Scale bars = $500 \, \mu m$. (d to f) Expressions of COL1A1 and α -SMA mRNA and protein were measured by qRT–PCR (d) and Western blot (e and f) in LX-2 transfected with these two miRNA inhibitors.