YBL - Integrated Drug Discovery & Development

Estd. 1999

The Right Skin Model for the Right Question

Primary human skin cells, iPSC-derived systems, and non-animal OECD testing — matched to your context of use

Skin Biology - Supply to Screening



Why YBL-IDD for Skin-Based Research

One scientific team spanning cell supply, OECD testing, and dermatology-focused capability

1 Human-Relevant by Design

2 Consistency you can Document

3 From Primary Skin Cells to iPSC-derived Systems

4 Fit-for-Purpose Study Design

Dermatology-Focused Delivery

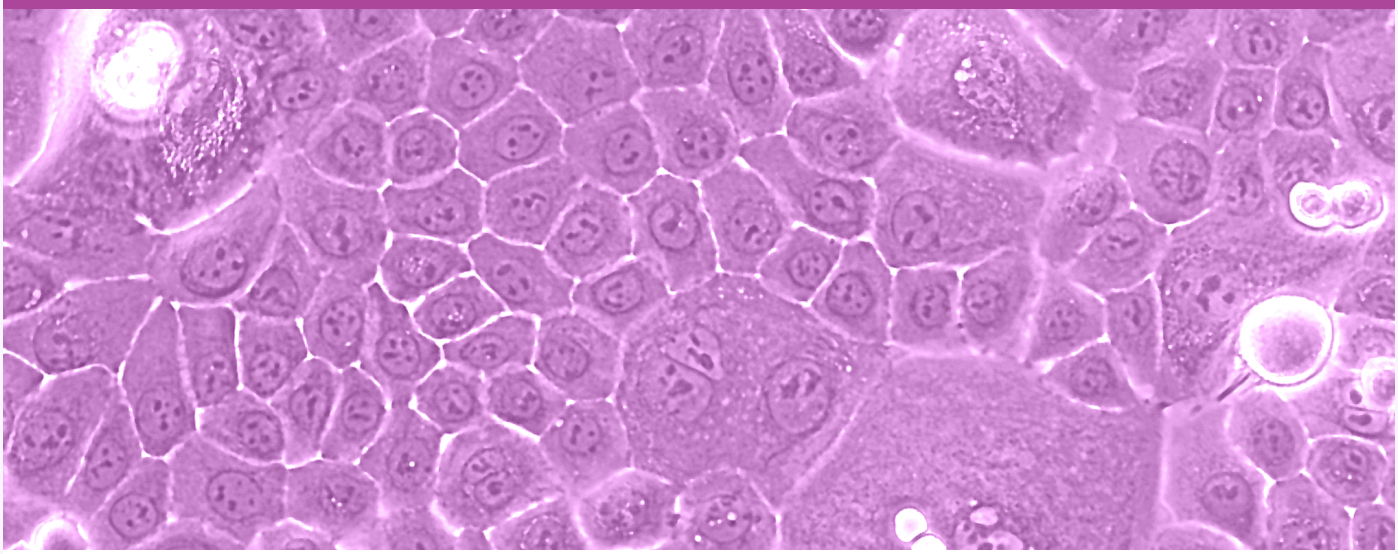
- India-based delivery — no import lead times or forex overhead for cells/expansion media requirements
- In-house team spanning cell manufacturing and regulatory-aligned testing
- Dermatology as a dedicated focus area, not a side offering



Two Capabilities, One Skin Biology Team

Manufacturing and testing are run by the same group — but they are distinct offerings, not one pipeline.

Primary Cell Supply PART-A



Cryopreserved isogenic primary human keratinocytes, melanocytes, & dermal fibroblasts, with matched expansion media for your own in-house protocols.

See pages 4-5

OECD Testing Services PART-B



Skin irritation and sensitization assays on the EpiSkin reconstructed human epidermis model, aligned to OECD test guidelines.

See pages 6-7

Part A

Isogenic Primary Skin Cell Portfolio

Isogenic Primary Skin Cells available from n=5 unique Indian juvenile donors (age 4-6 years)



NHEK Expansion Kit

Normal Human Epidermal Keratinocytes (NHEK) - 0.5 x 10^6 cells + 500 mL Expansion Medium

Applications

Skin irritation, sensitization and corrosion testing



NHEM Expansion Kit

Normal Human Epidermal Melanocytes (NHEM) - 0.5 x 10^6 cells + 500 mL Expansion Medium

