

APPLICATION NOTES

Product: TRANS-CT

PHENOTYPICALLY RESPONSIVE HUMAN SKIN LIKE INVITRO TISSUE EQUIVALENT – A NON-ANIMAL TISSUE MODEL FOR INVITRO TESTINGS

Authors: M Vanje MDS, L Krishna (PhD), S Dravida PhD

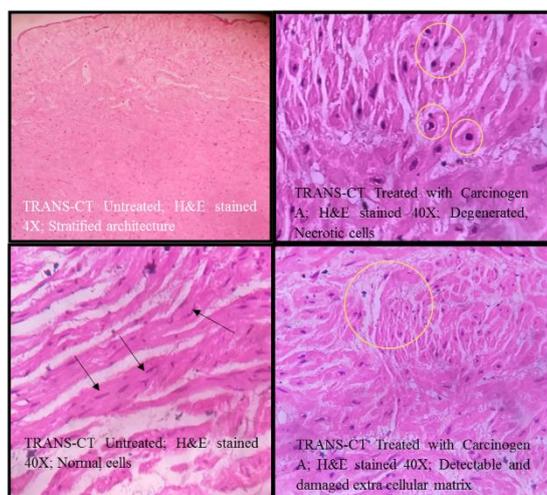
Product Description:

TRAN-CT is an *invitro* human tissue model composed of upper squamous epithelial layer, followed by glycogen rich metabolically active stroma with stellate cells. Arterial and venous connections are structured below epidermal like upper layer.

This model is histologically drawn analogous to multi layered tissue model like that of human skin with cells and connective tissue stratified.

Available in frozen condition. Thaw to use.

Phenotypically responsive TRANS-CT sectioned:



The tested chemical is a known carcinogen and is applied on TRANS-CT, incubated to evaluate the effect. After the exposure time, TRANS-CT is processed further to fix and diagnose the differential architectural effect/s as a whole.

Recommended for:

Exploratory - Evaluating toxicity of topical excipients, cosmetics; Tissue permeability studies; Chemical induced allergy, corrosion, irritation tests; Effect on Whole tissue

Measurable end points:

Tissue related pathological changes, Cell death

Compatible to do: Immunohistochemistry, Immunofluorescence, RT-PCR, Western blot, Colorimetry

Advantages:

- The measured end points on TRANS-CT are of human relevance
- Ready to use
- No culturing procedure involved to use
- No tissue culture facility required to use

Features:

Complete and well organized, multi-layered healthy tissue structure, Processed to be Bioburden free

Benefits:

Best suited as the easiest invitro platform to conduct exploratory preclinical assays

TRANS-CT for:

Type of testing: Screening, Invitro

Level of assessment:

Test material hazard effect

Purpose of testing

Exploratory Preclinical evaluation for human application and compatibility

Use Cases:

For in-Vitro exploratory validations in cosmetic testing

According to PETA, between 100,000-200,000 animals-including rabbits, guinea pigs, hamsters, rats and mice -suffer and die in the name of beauty every year around the world. While the European Union banned the testing of cosmetic products on animals in 1998 and banned the sale of cosmetics whose ingredients had been tested on animals in 2013, only four states in the USA have passed laws that ban animal testing (California, New Jersey, New York and Virginia). With this ban, it makes sense to test (both exploratory and regulatory) beauty products on human skin, equivalents where the result will be out in weeks' time that would reduce the costs involved significantly.

Features & Benefits:

- ✓ Processed Stratified Tissue model (Human sourced) prepared from biological discards.
- ✓ Available in abundance and not donor dependent
- ✓ Most suited for testing cosmetics with read outs for both exploratory and regulatory submissions
- ✓ Easy to handle; Sterile to culture and test

