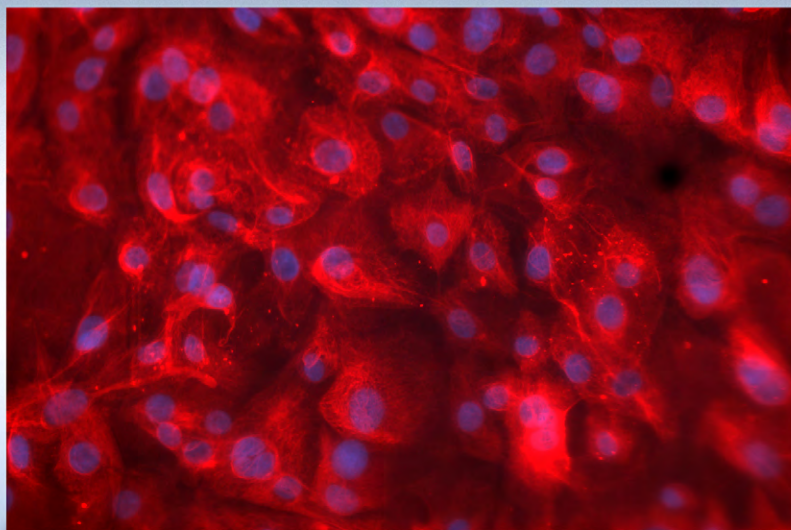


# Primary Cells and Media Reference Guide



# Primary Cells and Media

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### Fresh Human and Animal Primary Cells

These are available upon request. Contact our Scientific Support Team for additional details.

Lonza offers a comprehensive collection of primary cells and media products supporting many research areas. Our brand is well-recognized for its outstanding scientific support team and its dedication to consistent, high-performing products for more than 30 years.

Lonza's Cryopreserved Human Primary Cells Are:

- Flexible – Removes time-dependencies with tissue procurement and isolations. Ready-to-use cells.
- Ideal for Scale Up – Cells are produced as large batches. Same batch can be stored, archived and utilized as needed for long-term studies
- Authenticated – Thorough quality control testing completed to assure cell identity
- Performance guaranteed when used with recommended media, reagents and protocols
- All tissue utilized for our human cell products is ethically obtained with documented, legal permission for research use.

Upon request, detailed donor information including medical history can be provided both for normal and diseased cells.

Contact Scientific Support for further details.

These products are for research use only.

Not approved for human or veterinary use, for application to humans or animals, or for use in clinical or *in vivo* procedures.

Product Warranty – Cultures have a finite lifespan *in vitro*.

Lonza guarantees the performance of its cells up to two years from purchase only if appropriate Clonetics™ or Poietics™ Media and Reagents are used exclusively, and the recommended storage and use protocols are followed. Cell and media performance is not guaranteed if any modifications are made to the complete cell system.

