EPISKIN
L'ORÉAL RESEARCH & INNOVATION

KRISHGEN BioSystems
OUR REAGENTS, YOUR RESEARCH

SkinEthic™ Human Corneal Epithelium

transformed human corneal keratinocytes that are structurally, morphologically and functionally similar to the human cornea with presence of basal, wing and mucus production cells.

ABOUT HCE TISSUES

The SkinEthicTM HCE model is composed of transformed human corneal keratinocytes cultivated on an inert polycarbonate filter at the air liquid interface in a chemically defined medium. The reconstructed tissue forms a stratified and well organized epithelium which is structurally, morphologically and functionnally similar to the human cornea with presence of basal, wing and mucus production cells.

Episkin models are critical tools to speed up Research and Development phases and to shorten the time to market. Some screening tests are already referenced and validated as alternatives to animal use, and others are in the process of validation.

OECD (TG) 492:

The SkinEthic™ HCE EIT test method has adopted as OECD Test Guidelines (TG) 492 in 2017.

The SkinEthic™ Human Corneal Epithelium (HCE) Eye Irritation Test (SkinEthic HCE EIT) describes an in vitro procedure allowing the identification on its own of chemicals not requiring classification and labelling for eye irritation or serious eye damage in accordance with UN GHS ocular hazard categories.

This test method is applicable to substances and mixtures, to solids, liquids, semi-solids and waxes. The liquids may be aqueous or non-aqueous, fully water miscible or not fully water miscible; solids may be soluble or insoluble in water.



SPECIFIC MARKERS
Keratin, CD44, Hémidesmosomes

FORMAT
0.5 cm^2 on an innovative insert

APPLICATIONS

- Ocular Irritation
- Bacterial Adhesion
- Omics

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SkinEthic™ Reconstructed Human Epidermis

an in vitro reconstructed human epidermis from normal human keratinocytes cultured on an inert polycarbonate filter at the air-liquid interface. It is histologically similar to the in vivo human epidermis.

ABOUT RHE TISSUES

SkinEthic RHE is an in vitro reconstructed human epidermis from normal human keratinocytes cultured on an inert polycarbonate filter at the air-liquid interface. It is histologically similar to the in vivo human epidermis.

Episkin models are critical tools to speed up Research and Development phases and to shorten the time to market. Some screening tests are already referenced and validated as alternatives to animal use, and others are in the process of validation.

Every single biocomponent of each step of our production is clearly defined and their traceability is guaranteed. The process is then more secured, allowing to deliver a SkinEthic RHE model more reproducible, robust and reliable than ever.
Different maturities and surfaces are available.

SPECIFIC MARKERS:

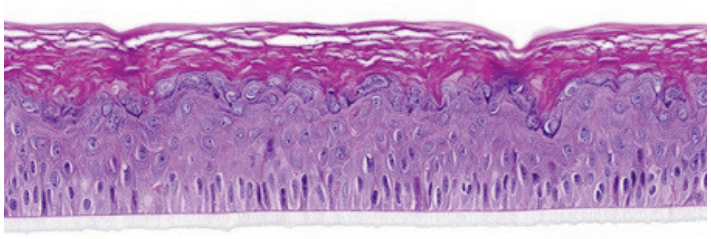
- Filaggrin
- Involucrin
- Loricrin
- Transglutaminase
- Keratin 10
- Keratin 5
- CD44
- Presence of different epidermal classes of lipids comprising ceramides.

Dermal-Epidermal Junction Markers:
Type IV collagen, Laminin V, Alpha6Beta4-integrin, BP antigen

Proliferation marker: Ki67

FORMAT

- 0.5 cm², 1 cm², 4 cm²
- HTS 24-well plate (0.33 cm²)
- HTS 96-well plate (0.11 cm²)



APPLICATIONS


Skin Irritation


Skin Corrosion


Medical Devices


UV Exposure


DNA Damage


Bacterial Adhesion


Omics


Permeability