

# DERMATOLOGICAL RESEARCH

## TOOLS FOR PHYSIOLOGICALLY RELEVANT RESULTS

### Human Skin Cells and Media Culture Systems

- Keratinocytes
- Melanocytes
- Dermal Fibroblasts
- Dermal Microvascular Endothelial Cells
- Follicle Dermal Papilla Cells
- Preadipocytes

### Applications

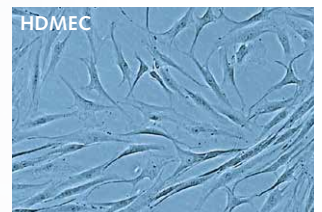
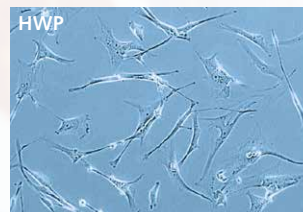
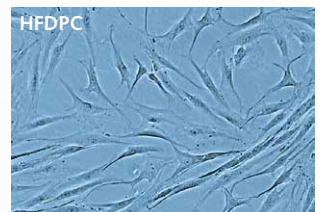
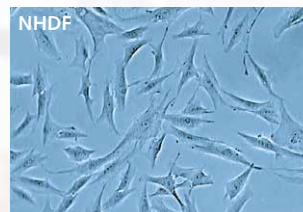
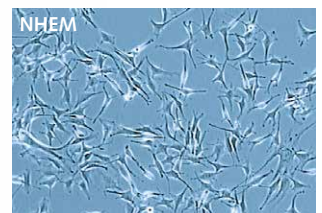
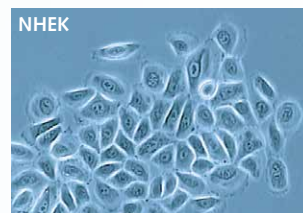
- 2D cell culture of single cell type or co-culture
- Reconstructed human epidermis/skin of single cell type or mix
- Bio-printing
- 3D spheroid embedded in a matrix

### Assays

- Melanin production evaluation
- Cytotoxicity
- Viability – 2D & 3D
- Proliferation
- Migration/invasion
- Inflammation

### Research Areas

- Tissue engineering
- Skin pigmentation
- Aging
- Cosmetic and toxicological testing
- Wound healing
- Hair growth and regeneration



Various cell types in 2D culture at different stages of confluence



If you require special media modifications, we offer a Custom Media Service starting at 10 bottles per order.



# Cell Biology Tools

| Assay               | Description  | Cat. no.  |
|---------------------|--|---|
| ■ 3D Matrix Kits    | Animal-based (BME)/plant-based (Alginate-Hydrogel)/DuoMatrix             | PK-CA577-K51*   |
| ■ 3D Harvesting Kit | Non enzymatic saline based solution                                      | PK-CA577-K982   |
| ■ Growth Factors    | KGF, FGF, ... ; endotoxin-free available                                 | See website *   |
| ■ Transfection      | PromoFectin<br>PromoFectin-siRNA<br>Magnet Assisted Transfection (MATra) | PK-CT-2000-10 / 100<br>PK-CT-2000-RNA-050 / 100 / 500<br>PK-CT-2001-005 / 020 |

\* For more information, please visit our website [www.promocell.com/cell-biology](http://www.promocell.com/cell-biology)

## Cell-based Assays

| Assay                  | Description   | Cat. no.                  |
|------------------------|---|---------------------------|
| ■ Melanin Production   | Tyrosinase Inhibitor Screening Kit  | PK-CA577-K575             |
| ■ Cell Viability       | MTT/XTT/WST1-8/Resazurin/calcein/ATP  | See website *             |
| ■ Viability – 3D       | Fluorometric  | PK-CA577-K948             |
| ■ Cytotoxicity Assay   | Colorimetric/fluorometric/bioluminescence/Crystal violet/Neutral red/<br>Sulforhodamine B | See website *             |
| ■ Proliferation        | EdU/BrdU/CFSE   | PK-CA724-*                |
| ■ Cell Migration Assay | 3/5/8 µm pore size  | PK-CA577-K906 until -K911 |
| ■ Cell Invasion Assay  | BME/Laminin/Collagen I/Collagen IV  | PK-CA577-K912 until -K919 |
| ■ Inflammation         | Elisa Kits  | See website *             |

\* For more information, please visit our website [www.promocell.com/cell-biology](http://www.promocell.com/cell-biology)