## Cryopreserved Human Primary Cells

| Cell Abbreviation                                | Description  | Cell Cat. No.    | Recommended Medium  | BulletKit™ Cat. No.                      | Basal Cat. No. | SingleQuot™ Cat. No. |
|--|--|------------------|---|--|----------------|----------------------|
| <b>Adipose (Fat) Cells – Normal and Diseased</b> |  |                  |   |  |                |                      |
| ADSC   | Adipose-derived stem cells   | PT-5006          | ADSC™ BulletKit™  | PT-4505                                  | PT-3273        | PT-4503              |
| Pr-Ad-S  | Preadipocytes - subcutaneous   | PT-5001, PT-5020 | PGM™ 2 BulletKit™   | PT-8002, PT-8200 (Insulin free)          | PT-8202        | PT-9502              |
| Pr-Ad-V  | Preadipocytes - visceral   | PT-5005          | PGM™ 2 BulletKit™   | PT-8002, PT-8200 (Insulin free)          | PT-8202        | PT-9502              |
| D-PrAd-S-Diab T1                                 | (Diabetic Type 1) Subcutaneous preadipocyte cells                      | PT-5021          | PGM™ 2 BulletKit™   | PT-8002, PT-8200 (Insulin free)          | PT-8202        | PT-9502              |
| D-PrAd-S-Diab T2                                 | (Diabetic Type 2) Subcutaneous preadipocyte cells                      | PT-5022          | PGM™ 2 BulletKit™   | PT-8002, PT-8200 (Insulin free)          | PT-8202        | PT-9502              |
| D-PrAd-V-Diab T1                                 | (Diabetic Type 1) Visceral preadipocyte cells                          | PT-5023          | PGM™ 2 BulletKit™   | PT-8002, PT-8200 (Insulin free)          | PT-8202        | PT-9502              |
| D-PrAd-V-Diab T2                                 | (Diabetic Type 2) Visceral preadipocyte cells                          | PT-5024          | PGM™ 2 BulletKit™   | PT-8002, PT-8200 (Insulin free)          | PT-8202        | PT-9502              |
| D-ADSC-Diab T1                                   | (Diabetic Type 1) Adipose-derived stem cells                           | PT-5007          | ADSC™ BulletKit™  | PT-4505                                  | PT-3273        | PT-4503              |
| D-ADSC-Diab T2                                   | (Diabetic Type 2) Adipose-derived stem cells                           | PT-5008          | ADSC™ BulletKit™  | PT-4505                                  | PT-3273        | PT-4503              |
| <b>Adult Stem Cells – Normal</b>                 |  |                  |   |  |                |                      |
| ADSC   | Adipose-derived stem cells   | PT-5006          | ADSC™ BulletKit™  | PT-4505                                  | PT-3273        | PT-4503              |
| MSC  | Mesenchymal stem cells   | PT-2501          | MSCGM™ Growth BulletKit™, MSC Osteogenic BulletKit™, MSC Chondrogenic BulletKit™, MSC Adipogenic BulletKit™ | PT-3001<br>PT-3002<br>PT-3003<br>PT-3004 | PT-3238        | PT-4105              |
| DPSC   | Dental pulp stem cells   | PT-5025          | DPSC™ BulletKit™  | PT-3005                                  | PT-3927        | PT-4516              |
| <b>Airway Cells – Normal and Diseased</b>        |  |                  |   |  |                |                      |
| SAEC   | Small airway epithelial cells  | CC-2547          | SAGM™ BulletKit™  | CC-3118                                  | CC-3119        | CC-4124              |
| SAEC-ALI   | Small airway epithelial cells guaranteed for ALI differentiation       | CC-2547S         | S-ALI™ BulletKit™   | CC-4539                                  |                |                      |
| NHBE with RA                                     | Bronchial/Tracheal epithelial cells with retinoic acid                 | CC-2540          | BEGM™ BulletKit™  | CC-3170                                  | CC-3171        | CC-4175              |
| NHBE without RA                                  | Bronchial/Tracheal epithelial cells without retinoic acid              | CC-2541          | BEGM™ BulletKit™  | CC-3170                                  | CC-3171        | CC-4175              |
| NHBE-ALI   | Bronchial/tracheal epithelial cells guaranteed for ALI differentiation | CC-2540S         | B-ALI™ BulletKit™   | 193514                                   |                |                      |
| NHLF   | Lung fibroblasts   | CC-2512          | FGM™ 2 BulletKit™   | CC-3132                                  | CC-3131        | CC-4126              |
| HMVEC-L  | Lung microvascular endothelial cells                                   | CC-2527          | EGM™ 2MV BulletKit™   | CC-3202                                  | CC-3156        | CC-4147              |
| HPAEC  | Pulmonary artery endothelial cells                                     | CC-2530          | EGM™ 2 BulletKit™   | CC-3162                                  | CC-3156        | CC-4176              |
| BSMC   | Bronchial smooth muscle cells  | CC-2576          | SmGM™ 2 BulletKit™  | CC-3182                                  | CC-3181        | CC-4149              |
| PASMC  | Pulmonary artery smooth muscle cells                                   | CC-2581          | SmGM™ 2 BulletKit™  | CC-3182                                  | CC-3181        | CC-4149              |
| DHBE-As  | (Asthma) Bronchial epithelial cells                                    | 194911           | BEGM™ BulletKit™  | CC-3170                                  | CC-3171        | CC-4175              |
| DHBE-As-ALI                                      | (Asthma) Bronchial epithelial cells guaranteed for ALI differentiation | 194911S          | B-ALI™ BulletKit™   | 193514                                   |                |                      |
| DBSMC-As   | (Asthma) Bronchial smooth muscle cells                                 | 194850           | SmGM™ 2 BulletKit™  | CC-3182                                  | CC-3181        | CC-4149              |
| DHLF-As  | (Asthma) Lung fibroblasts  | 194912           | FGM™ 2 BulletKit™   | CC-3132                                  | CC-3131        | CC-4126              |
| D-SAEC-As  | (Asthma) Small airway epithelial cells                                 | CC-2932          | SAGM™ BulletKit™  | CC-3118                                  | CC-3119        | CC-4124              |
| DHBE-COPD  | (COPD) Bronchial epithelial cells                                      | 195275           | BEGM™ BulletKit™  | CC-3170                                  | CC-3171        | CC-4175              |
| DHBE-COPD-ALI                                    | (COPD) Bronchial epithelial cells guaranteed for ALI differentiation   | 195275S          | B-ALI™ BulletKit™   | 193514                                   |                |                      |
| DBSMC-COPD                                       | (COPD) Bronchial smooth muscle cells                                   | 195274           | SmGM™ 2 BulletKit™  | CC-3182                                  | CC-3181        | CC-4149              |
| DHLF-COPD  | (COPD) Lung fibroblasts  | 195277           | FGM™ 2 BulletKit™   | CC-3132                                  | CC-3131        | CC-4126              |
| D-SAEC-COPD                                      | (COPD) Small airway epithelial cells                                   | CC-2934          | SAGM™ BulletKit™  | CC-3118                                  | CC-3119        | CC-4124              |

| Cell Abbreviation | Description  | Cell Cat. No. | Recommended Medium | BulletKit™ Cat. No. | Basal Cat. No. | SingleQuot™ Cat. No. |
|-------------------|--|---------------|--------------------|---------------------|----------------|----------------------|
| DHBE-CF           | {Cystic Fibrosis} Bronchial/Tracheal epithelial cells  | 196979        | BEGM™ BulletKit™   | CC-3170             | CC-3171        | CC-4175              |
| DBSMC - CF        | {Cystic Fibrosis} Bronchial smooth muscle cells        | 196980        | SmGM™ 2 BulletKit™ | CC-3182             | CC-3181        | CC-4149              |
| DHLF-CF           | {Cystic Fibrosis} Lung fibroblasts                     | 194843        | FGM™ 2 BulletKit™  | CC-3132             | CC-3131        | CC-4126              |
| D-SAEC-CF         | {Cystic Fibrosis} Small airway epithelial cells        | CC-2933       | SAGM™ BulletKit™   | CC-3118             | CC-3119        | CC-4124              |
| D-HPAEC-Diab T1   | {Diabetic Type 1} Pulmonary artery endothelial cells   | CC-2923       | EGM™ 2 BulletKit™  | CC-3162             | CC-3156        | CC-4176              |
| D-PASMC-Diab T1   | {Diabetic Type 1} Pulmonary artery smooth muscle cells | CC-2915       | SmGM™ 2 BulletKit™ | CC-3182             | CC-3181        | CC-4149              |
| D-HPAEC-Diab T2   | {Diabetic Type 2} Pulmonary artery endothelial cells   | CC-2924       | EGM™ 2 BulletKit™  | CC-3162             | CC-3156        | CC-4176              |
| D-PASMC-Diab T2   | {Diabetic Type 2} Pulmonary artery smooth muscle cells | CC-2913       | SmGM™ 2 BulletKit™ | CC-3182             | CC-3181        | CC-4149              |
| DHLF-IPL          | {Idiopathic Lung Fibrosis} Lung fibroblasts            | CC-7231       | FGM™ 2 BulletKit™  | CC-3132             | CC-3131        | CC-4126              |