Applications

Stratified epidermal co-cultures, UV stress, pigment screening



NHDF Expansion Kit

Normal Human Dermal Fibroblasts (NHDF) - 0.5 x 10^6 cells + 500 mL Basal Medium

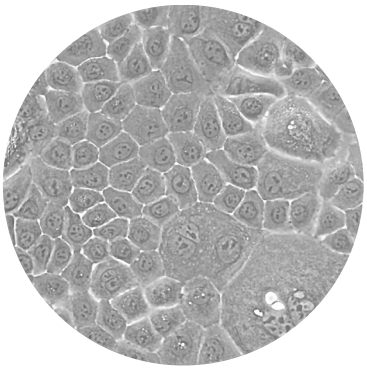
Applications

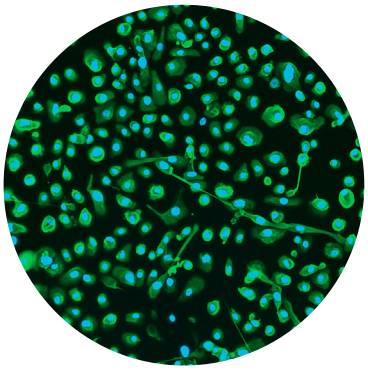
Scratch assays, ECM deposition, anti-fibrotic screening

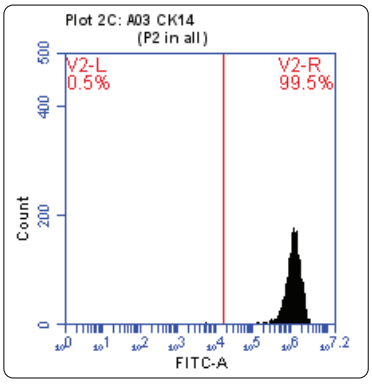
Every kit ships with a safety and technical datasheet; a certificate of analysis is available on request for each component.

Performance Data

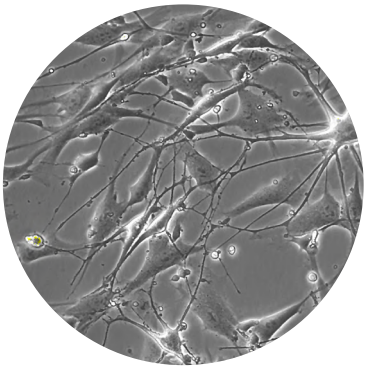
YBL Primary Cells express phenotypic cell shape and functional markers in in vitro culture

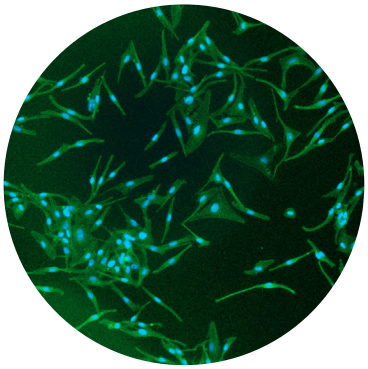


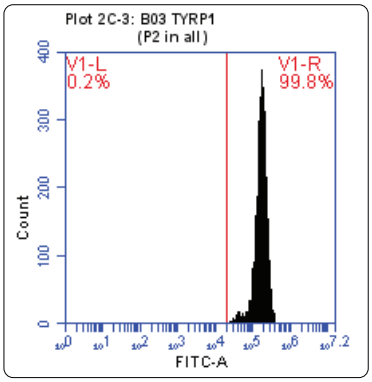




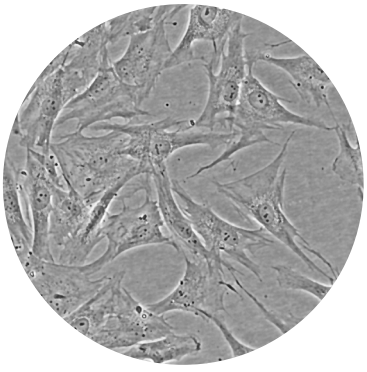
NHEK - cobblestone morphology (left), CK14 expression (middle) and Purity ~99.5% (right)

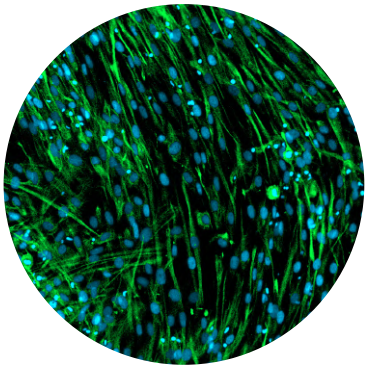


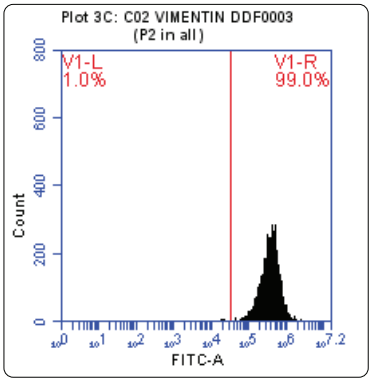




NHEM - polydendritic morphology (left), TYRP1 marker expression (middle) and Purity ~99.8% (right)







NHDF -fibroblastic morphology (left), VIM marker expression (middle) and Purity ~99.0% (right)

Part B

OECD Skin Irritation and Sensitization Testing

Newly Launched

Run your molecules on the EpiSkin reconstructed human epidermis (RHE) model, aligned to OECD TG 439 (skin irritation) and the TG 431 series (skin sensitization).