## Human Skin Cells and Media

| Cell type                         | Description  | Cat. no. | Marker   | Recommended culture media |
|-----------------------------------|--|----------|--|---------------------------|
| Keratinocytes                     | Normal Human Epidermal Keratinocytes (NHEK) juvenile foreskin, single donor        | C-12001  | Cytokeratin <sup>+</sup>   | C-20011                   |
|                                   | Normal Human Epidermal Keratinocytes (NHEK) juvenile foreskin, pooled              | C-12005  | Cytokeratin <sup>+</sup>   | C-20011                   |
|                                   | Normal Human Epidermal Keratinocytes (NHEK) adult, single donor                    | C-12003  | Cytokeratin <sup>+</sup>   | C-20011                   |
|                                   | Normal Human Epidermal Keratinocytes (NHEK) adult, pooled                          | C-12006  | Cytokeratin <sup>+</sup>   | C-20011                   |
| Melanocytes                       | Normal Human Epidermal Melanocytes (NHEM) juvenile foreskin                        | C-12400  | Mel-5 <sup>+</sup>   | C-24010                   |
|                                   | Normal Human Epidermal Melanocytes (NHEM) juvenile foreskin, cultured in M2 Medium | C-12402  | Mel-5 <sup>+</sup>   | C-24300                   |
|                                   | Normal Human Epidermal Melanocytes (NHEM) adult donor, cultured in M2 Medium       | C-12403  | Mel-5 <sup>+</sup>   | C-24300                   |
| Fibroblasts                       | Normal Human Dermal Fibroblasts (NHDF) juvenile foreskin                           | C-12300  | CD90 <sup>+</sup>  | C-23010                   |
|                                   | Normal Human Dermal Fibroblasts (NHDF) adult donor                                 | C-12302  | CD90 <sup>+</sup>  | C-23020                   |
| Follicle Dermal Papilla Cells     | Human Follicle Dermal Papilla Cells (HFDPC)  | C-12071  | Alkaline phosphatase <sup>+</sup>  | C-26501                   |
| Endothelial Cells (microvascular) | Human Dermal Microvascular Endothelial Cells (HDMEC) juvenile foreskin             | C-12210  | vWF <sup>+</sup> CD31 <sup>+</sup><br>Dil-Ac-LDL uptake <sup>+</sup>                               | C-22020/C-22022           |
|                                   | Human Dermal Microvascular Endothelial Cells (HDMEC) adult donor                   | C-12212  | vWF <sup>+</sup> CD31 <sup>+</sup><br>Dil-Ac-LDL uptake <sup>+</sup>                               | C-22020/C-22022           |
|                                   | Human Dermal Microvascular Endothelial Cells (HDMEC) pre-screened                  | C-12215  | vWF <sup>+</sup> CD31 <sup>+</sup><br>Dil-Ac-LDL uptake <sup>+</sup><br>VEGF response <sup>+</sup> | C-22020/C-22022           |
|                                   | Human Dermal Blood Endothelial Cells (HDBEC) juvenile foreskin                     | C-12211  | Podoplanin <sup>-</sup> CD31 <sup>+</sup>  | C-22020                   |
|                                   | Human Dermal Blood Endothelial Cells (HDBEC) adult donor                           | C-12225  | Podoplanin <sup>-</sup> CD31 <sup>+</sup>  | C-22020                   |
|                                   | Human Dermal Lymphatic Endothelial Cells (HDLEC) juvenile foreskin                 | C-12216  | Podoplanin <sup>-</sup> CD31 <sup>+</sup>  | C-22022                   |
|                                   | Human Dermal Lymphatic Endothelial Cells (HDLEC) adult donor                       | C-12217  | Podoplanin <sup>+</sup> CD31 <sup>+</sup>  | C-22022                   |
| Preadipocytes                     | Human White Preadipocytes (HWP) subcutaneous                                       | C-12730  | Differentiation tested   | C-27410/C-27436/C-27438   |
|                                   | Human White Preadipocytes (HWP) visceral   | C-12732  | Differentiation tested   | C-27410/C-27436/C-27438   |

Cells supplied with at least 500,000 viable cells per vial. Thawing and seeding result in passage 2.

### PromoCell GmbH

Sickingenstr. 63/65  
69126 Heidelberg  
Germany

Email: [info@promocell.com](mailto:info@promocell.com)  
[www.promocell.com](http://www.promocell.com)

### USA/Canada

Phone: 1 – 866 – 251 – 2860 (toll free)  
Fax: 1 – 866 – 827 – 9219 (toll free)

### Deutschland

Telefon: 0800 – 776 66 23 (gebührenfrei)  
Fax: 0800 – 100 83 06 (gebührenfrei)

### France

Téléphone: 0800 – 90 93 32 (ligne verte)  
Téléfax: 0800 – 90 27 36 (ligne verte)

### United Kingdom

Phone: 0800 – 96 03 33 (toll free)  
Fax: 0800 – 169 85 54 (toll free)

### Other Countries

Phone: +49 6221 – 649 34 0  
Fax: +49 6221 – 649 34 40

© PromoCell GmbH