## Bone Marrow

|  |  |                                   |                  |         |  |  |
|--|--|-----------------------------------|------------------|---------|--|--|
|  | Unprocessed human bone marrow                                  | 1M-125 (25 mL);<br>1M-105 (10 mL) |                  |         |  |  |
|  | Human bone marrow stromal cells (>5million cells/vial)         | 2M-302                            |                  |         |  |  |
|  | Bone marrow mononuclear cells (fresh)                          | 1M-125                            | HPGM™ BulletKit™ | PT-3926 |  |  |
|  | Bone marrow mononuclear cells (cryopreserved)                  | 2M-125                            | HPGM™ BulletKit™ | PT-3926 |  |  |
|  | Bone marrow CD34 <sup>+</sup> progenitor cells (fresh)         | 1M-101                            | HPGM™ BulletKit™ | PT-3926 |  |  |
|  | Bone marrow CD34 <sup>+</sup> progenitor cells (cryopreserved) | 2M-101                            | HPGM™ BulletKit™ | PT-3926 |  |  |

## Cardiac – Normal and Diseased

|                   |   |         |                     |         |         |         |
|-------------------|---|---------|---------------------|---------|---------|---------|
| HAEC              | Aortic endothelial cells                                  | CC-2535 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |
| AoSMC             | Aortic smooth muscle cells                                | CC-2571 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-4149 |
| HCAEC             | Coronary artery endothelial cells                         | CC-2585 | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| CASMC             | Coronary artery smooth muscle cells                       | CC-2583 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-4149 |
| HMVEC-C           | Cardiac microvascular endothelial cells                   | CC-7030 | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| AoAF              | Aortic adventitial fibroblasts                            | CC-7014 | SCGM™ BulletKit™    | CC-3205 | CC-3204 | CC-4181 |
| NHCF-A            | Atrial cardiac fibroblasts                                | CC-2903 | FGM™ 3 BulletKit™   | CC-4526 | CC-3131 | CC-4525 |
| NHCF-V            | Ventricle cardiac fibroblasts                             | CC-2904 | FGM™ 3 BulletKit™   | CC-4526 | CC-3131 | CC-4525 |
| HPAEC             | Pulmonary artery endothelial cells                        | CC-2530 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |
| PASMC             | Pulmonary artery smooth muscle cells                      | CC-2581 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-4149 |
| D-HPAEC-Diab T1   | {Diabetic Type 1} Pulmonary artery endothelial cells      | CC-2923 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-3156 |
| D-PASMC-Diab T1   | {Diabetic Type 1} Pulmonary artery smooth muscle cells    | CC-2915 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-3181 |
| D-HAEC-Diab T1    | {Diabetic Type 1} Aortic endothelial cells                | CC-2919 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-3156 |
| D-AoSMC-Diab T1   | {Diabetic Type 1} Aortic smooth muscle cells              | CC-2914 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-3181 |
| D-HCAEC-Diab T1   | {Diabetic Type 1} Coronary artery endothelial cells       | CC-2921 | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-3156 |
| D-CASMC-Diab T1   | {Diabetic Type 1} Coronary artery smooth muscle cells     | CC-2917 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-3181 |
| D-HMVEC-C-Diab T1 | {Diabetic Type 1} Cardiac microvascular endothelial cells | CC-2927 | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-3156 |
| D-HPAEC-Diab T2   | {Diabetic Type 2} Pulmonary artery endothelial cells      | CC-2924 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-3156 |
| D-PASMC-Diab T2   | {Diabetic Type 2} Pulmonary artery smooth muscle cells    | CC-2913 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-3181 |
| D-HAEC-Diab T2    | {Diabetic Type 2} Aortic endothelial cells                | CC-2920 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-3156 |

| Cell Abbreviation | Description   | Cell Cat. No. | Recommended Medium  | BulletKit™ Cat. No. | Basal Cat. No. | SingleQuot™ Cat. No. |
|-------------------|---|---------------|---------------------|---------------------|----------------|----------------------|
| D-AoSMC-Diab T2   | (Diabetic Type 2) Aortic smooth muscle cells              | CC-2916       | SmGM™ 2 BulletKit™  | CC-3182             | CC-3181        | CC-3181              |
| D-HCAEC-Diab T2   | (Diabetic Type 2) Coronary artery endothelial cells       | CC-2922       | EGM™ 2MV BulletKit™ | CC-3202             | CC-3156        | CC-3156              |
| D-CASMC-Diab T2   | (Diabetic Type 2) Coronary artery smooth muscle cells     | CC-2918       | SmGM™ 2 BulletKit™  | CC-3182             | CC-3181        | CC-3181              |
| D-HMVEC-C-Diab T2 | (Diabetic Type 2) Cardiac microvascular endothelial cells | CC-2928       | EGM™ 2MV BulletKit™ | CC-3202             | CC-3156        | CC-3156              |

