

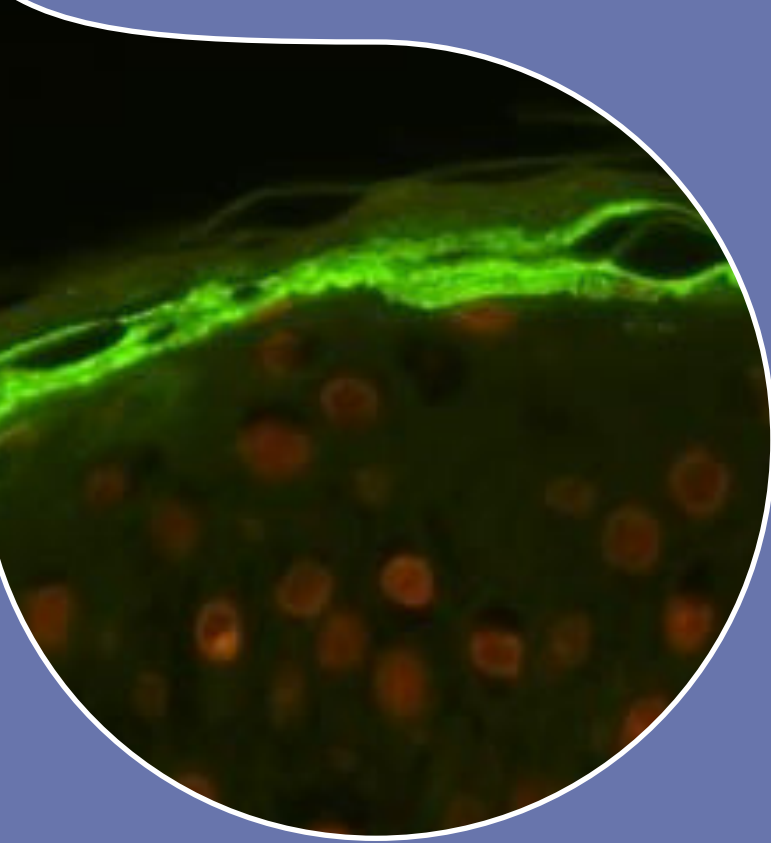
ATOPIC DERMATITIS

Mastering tolerance and efficacy tests

Atopic dermatitis is an inflammatory skin disease affecting a growing number of people worldwide, affecting consumers' quality of life and posing new challenges for personal care product manufacturers.

In this context, it is vital to understand the biomarkers, molecular and cellular mechanisms and visible manifestations of this disease, in order to meet the specific needs of atopic skin, while guaranteeing safety and efficacy.

Eurofins Cosmetics & Personal Care is positioned as a key partner to help you develop a testing plan adapted to this type of skin, while ensuring compliance with current regulations.



Clinical Testing

- **Tolerance tests:** Patch tests, repeated application tests (ROAT) and use tests to identify the risks of sensitisation.
- **Efficacy studies:** Parameters such as hydration, barrier function, redness reduction, and itch relief are meticulously evaluated. Standardized scoring systems like SCORAD, EASI, and IGA ensure objective comparisons across different products.
- **Quality-of-life questionnaires:** Providing insight into the real impact of skincare solutions on daily well-being.

Emotional Tests

Galvanic Skin Response (GSR): characterises skin sensitivity and objectively evaluates the calming or soothing effects of cosmetic products.

Our expertise

ATODERM Skin

An *ex vivo* model based on human skin explants treated with a mixture of cytokines to faithfully reproduce the molecular and structural characteristics of atopic dermatitis.

- **Transcriptomic profiling:** Through comparative analysis with *in vivo* biopsies, we identified three main molecular pathways mirroring real-life atopic dermatitis conditions: inflammation, skin barrier function, and lipid metabolism.
- **Real-time PCR-based array:** A targeted analysis of 30 key genes implicated in atopic dermatitis pathology.
- **Protein-level validation:** Using microscopy, we confirmed a significant decrease of filaggrin expression, reinforcing the model's relevance for preclinical evaluation.

With its in-depth expertise and cutting-edge technologies, Eurofins C&PC supports this industry in the quest for innovative solutions, fostering a deeper understanding of this complex and multifactorial disease and providing tailor-made solutions to improve the daily lives of those affected.

