

Supplementary Materials

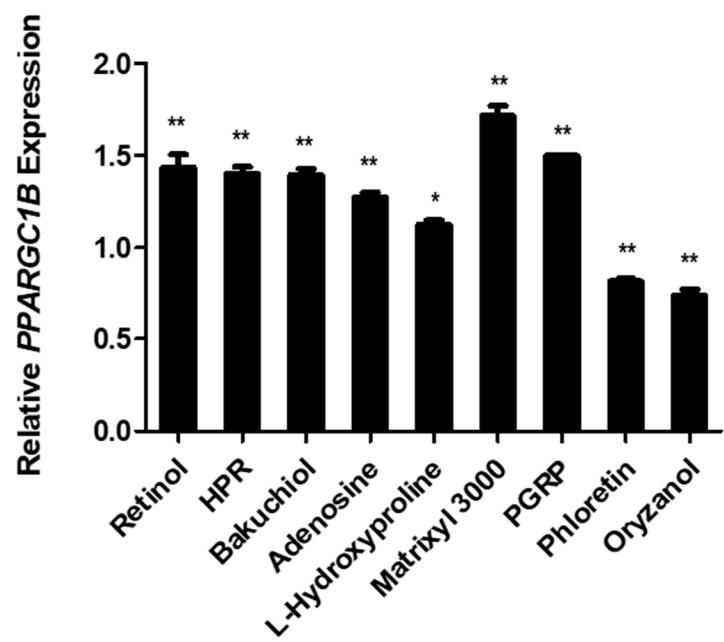


Figure S1. Effects of wrinkle improving materials on *PPARGC1B* expression. The materials that increased or decreased the expression of *PPARGC1B* in human dermal fibroblast, Hs68 treated with various candidates. Error bars represent the standard error of the mean. ** $p < 0.05$, * $p < 0.1$; Student's *t*-test.

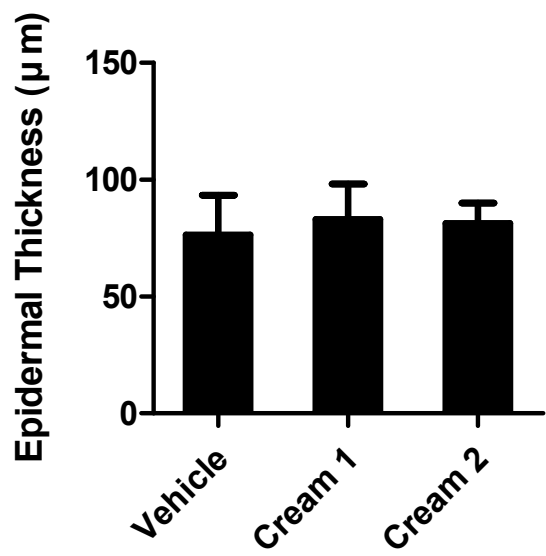


Figure S2. Effect of two cream formulations on epidermal thickness in 3D skin equivalent.