## ATOPIC DERMATITIS: barrier resilience in a Th2-driven inflammation





**Atopic Dermatitis** (AD) is a skin disorder driven by a Th2 inflammatory response associated with epidermal barrier defects. Based on a 3D reconstructed epidermis stimulated with Th2-type interleukins, StratiCELL has established a 3D skin models displaying AD features. This model and associated endpoints are highly relevant to study dyslipidemia, barrier resilience, and inflammation in atopic or sensitive skin conditions.

**Description** 

Replicates AD features: loss of epidermal barrier function and Th2-type inflammatory status

Skin model

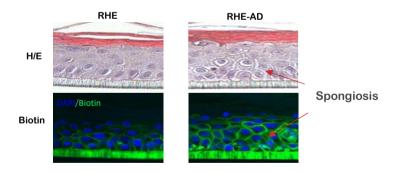
- RHE-Th2: Reconstructed Human Epidermis treated with Th2-type interleukins
- NHEK-Th2: Normal Human Epidermal Keratinocytes treated with Th2-type interleukins

Positive reference

JAK/STAT inhibitors, LXR agonist

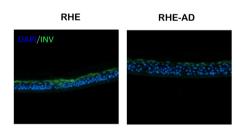
**Endpoints** 

**1. Spongiosis** and barrier function analysis by histological analysis (Hemalun/Eosin (H/E) staining) and trans-membrane **Biotin** diffusion assay.



**3. Expression of genes playing key roles in AD**, by RT-qPCR: individual TaqMan probes or 93 TaqMan Low-Density Arrays (TLDA).

**2.** Quantification and localisation of key AD biomarkers by **Western-Blotting** and **immuno-staining**, respectively.



4. Quantification of Periostin proteins by ELISA.

