

Your key to future technologies!

Phenion®

**3D tissue models
of the human skin**

**Meet us and browse
more detailed information
on our website**

www.phenion.com



We care!

**It is our ambition to support your projects with
our expertise in skin physiology.**

Phenion, a Henkel brand, is a synonym for more than 20 years experience in the development of alternatives to animal testing, *in vitro* research and tissue engineering.

**Multi-functional tools for
in vitro R&D and risk assessment**

Applications & Technologies

- efficacy testing of cosmetics and pharmaceuticals
- cytotoxicity
- genotoxicity (3D Skin Comet Assay)
- organ-on-a-chip technology
- skin metabolism
- dermal absorption / skin penetration
- wound healing
- microbiome studies
- cancer research
- skin aging
- long-term studies
- TEWL & TEER analysis
- sub-cutaneous injections
- biophysics
- environmental research

For any request regarding

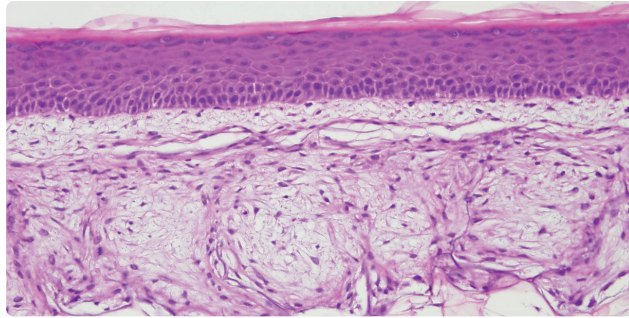
- quotation and order details
- fields of application
- analytics
- consultancy

**in respect of the Phenion® 3D tissue models
please contact us via**

info@phenion.com

Our products...

Standard FT skin models



Histology at day of receipt

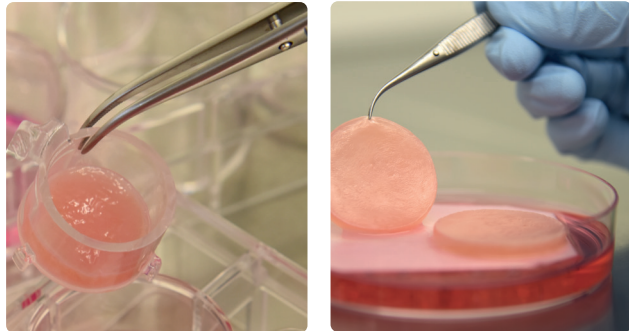
Phenion® Full-Thickness (FT) Skin Model

- epidermis + dermis, Ø 1.4 cm
produced on filter disc

Phenion® FT INSERT

- epidermis + dermis, Ø 1.4 cm
produced in cell culture insert

Standard FT skin models - size options



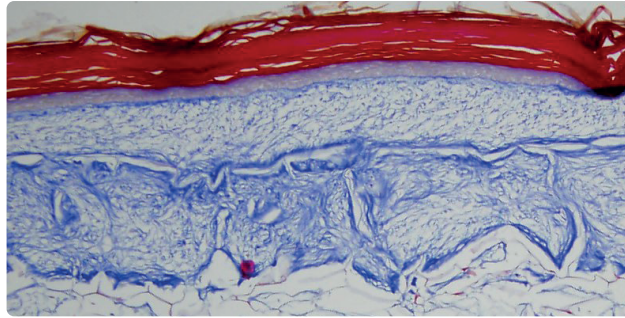
Phenion® FT SMALL

- epidermis + dermis, Ø 0.9 cm
available formats:
in insert or on filter disc

Phenion® FT LARGE

- epidermis + dermis, Ø 3.1 cm
available only on filter disc

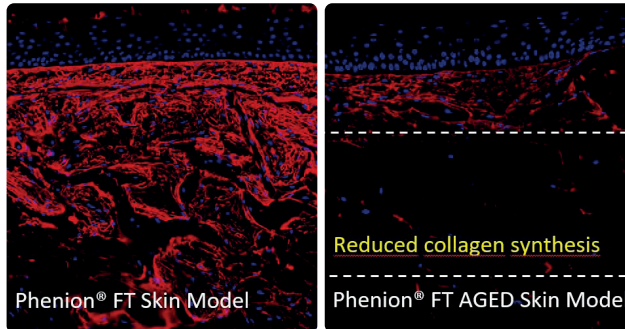
FT skin models - special variants



Histology at day 50 after shipment

Phenion® FT LONG-LIFE

- epidermis + dermis, Ø 1.4 cm
50 days experimental phase
long-lasting tissue maintenance



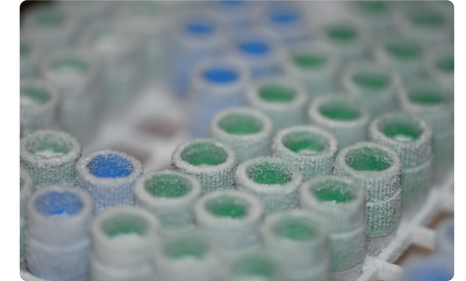
Phenion® FT AGED

- epidermis + dermis, Ø 1.4 cm
mimics aged human skin through
drug-induced accelerated senescence
in fibroblasts
 - less collagen de novo synthesis
 - increased ROS generation
 - increased MMP release

Primary Human Skin Cells

Phenion® keratinocytes / fibroblasts / feeder

- 1x10⁶ cells/vial
foreskin, juvenile, P1



Cell Culture Media

for skin models / fibroblasts / keratinocytes

- variety of special compositions available



Accessories

Phenion® Franz Cell adapter

- perfect fit of Phenion® FT Standard in
15 mm PermeGear Franz Cells
ideal for dermal absorption studies