1

Sample Submission

Test article received and logged against the study protocol.

2

RHE-Based Assay

EpiSkin RHE exposure per OECD TG 439 / 431 - series method, non animal format.

3

Report Out

Results and interpretation delivered on a defined turnaround.

Who this serves:

Cosmetics and personal-care formulators who need fast, documented irritation and sensitization data early in development

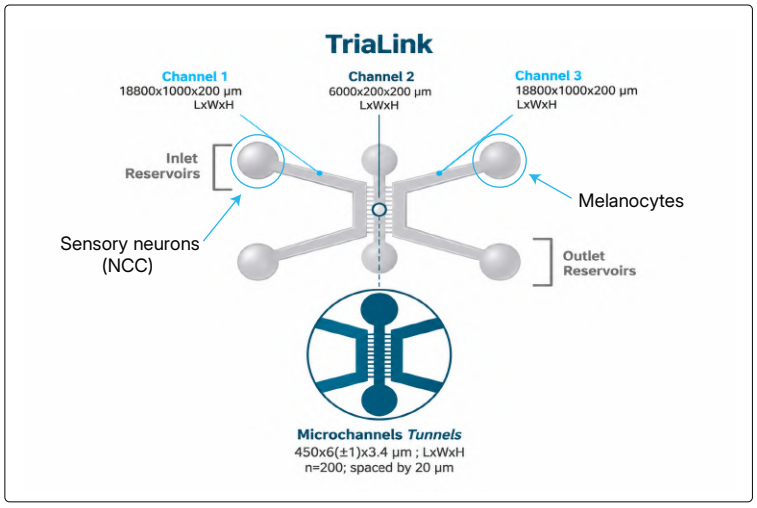
ISO 27001 certified — study data and client formulations are handled under certified information security controls.

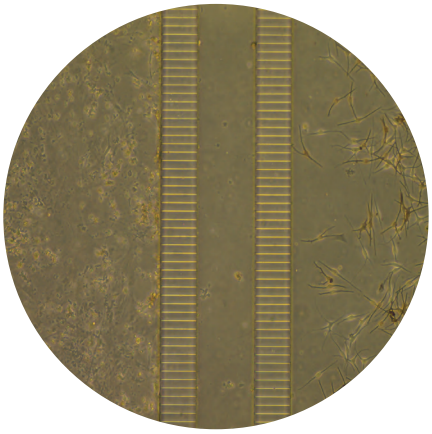
Closer to the Clinic: iPSC & Advanced Modeling

One scientific team spanning cell supply, OECD testing & dermatology-focused capability

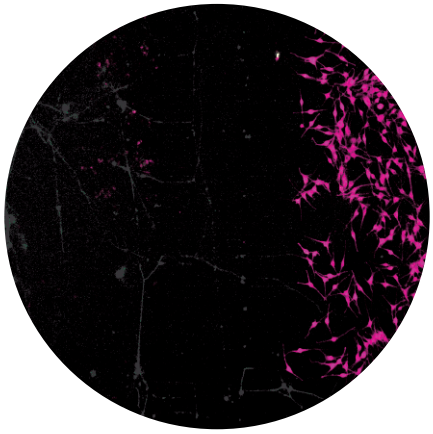
YBL's in-house iPSC technology and derivatives capability sits alongside primary cell supply and OECD testing adding a dimension that moves fit-for-purpose modeling closer to clinical relevance.

Where a study calls for cell-cell crosstalk that primary cultures alone cannot capture, YBL can build multi-cell-type systems — including organ-on-chip formats — around the specific biological question being asked.





Melanocytes and iPSC-derived sensory neurons co-culture on an organ on chip system - chip illustration(top); phase contrast image of co-culture(left); fluorescence staining imaging for co-culture - sensory neurons(green), melanocytes(pink)



EXAMPLE MODEL

Customized Primary Skin Cell-iPSC-Derivative Model

Organ-on-chip co-culture of primary melanocytes with iPSC-derived sensory neurons, built to model neuro-pigmentary crosstalk relevant to hyperpigmentation.



Normal Human Epidermal Keratinocytes Expansion Kit



Normal Human Epidermal Melanocytes Expansion Kit



Normal Human Dermal Fibroblasts Expansion Kit

Standalone media & Cryopreserved cells for all three cell types also available!

Media Pack size : 500 ml I Cryopreserved Cells : 0.5 × 10^6/vial

Each kit/media pack comes with Certificate of Analysis, Technical datasheet with Protocol & MSDS

Primary Skin Cells & Expansion Media

Request the technical datasheet for NHEK, NHEM, and NHDF expansion kits.

Request Datasheet



OECD Testing Services

Request a quote and turnaround time for non-animal-based skin irritation or sensitization testing.

Request Quote

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For more product & service information

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