



# Permeability

## Epidermal metabolic capacity and barrier function

Models: EpiSkin™ Large Model/SkinEthic™ RHE

### DESCRIPTION

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Maintain models in culture 18 hrs before use.



*Biodisponibility studies:* topical application from a few minutes to a few hours

*Metabolic studies:* culture medium containing the substrates solutions for the different enzymatic activities applied for appropriate time.



After the contact time, analysis either with:

- Confocal Raman analysis: profiles of skin components and concentration of test substances (ie: caffeine, salicylic ac., benzoic ac., MBC, OMC...)
- HPLC UV/MSMS analysis: substrates and reaction products concentrations measured in epidermis/epithelia and media: 4-MUAc, CDNB, PABA, 4-MU, PNP



Markers in 3D models can be visualized by histological analysis (HES) and proteins content determined using BCA Pierce Kit for example.

### ENDPOINTS

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Metabolic characterization of epidermal 3D models  
Evaluation of molecules or substances.

