

IN VITRO & EX VIVO TESTING



strati@ll
Testing & Beyond

Microbiome-friendly products

***In vitro* testing for “microbiome-friendly products”**

“Microbiome-friendly products” are skin care products preserving a perfectly balanced cutaneous microflora. *In vitro* evaluation can be performed by assessing the adhesion and growth of *Staphylococcus epidermidis*, the predominant commensal in healthy human skin, on top of 3D reconstructed human epidermis.

StratiCELL offers to evaluate the influence of dermo-cosmetic active ingredients and skin care products on reconstructed epidermis colonized by a living strain of *S. epidermidis*, as a model to test “microbiome-friendly products”.



3D model

RHE-SE : Reconstructed Human Epidermis topically colonized by *Staphylococcus epidermidis*



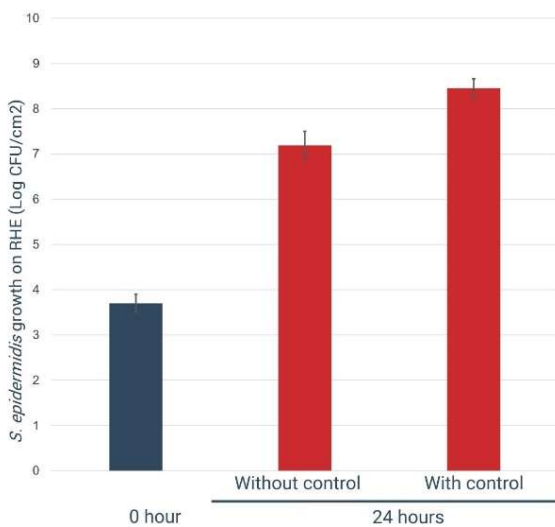
Positive Reference

- *Staphylococcus epidermidis* growth stimulator

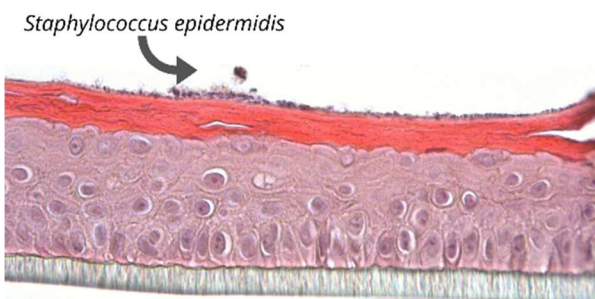


Testing Methods

1. *S. epidermidis* growth on top of RHE by Colony Forming Units counting (CFU).



2. Morphological analysis of RHE-SE after Hemalun/Eosin staining.



3. Skin response to *S. epidermidis* colonization by **gene expression (RT-qPCR)** : individual TaqMan assays or 93 genes TaqMan Low Density Array (TLDA – “Skin Response to Microorganisms”).