### Dermal – Normal and Diseased

|                   |   |         |                                    |         |         |                  |
|-------------------|---|---------|------------------------------------|---------|---------|------------------|
| HMVEC-dAd         | Adult dermal microvascular endothelial cells (blood and lymphatic mix)    | CC-2543 | EGM™ 2MV BulletKit™                | CC-3202 | CC-3156 | CC-4147          |
| HMVEC-dBIAd       | Adult dermal blood microvascular endothelial cells                        | CC-2811 | EGM™ 2MV BulletKit™                | CC-3202 | CC-3156 | CC-4147          |
| HMVEC-dLyAd       | Adult dermal lymphatic microvascular endothelial cells                    | CC-2810 | EGM™ 2MV BulletKit™                | CC-3202 | CC-3156 | CC-4147          |
| HMVEC-dNeo        | Neonatal dermal microvascular endothelial cells (blood and lymphatic mix) | CC-2505 | EGM™ 2MV BulletKit™                | CC-3202 | CC-3156 | CC-4147          |
| HMVEC-dBINEo      | Neonatal dermal blood microvascular endothelial cells                     | CC-2813 | EGM™ 2MV BulletKit™                | CC-3202 | CC-3156 | CC-4147          |
| HMVEC-dLyNeo      | Neonatal dermal lymphatic microvascular endothelial cells                 | CC-2812 | EGM™ 2MV BulletKit™                | CC-3202 | CC-3156 | CC-4147          |
| NHDF-Ad           | Adult dermal fibroblasts  | CC-2511 | FGM™ 2 BulletKit™                  | CC-3132 | CC-3131 | CC-4126          |
| NHDF-Neo          | Neonatal dermal fibroblasts   | CC-2509 | FGM™ 2 BulletKit™                  | CC-3132 | CC-3131 | CC-4126          |
| NHEK-Ad           | Epidermal keratinocytes, Adult  | 192627  | KGM™ Gold BulletKit™               | 192060  | 192151  | 192152           |
| NHEK-Neo          | Epidermal keratinocytes, Neonatal   | 192907  | KGM™ Gold BulletKit™               | 192060  | 192151  | 192152           |
| NHEK-Neo Pooled   | Epidermal keratinocytes, Neonatal pooled                                  | 192906  | KGM™ Gold BulletKit™               | 192060  | 192151  | 192152           |
| NHEM-Neo          | Neonatal epidermal melanocytes  | CC-2504 | MGM™ 4 BulletKit™                  | CC-3249 | CC-3250 | CC-4435          |
| NHEM-Ad           | Adult epidermal melanocytes   | CC-2586 | MGM™ 4 BulletKit™ + ET3 Supplement | CC-3249 | CC-3250 | CC-4435, CC-4510 |
| D-HMVEC-D-Diab T1 | (Diabetic Type 1) Dermal microvascular endothelial cells                  | CC-2929 | EGM™ 2MV BulletKit™                | CC-3202 | CC-3156 | CC-4147          |
| D-HMVEC-D-Diab T2 | (Diabetic Type 2) Dermal microvascular endothelial cells                  | CC-2930 | EGM™ 2MV BulletKit™                | CC-3202 | CC-3156 | CC-4147          |
| D-HEK-Diabetes T2 | (Diabetic Type 2) Adult epidermal keratinocytes                           | CC-2926 | KGM™ Gold BulletKit™               | 192060  | 192151  | 192152           |

### Diabetic (Type 1 and 2)

|                   |   |         |                     |         |         |         |
|-------------------|---|---------|---------------------|---------|---------|---------|
| D-HSMM-Diab T1    | (Diabetic Type 1) Muscle myoblasts                        | CC-2900 | SkGM™ 2 BulletKit™  | CC-3245 | CC-3246 | CC-3244 |
| D-HPAEC-Diab T1   | (Diabetic Type 1) Pulmonary artery endothelial cells      | CC-2923 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |
| D-PASMC-Diab T1   | (Diabetic Type 1) Pulmonary artery smooth muscle cells    | CC-2915 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-4149 |
| D-HAEC-Diab T1    | (Diabetic Type 1) Aortic endothelial cells                | CC-2919 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |
| D-AoSMC-Diab T1   | (Diabetic Type 1) Aortic smooth muscle cells              | CC-2914 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-4149 |
| D-HCAEC-Diab T1   | (Diabetic Type 1) Coronary artery endothelial cells       | CC-2921 | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| D-CASMC-Diab T1   | (Diabetic Type 1) Coronary artery smooth muscle cells     | CC-2917 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-4149 |
| D-HMVEC-C-Diab T1 | (Diabetic Type 1) Cardiac microvascular endothelial cells | CC-2927 | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| D-HMVEC-D-Diab T1 | (Diabetic Type 1) Dermal microvascular endothelial cells  | CC-2929 | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| D-HSMM-Diab T2    | (Diabetic Type 2) Muscle myoblasts                        | CC-2901 | SkGM™ 2 BulletKit™  | CC-3245 | CC-3246 | CC-3244 |
| D-HPAEC-Diab T2   | (Diabetic Type 2) Pulmonary artery endothelial cells      | CC-2924 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |
| D-PASMC-Diab T2   | (Diabetic Type 2) Pulmonary artery smooth muscle cells    | CC-2913 | SmGM™ 2 BulletKit™  | CC-3182 | CC-3181 | CC-4149 |
| D-HAEC-Diab T2    | (Diabetic Type 2) Aortic endothelial cells                | CC-2920 | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |

