

SOLAR LENTIGINES: hyperpigmented skin lesions



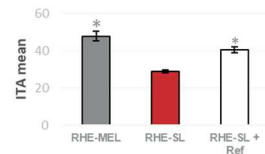
Solar lentigines (SL), also referred as “age spots”, are hyperpigmented lesions that are located predominantly on the sun-exposed areas of the skin, such as the dorsum of the hands, the face, the shoulders, and the scalp. Even though highly associated with photo-ageing in elderly people, hyperpigmented lesions can result from other environmental causes. Histologically, the hallmark of the SL is an increased number of melanocytes in the basal layer of the epidermis and variable epidermal acanthosis.

To objectivate depigmenting ingredients, StratiCELL has developed an in vitro 3D model of reconstructed epidermis that replicates main features of solar lentigines. The specific culture conditions based on a proprietary cocktail of melanogenic mediators induce hyper-proliferation and hyper-pigmentation of the epidermis.

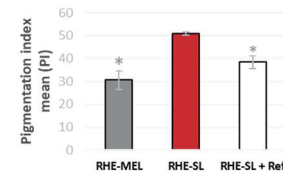
Description	Replicates SL features : hyper-proliferation and hyper-pigmentation of the epidermis
Skin model	<ul style="list-style-type: none"> - RHE-MEL: Reconstructed Human Epidermis with MELanocytes (different phototypes) - RHE-SL: Reconstructed Human Epidermis upon stimulation with a cocktail of fibroblast-derived melanogenic factors to replicate Solar Lentigines features - RHE-SL SPOTS : Reconstructed Human Epidermis with individualized age spots upon stimulation of a melanogenic factors cocktail
Positive reference	Kojic acid
Endpoints	<p>1. Tissues morphology by Fontana-Masson staining, and dermoscopy images : high-resolution macroscopic pictures and calculation of the Individual Typology Angle (ITA), the Pigmentation Index (PI)</p> <p>2. Melanin content by colorimetry after Solvable™ solubilization, or by quantification of Fontana-Masson images</p>



The individual typology angle (ITA) characterizing the phototype is inversely proportional to the phototype (*: p<0,5).

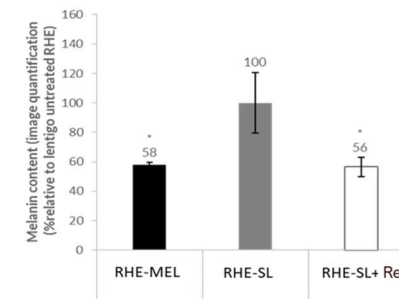


The pigmentation index (PI) for which value is directly proportional to the skin pigmentation (*: p<0,5).



3. Expression of gene playing key roles in pigmentation disorders, by RT-qPCR: individual TaqMan probes or 93 TaqMan Low-Density Array (TLDA)

2. Melanin content by colorimetry after Solvable™ solubilization, or by quantification of Fontana-Masson images



4. RHE-SL SPOTS showing individual age spots: dermoscopy images

