



Skin Lightening Assessment

REPORT

01 JUNE 2022

For
SKINCOMM INTERNATIONAL PTE. LTD

Report reference: R2022043

Test Summary

Project Objective

Skin lightening test of the finished products by assessment of the (in vitro) Melanin content

Human skin pigmentation is related to the lineage of cells known as melanocytes. Amongst the stars of the market for cosmetic care ingredients are the skin lightening agents. Highly differentiated, 3D tissue culture model comprising of normal melanocytes (derived from Asian origin) and keratinocytes can be used to screen for pigmentation effects, where skin care or cosmetic product can be applied directly on epidermis over a period of 21 days. After 21 days, melanin content was assessed, and images were captured.

Test Products:

1. SKINCOMM™ Unicel Actives YouthVital
2. SKINCOMM™ Unicel Mask YouthNutri

Test Conclusion

Based on quantification of melanin, application of YouthVital reduced melanin content significantly by approximately 37.84% ($p \leq 0.01$) while YouthVital + YouthNutri reduced melanin content significantly by 58.63% ($p \leq 0.001$) compared to the negative control. **Result showed that YouthVital and YouthNutri have skin lightening benefits after 21 days of application (YouthVital lightened 37% and combinatory treatment yield 58%)**

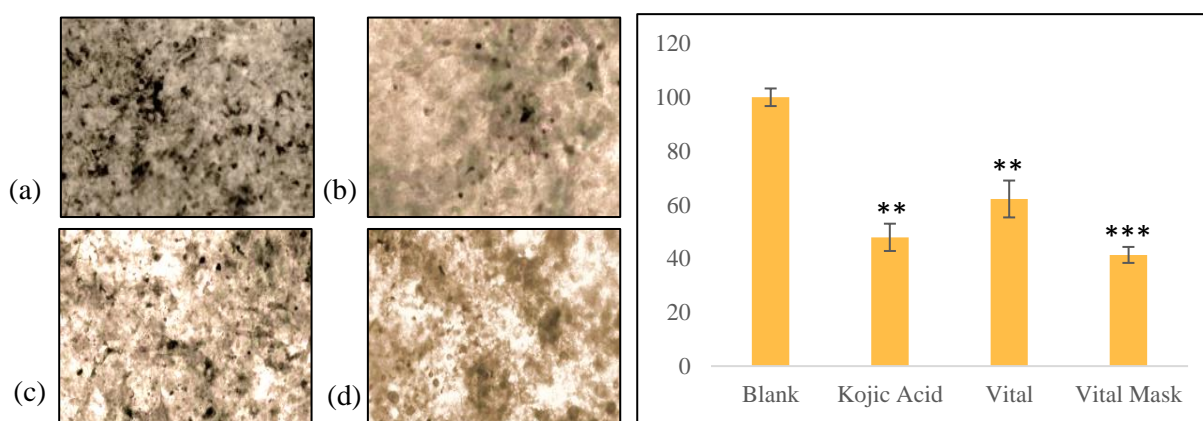


Figure: Left: Microscopic view in in vitro pigmented model after 14 days in culture. (a) Blank (negative control); (b) Kojic Acid (positive control); (c) Vital (UNICEL ACTIVES YOUTHVITAL ACTIVES); (d) Vital + Mask (UNICEL MASK YOUTHNUTRI MASK). Right: Melanin content quantification Student T-test: ***P value ≤ 0.001 ; ** P value ≤ 0.01 ; * P value ≤ 0.05 . (with reference to Blank); ns P value > 0.05 .