| Cell Abbreviation | Description   | Cell Cat. No. | Recommended Medium   | BulletKit™ Cat. No.             | Basal Cat. No. | SingleQuot™ Cat. No. |
|-------------------|---|---------------|----------------------|---------------------------------|----------------|----------------------|
| D-AoSMC-Diab T2   | {Diabetic Type 2} Aortic smooth muscle cells              | CC-2916       | SmGM™ 2 BulletKit™   | CC-3182                         | CC-3181        | CC-4149              |
| D-HCAEC-Diab T2   | {Diabetic Type 2} Coronary artery endothelial cells       | CC-2922       | EGM™ 2MV BulletKit™  | CC-3202                         | CC-3156        | CC-4147              |
| D-CASMC-Diab T2   | {Diabetic Type 2} Coronary artery smooth muscle cells     | CC-2918       | SmGM™ 2 BulletKit™   | CC-3182                         | CC-3181        | CC-4149              |
| D-HMVEC-C-Diab T2 | {Diabetic Type 2} Cardiac microvascular endothelial cells | CC-2928       | EGM™ 2MV BulletKit™  | CC-3202                         | CC-3156        | CC-4147              |
| D-HMVEC-D-Diab T2 | {Diabetic Type 2} Dermal microvascular endothelial cells  | CC-2930       | EGM™ 2MV BulletKit™  | CC-3202                         | CC-3156        | CC-4147              |
| D-HEK-Diabetes T2 | {Diabetic Type 2} Adult epidermal keratinocytes           | CC-2926       | KGM™ Gold BulletKit™ | 192060                          | 192151         | 192152               |
| D-RPTEC-Diab T2   | {Diabetic Type 2} Renal proximal tube epithelial cells    | CC-2925       | REGM™ BulletKit™     | CC-3190                         | CC-3191        | CC-4127              |
| D-PrAd-S-Diab T1  | {Diabetic Type 1} Subcutaneous preadipocyte cells         | PT-5021       | PGM™ 2 BulletKit™    | PT-8002, PT-8200 (Insulin free) | PT-8202        | PT-9502              |
| D-PrAd-S-Diab T2  | {Diabetic Type 2} Subcutaneous preadipocyte cells         | PT-5022       | PGM™ 2 BulletKit™    | PT-8002, PT-8200 (Insulin free) | PT-8202        | PT-9502              |
| D-PrAd-V-Diab T1  | {Diabetic Type 1} Visceral preadipocyte cells             | PT-5023       | PGM™ 2 BulletKit™    | PT-8002, PT-8200 (Insulin free) | PT-8202        | PT-9502              |
| D-PrAd-V-Diab T2  | {Diabetic Type 2} Visceral preadipocyte cells             | PT-5024       | PGM™ 2 BulletKit™    | PT-8002, PT-8200 (Insulin free) | PT-8202        | PT-9502              |
| D-ADSC-Diab T1    | {Diabetic Type 1} Adipose-derived stem cells              | PT-5007       | ADSC™ BulletKit™     | PT-4505                         | PT-3273        | PT-4503              |
| D-ADSC-Diab T2    | {Diabetic Type 2} Adipose-derived stem cells              | PT-5008       | ADSC™ BulletKit™     | PT-4505                         | PT-3273        | PT-4503              |

### Endothelial Cells – Normal

|                        |   |                 |                     |         |         |         |
|------------------------|---|-----------------|---------------------|---------|---------|---------|
| HAEC                   | Aortic endothelial cells  | CC-2535         | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |
| HCAEC                  | Coronary artery endothelial cells   | CC-2585         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HIAEC                  | Iliac artery endothelial cells  | CC-2545         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HPAEC                  | Pulmonary artery endothelial cells  | CC-2530         | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |
| HUVEC*<br>Next page    | Umbilical vein endothelial cells  | See table below |                     |         |         |         |
| HUVEC-XL*<br>Next page | Umbilical vein endothelial cells  | 191027          | EGM™ 2 BulletKit™   | CC-3162 | CC-3156 | CC-4176 |
| HMVEC-C                | Cardiac microvascular endothelial cells                                   | CC-7030         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HMVEC-L                | Lung microvascular endothelial cells (blood and lymphatic mix)            | CC-2527         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HMVEC-dAd              | Adult dermal microvascular endothelial cells (blood and lymphatic mix)    | CC-2543         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HMVEC-dBIAAd           | Adult dermal blood microvascular endothelial cells                        | CC-2811         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HMVEC-dLyAd            | Adult dermal lymphatic microvascular endothelial cells                    | CC-2810         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HMVEC-dNeo             | Neonatal dermal microvascular endothelial cells (blood and lymphatic mix) | CC-2505         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HMVEC-dBINeo           | Neonatal dermal blood microvascular endothelial cells                     | CC-2813         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HMVEC-dLyNeo           | Neonatal dermal lymphatic microvascular endothelial cells                 | CC-2812         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| UtMVEC-Myo             | Uterine microvascular endothelial cells                                   | CC-2564         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |
| HMVEC-Bd               | Bladder microvascular endothelial cells                                   | CC-7016         | EGM™ 2MV BulletKit™ | CC-3202 | CC-3156 | CC-4147 |

Please see section Diabetes Type 1 and 2 for diseased endothelial cells.



