



**CELLnTEC**  
ADVANCED CELL SYSTEMS

# The New PRIME Products

## for Epithelial Cell Culture



<b>Tightly Focused</b>	<b>6 Epithelia</b>
<b>Advanced and Reliable</b>	<b>Fully defined, xeno-free</b>
<b>Standard and Specialty Culture</b>	<b>2D, 3D, co-culture, aging</b>
<b>Precisely Tuned</b>	<b>Proliferation or differentiation</b>
<b>Strong Cell Performance</b>	<b>Growth, longevity, functionality</b>



**Swiss Quality Products**



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# Prime Media: Epidermal Keratinocyte Proliferation, 2D and 3D Differentiation

## CnT-Prime CnT-PR

Based on the successful CnT-07 medium, CnT-Prime (#CnT-PR) uses specialized co-factors to improve growth factor binding to membrane-bound receptors.

CnT-Prime retains the same Progenitor Cell Targeted (PCT) growth factors that improve retention of cells in a proliferative progenitor cell phenotype, and thus increase isolation efficiency, growth rates and longevity.

CnT-Prime is fully defined, and does not contain phenol red or any animal or human-derived components. It is provided fully supplemented and frozen.

## CnT-Prime 2D Diff. CnT-PR-D

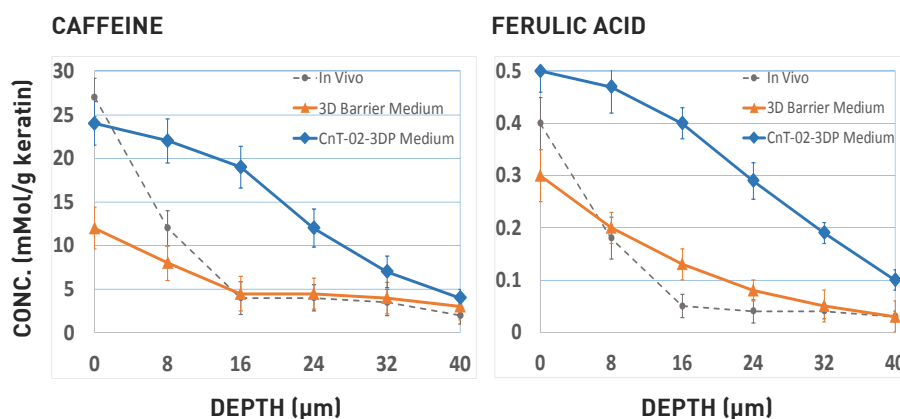
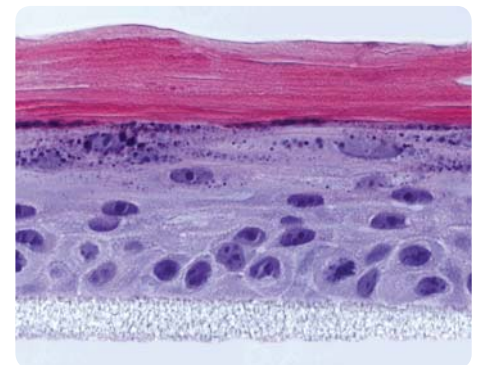
Media designed for proliferation and longevity contain a range of factors that are known to retard the differentiation process.

The CnT-PR-D medium is formulated with a totally different balance of growth factors to encourage cells to differentiate quickly and efficiently in 2D culture.

## CnT-Prime 3D Barrier CnT-PR-3D

Traditional 3D epidermal models deliver good stratification, but have always been 2-5x more permeable than in vivo skin (depending on the physical characteristics of the test chemical).

With additional lipids and an optimised growth factor balance to improve differentiation, the CnT-PR-3D medium delivers a 50% improvement in barrier function after just 12 days of air-lift culture.



Concentration of caffeine (left) or ferulic acid (right) at different depths within the epidermis, measured by raman spectroscopy.

3D epidermal models established with 3D Barrier medium showed significantly lower concentrations at all depths.

Epidermal penetration in vivo shown for comparison (measured using modified treatment protocol).