



## Pigmentation

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### Skin whitening or propigmenting effects

**Skin pigmentation** is a result of melanin produced by melanocytes in the epidermis. Melanocyte activity, along with the type and distribution of melanin, are the main drivers for diversity of skin color.

**StratiCELL** has developed various 2D and 3D pigmented skin models based on its homemade melanized reconstructed human epidermis, allowing to study the efficacy of dermo-cosmetic active ingredients and skin care products to reduce or activate skin pigmentation.



## 2D & 3D models

**NHEM** : Normal Human Epidermal Melanocytes

**RHE-MEL** : Reconstructed Human Epidermis with MELanocytes

**UV-induced RHE-MEL**

*Phototypes vary according to testing methods*



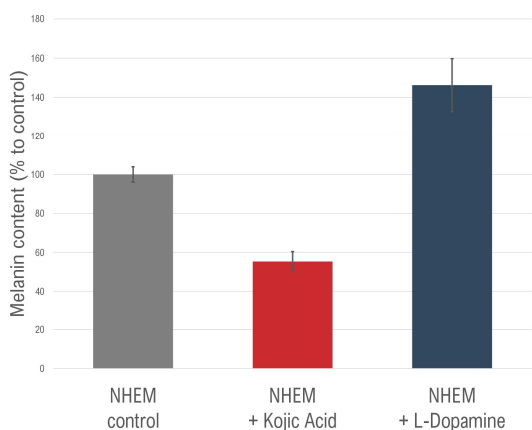
## Positive References

- Kojic acid for *in vitro* studies on skin whitening
- L-Dopamine or IBMX for *in vitro* studies on pigmenting effect

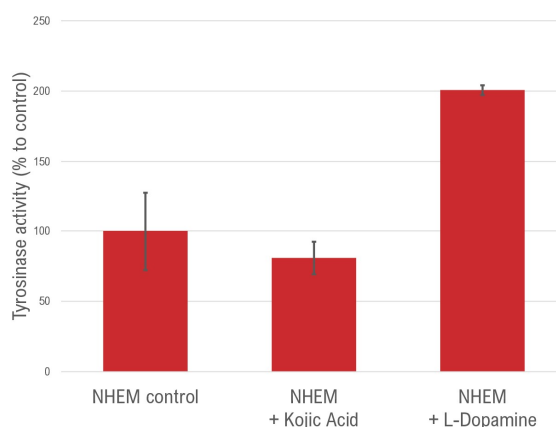


## Testing Methods

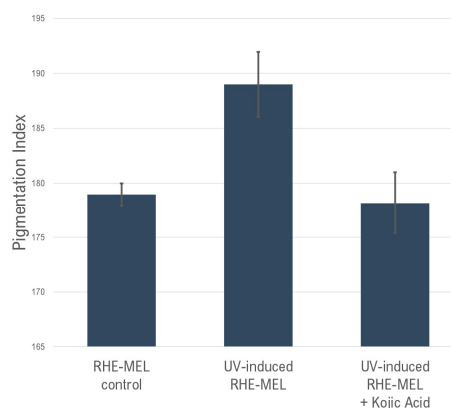
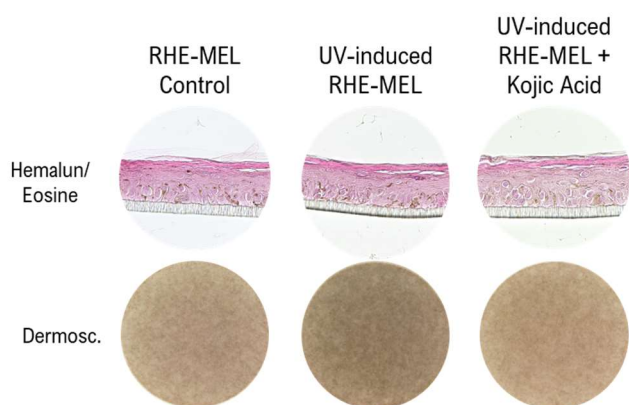
1. Quantification of melanin content after total extraction or based on Fontana-Masson images.



2. Tyrosinase activity, *in tubo* or *in vitro*.



3. Tissue morphology based on Hemalun/Eosin staining and pigmentation based on dermoscopy images : high-resolution macroscopic pictures and calculation of the Individual Typology Angle (ITA) and the Pigmentation Index (PI).



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