| HUVEC Type                          | Catalog Number   | Characteristics   |
|-------------------------------------|--|---|
| Isolated in EGM™ Media              | Isolated in absence of defined growth factors. Contains BBE. No exogenous VEGF   | CC-2517 (single donor), CC-2519 (pooled donor)                  |
| Isolated in EGM™-Plus Media         | Improved version of part number CC-2517. Offers faster proliferation rates than HUVEC isolated in EGM™ Growth Media. No exogenous VEGF | CC-2935 (single donor)  |
| Isolated in EGM™ 2 Media            | Isolated in presence of growth factors such as VEGF, rhFGF, rhEGF, and others. Does not contain BBE                                    | C2517A (single donor), C2519A (pooled donor) 00191027 (XL size) |
| Pre-screened HUVECs in EGM™ 2 Media | Screened for angiogenesis markers and test positive for expression of eNOS, Axl, Tie-2 and VEGFr2                                      | C2517AS (single donor), C2519AS (pooled donor)                  |

Please see section Diabetes Type 1 and 2 for diseased endothelial cells.

| Cell Abbreviation | Description | Cell Cat. No. | Recommended Medium | BulletKit™ Cat. No. | Basal Cat. No. | SingleQuot™ Cat. No. |
|-------------------|-------------|---------------|--------------------|---------------------|----------------|----------------------|
|-------------------|-------------|---------------|--------------------|---------------------|----------------|----------------------|

### Epithelial Cells – Normal and Diseased

|                 |  |          |                    |         |         |         |
|-----------------|--|----------|--------------------|---------|---------|---------|
| InEpC           | Intestinal epithelial cells  |          | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| HMEC            | Mammary epithelial cells   | CC-2551  | MEGM™ BulletKit™   | CC-3150 | CC-3151 | CC-4136 |
| RPE             | Retinal pigment epithelial cells                                       | 194987   | Rt-EGM™ BulletKit™ | 195409  | 195406  | 195407  |
| PrEC            | Prostate epithelial cells  | CC-2555  | PrEGM™ BulletKit™  | CC-3166 | CC-3165 | CC-4177 |
| SAEC            | Small airway epithelial cells  | CC-2547  | SAGM™ BulletKit™   | CC-3118 | CC-3119 | CC-4124 |
| SAEC-ALI        | Small airway epithelial cells guaranteed for ALI differentiation       | CC-2547S | S-ALI™ BulletKit™  | CC-4539 |         |         |
| NHBE with RA    | Bronchial epithelial cells with retinoic acid                          | CC-2540  | BEGM™ BulletKit™   | CC-3170 | CC-3171 | CC-4175 |
| NHBE without RA | Bronchial epithelial cells without retinoic acid                       | CC-2541  | BEGM™ BulletKit™   | CC-3170 | CC-3171 | CC-4175 |
| NHBE-ALI        | Bronchial epithelial cells guaranteed for ALI differentiation          | CC-2540S | B-ALI™ BulletKit™  | 193514  |         |         |
| HRCE            | Cortical epithelial cells  | CC-2554  | REGM™ BulletKit™   | CC-3190 | CC-3191 | CC-4127 |
| HRE             | Renal epithelial cells   | CC-2556  | REGM™ BulletKit™   | CC-3190 | CC-3191 | CC-4127 |
| RPTEC           | Renal proximal tube epithelial cells                                   | CC-0168  | REGM™ BulletKit™   | CC-3190 | CC-3191 | CC-4127 |
| DHBE-As         | (Asthma) Bronchial epithelial cells                                    | 194911   | BEGM™ BulletKit™   | CC-3170 | CC-3171 | CC-4175 |
| DHBE-As-ALI     | (Asthma) Bronchial epithelial cells guaranteed for ALI differentiation | 194911S  | B-ALI™ BulletKit™  | 193514  |         |         |
| D-SAEC-As       | (Asthma) Small airway epithelial cells                                 | CC-2932  | SAGM™ BulletKit™   | CC-3118 | CC-3119 | CC-4124 |
| DHBE-COPD       | (COPD) Bronchial epithelial cells                                      | 195275   | BEGM™ BulletKit™   | CC-3170 | CC-3171 | CC-4175 |
| DHBE-COPD-ALI   | (COPD) Bronchial epithelial cells guaranteed for ALI differentiation   | 195275S  | B-ALI™ BulletKit™  | 193514  |         |         |
| D-SAEC-COPD     | (COPD) Small airway epithelial cells                                   | CC-2934  | SAGM™ BulletKit™   | CC-3118 | CC-3119 | CC-4124 |
| DHBE-CF         | (Cystic Fibrosis) Bronchial epithelial cells                           | 196979   | BEGM™ BulletKit™   | CC-3170 | CC-3171 | CC-4175 |
| D-SAEC-CF       | (Cystic Fibrosis) Small airway epithelial cells                        | CC-2933  | SAGM™ BulletKit™   | CC-3118 | CC-3119 | CC-4124 |
| D-RPTEC-Diab T2 | (Diabetic Type 2) Renal proximal tube epithelial cells                 | CC-2925  | REGM™ BulletKit™   | CC-3190 | CC-3191 | CC-4127 |

