Morroniside regulates hair growth and cycle transition via activation of the Wnt/β-catenin signaling pathway

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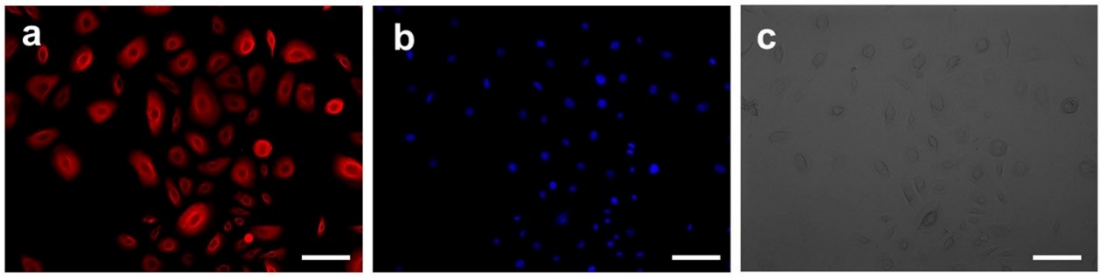
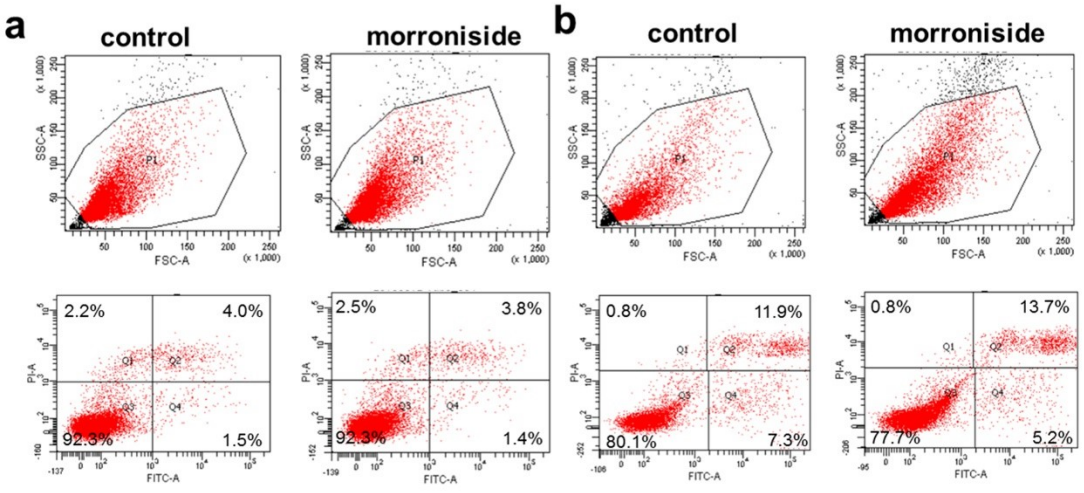
Supplementary Figures

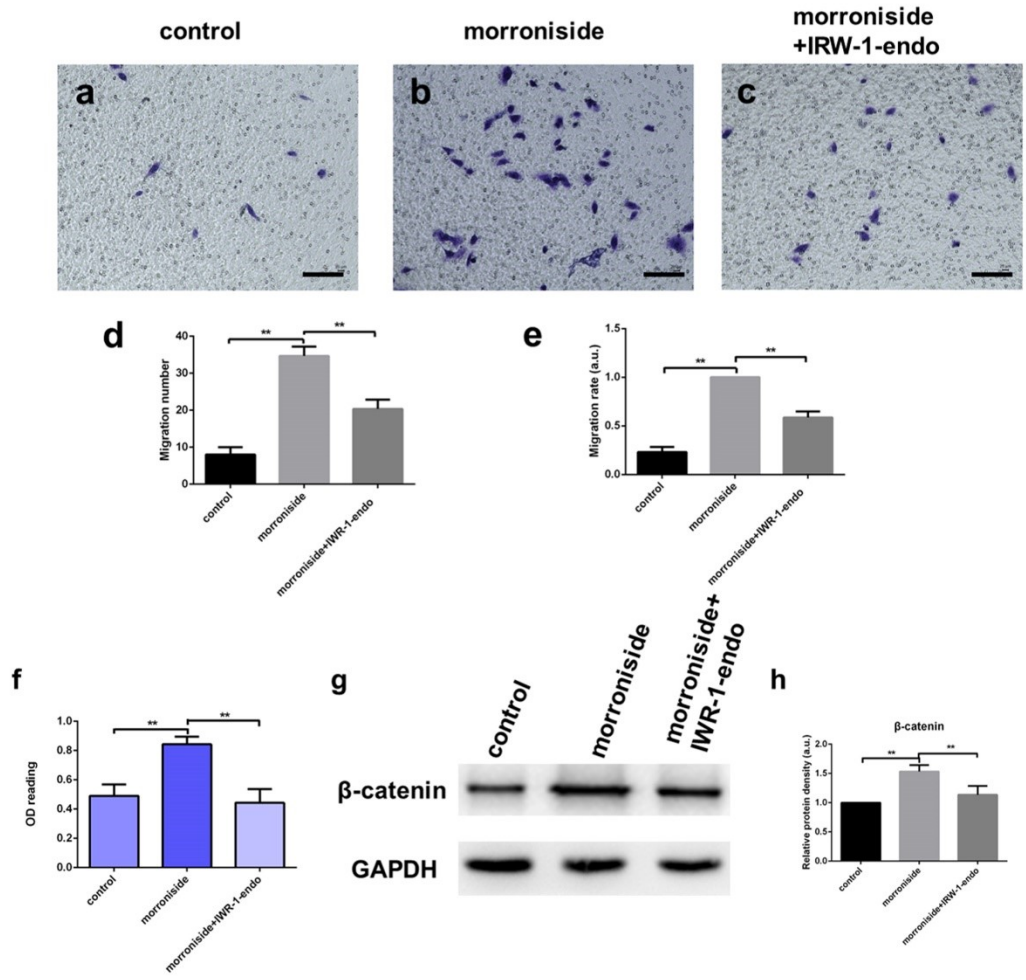


Supplementary Figure S1. Keratin 14 staining for ORSCs *in vitro*. a. ORSCs were stained for keratin 14 under a fluorescence microscope. b. ORSCs were stained for DAPI under a fluorescence microscope. c. ORSCs were observed under a normal microscope.



Supplementary Figure S2. Morroniside treatment had no significant effects on

ORSCs apoptosis in vitro. a-b. Representative pictures show the effect of morroniside treatment on ORSC apoptosis rate for 24 h (a) and 72 h (b) determined by flow cytometry. The morroniside-treated group showed no significant change compared with the control group after 24 h or 72 h.



Supplementary Figure S3. The increased proliferation, migration, and β-catenin expression caused by morroniside were partially rescued by the addition of a Wnt/β-catenin signaling inhibitor (IRW-1-endo).

a-e. Transwell assays of ORSCs in control, morroniside and morronside + IRW-1-endo groups. **f.** The proliferation of ORSCs in the control, morroniside and morronside + IRW-1-endo groups was measured by MTS assays. **g-h. β**-catenin

protein levels in control, morroniside and morronside + IRW-1-endo groups were determined by western blotting. a.u., arbitrary units.