### Fibroblasts – Normal and Diseased

|           |                                 |         |                    |         |         |         |
|-----------|---------------------------------|---------|--------------------|---------|---------|---------|
| NHCF-A    | Atrial cardiac fibroblasts      | CC-2903 | FGM™ 3 BulletKit™  | CC-4526 | CC-3131 | CC-4525 |
| NHCF-V    | Ventricle cardiac fibroblasts   | CC-2904 | FGM™ 3 BulletKit™  | CC-4526 | CC-3131 | CC-4525 |
| AoAF      | Aortic adventitial fibroblasts  | CC-7014 | SCGM™ BulletKit™   | CC-3205 | CC-3204 | CC-4181 |
| NHDF-Ad   | Adult dermal fibroblasts        | CC-2511 | FGM™ 2 BulletKit™  | CC-3132 | CC-3131 | CC-4126 |
| NHDF-Neo  | Neonatal dermal fibroblasts     | CC-2509 | FGM™ 2 BulletKit™  | CC-3132 | CC-3131 | CC-4126 |
| InMyoFib  | Intestinal Myofibroblasts       | CC-2902 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| NHLF      | Lung fibroblasts                | CC-2512 | FGM™ 2 BulletKit™  | CC-3132 | CC-3131 | CC-4126 |
| HPdLF     | Peridontal ligament fibroblasts | CC-7049 | SCGM™ BulletKit™   | CC-3205 | CC-3204 | CC-4181 |
| DHLF-As   | (Asthma) Lung fibroblasts       | 194912  | FGM™ 2 BulletKit™  | CC-3132 | CC-3131 | CC-4126 |
| DHLF-COPD | (COPD) Lung fibroblasts         | 195277  | FGM™ 2 BulletKit™  | CC-3132 | CC-3131 | CC-4126 |

| Cell Abbreviation | Description                                 | Cell Cat. No. | Recommended Medium | BulletKit™ Cat. No. | Basal Cat. No. | SingleQuot™ Cat. No. |
|-------------------|---|---------------|--------------------|---------------------|----------------|----------------------|
| DHLF-CF           | {Cystic Fibrosis} Lung fibroblasts          | 194843        | FGM™ 2 BulletKit™  | CC-3132             | CC-3131        | CC-4126              |
| DHLF-IPL          | {Idiopathic Lung Fibrosis} Lung fibroblasts | CC-7231       | FGM™ 2 BulletKit™  | CC-3132             | CC-3131        | CC-4126              |

### Immune Cells

|                   |  |         |                   |         |  |  |
|-------------------|--|---------|-------------------|---------|--|--|
| NHDC              | Dendritic cells                              | CC-2701 | LGM™ 3 BulletKit™ | CC-3211 |  |  |
| HPBMC             | Peripheral blood mononuclear cells           | CC-2702 | LGM™ 3 BulletKit™ | CC-3211 |  |  |
| CD14 <sup>+</sup> | Peripheral blood CD14 <sup>+</sup> monocytes | 2W-400  | LGM™ 3 BulletKit™ | CC-3211 |  |  |
| NK                | Natural Killer cells (negative selection)    | 2W-501  | LGM™ 3 BulletKit™ | CC-3211 |  |  |
| NK                | Natural Killer cells (positive selection)    | 2W-502  | LGM™ 3 BulletKit™ | CC-3211 |  |  |

### Neural Cells – Normal

|      |                    |         |                                       |                  |         |                  |
|------|--------------------|---------|---------------------------------------|------------------|---------|------------------|
| NHA  | Astrocytes         | CC-2565 | AGM™ BulletKit™                       | CC-3186          | CC-3187 | CC-4123          |
| NHNP | Neural progenitors | PT-2599 | NPMM™ BulletKit™,<br>NPDM™ BulletKit™ | CC-3209, CC-3229 | CC-3210 | CC-4241, CC-4242 |

### Pancreatic Islets

Available through Cells on Demand™ Service

### Progenitor Cells – Normal

|                   |   |                  |                                       |                                 |         |                  |
|-------------------|---|------------------|---------------------------------------|---------------------------------|---------|------------------|
| OCP               | Osteoclast precursors   | 2T-110           | OCP™ BulletKit™                       | PT-8001                         | PT-8201 | PT-9501          |
| NHNP              | Neural progenitors  | PT-2599          | NPMM™ BulletKit™,<br>NPDM™ BulletKit™ | CC-3209, CC-3229                | CC-3210 | CC-4241, CC-4242 |
| CD34 <sup>+</sup> | Bone marrow CD34 <sup>+</sup> progenitor cells (fresh)              | 1M-101           | HPGM™ BulletKit™                      | PT-3926                         |         |                  |
| CD34 <sup>+</sup> | Bone marrow CD34 <sup>+</sup> progenitor cells (cryopreserved)      | 2M-101           | HPGM™ BulletKit™                      | PT-3926                         |         |                  |
| CD34 <sup>+</sup> | Human cord blood CD34 <sup>+</sup> progenitor cells (cryopreserved) | 2C-101           | HPGM™ BulletKit™                      | PT-3926                         |         |                  |
| Pr-Ad-S           | Preadipocytes - subcutaneous  | PT-5001, PT-5020 | PGM™ 2 BulletKit™                     | PT-8002, PT-8200 (Insulin free) | PT-8202 | PT-9502          |
| Pr-Ad-V           | Preadipocytes - visceral  | PT-5005          | PGM™ 2 BulletKit™                     | PT-8002, PT-8200 (Insulin free) | PT-8202 | PT-9502          |

### Prostate – Normal

|       |                        |         |                    |         |         |         |
|-------|------------------------|---------|--------------------|---------|---------|---------|
| PrEC  | Prostate epithelial    | CC-2555 | PrEGM™ BulletKit™  | CC-3166 | CC-3165 | CC-4177 |
| PrSC  | Prostate stromal       | CC-2508 | SCGM™ BulletKit™   | CC-3205 | CC-3204 | CC-4181 |
| PrSMC | Prostate smooth muscle | CC-2587 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |

### Renal – Normal and Diseased

|                 |  |         |                  |         |         |         |
|-----------------|--|---------|------------------|---------|---------|---------|
| HRCE            | Cortical epithelial cells                              | CC-2554 | REGM™ BulletKit™ | CC-3190 | CC-3191 | CC-4127 |
| HRE             | Renal epithelial cells                                 | CC-2556 | REGM™ BulletKit™ | CC-3190 | CC-3191 | CC-4127 |
| RPTEC           | Renal proximal tube epithelial cells                   | CC-0168 | REGM™ BulletKit™ | CC-3190 | CC-3191 | CC-4127 |
| NHMC            | Mesangial Cells  | CC-2559 | MsGM™ BulletKit™ | CC-3146 | CC-3147 | CC-4146 |
| D-RPTEC-Diab T2 | {Diabetic Type 2} Renal proximal tube epithelial cells | CC-2925 | REGM™ BulletKit™ | CC-3190 | CC-3191 | CC-4127 |

### Skeletal and Skeletal Muscle – Normal and Diseased

|                |                                    |         |                                     |                  |                  |                  |
|----------------|------------------------------------|---------|-------------------------------------|------------------|------------------|------------------|
| NH0st          | Osteoblasts                        | CC-2538 | OGM™ BulletKit™                     | CC-3207          | CC-3208          | CC-4193, CC-4194 |
| NHAC-kn        | Articular chondrocytes, knee       | CC-2550 | CDM™ BulletKit™,<br>CGM™ BulletKit™ | CC-3225, CC-3216 | CC-3226, CC-3217 | CC-4408, CC-4409 |
| HPdLF          | Peridontal ligament fibroblasts    | CC-7049 | SCGM™ BulletKit™                    | CC-3205          | CC-3204          | CC-4181          |
| HSMM           | Skeletal muscle myoblasts          | CC-2580 | SkGM™ 2 BulletKit™                  | CC-3245          | CC-3246          | CC-3244          |
| SkMC           | Skeletal muscle cells              | CC-2561 | SkGM™ BulletKit™                    | CC-3160          | CC-3161          | CC-4139          |
| D-HSMM-Diab T1 | {Diabetic Type 1} Muscle myoblasts | CC-2900 | SkGM™ 2 BulletKit™                  | CC-3245          | CC-3246          | CC-3244          |
| D-HSMM-Diab T2 | {Diabetic Type 2} Muscle myoblasts | CC-2901 | SkGM™ 2 BulletKit™                  | CC-3245          | CC-3246          | CC-3244          |



| Cell Abbreviation | Description           | Cell Cat. No. | Recommended Medium | BulletKit™ Cat. No. | Basal Cat. No. | SingleQuot™ Cat. No. |
|-------------------|-----------------------|---------------|--------------------|---------------------|----------------|----------------------|
| OCP               | Osteoclast precursors | 2T-110        | OCP™ BulletKit™    | PT-8001             | PT-8201        | PT-9501              |

### Smooth Muscle Cells – Normal and Diseased

|                 |  |         |                    |         |         |         |
|-----------------|--|---------|--------------------|---------|---------|---------|
| AoSMC           | Aortic smooth muscle cells                             | CC-2571 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| CASMC           | Coronary artery smooth muscle cells                    | CC-2583 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| PrSMC           | Prostate smooth muscle cells                           | CC-2587 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| BSMC            | Bronchial smooth muscle cells                          | CC-2576 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| PASMC           | Pulmonary artery smooth muscle cells                   | CC-2581 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| UtSMC           | Uterine smooth muscle cells                            | CC-2562 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| UASMC           | Umbilical artery smooth muscle cells                   | CC-2579 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| BdSMC           | Bladder smooth muscle cells                            | CC-2533 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| DBSMC-As        | (Asthma) Bronchial smooth muscle cells                 | 194850  | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| DBSMC-COPD      | (COPD) Bronchial smooth muscle cells                   | 195274  | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| DBSMC-CF        | (Cystic Fibrosis) Bronchial smooth muscle cells        | 196980  | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| D-PASMC-Diab T1 | (Diabetic Type 1) Pulmonary artery smooth muscle cells | CC-2915 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| D-AoSMC-Diab T1 | (Diabetic Type 1) Aortic smooth muscle cells           | CC-2914 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| D-CASMC-Diab T1 | (Diabetic Type 1) Coronary artery smooth muscle cells  | CC-2917 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| D-PASMC-Diab T2 | (Diabetic Type 2) Pulmonary artery smooth muscle cells | CC-2913 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| D-AoSMC-Diab T2 | (Diabetic Type 2) Aortic smooth muscle cells           | CC-2916 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |
| D-CASMC-Diab T2 | (Diabetic Type 2) Coronary artery smooth muscle cells  | CC-2918 | SmGM™ 2 BulletKit™ | CC-3182 | CC-3181 | CC-4149 |

## Cryopreserved Animal Primary Cells

### Cardiac

|       |                                |           |                        |         |         |         |
|-------|--------------------------------|-----------|------------------------|---------|---------|---------|
| R-CM  | Rat cardiac myocytes           | R-CM-561  | RCGM™ BulletKit™       | CC-4515 | CC-3275 | CC-4516 |
| R-ASM | Rat aortic smooth muscle cells | R-ASM-580 | DMEM:F12 + supplements |         |         |         |

### Neural Cells

|        |  |            |                    |         |         |                  |
|--------|--|------------|--------------------|---------|---------|------------------|
| R-Cx   | Rat Brain cortex neurons                   | R-Cx-500   | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| R-Hi   | Rat brain hippocampus neurons              | R-Hi-501   | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| R-Cp   | Rat brain striatum neurons                 | R-Cp-502   | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| R-Drg  | Rat dorsal root ganglion neurons           | R-Drg-505  | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| R-eDrg | Embryonic rat dorsal root ganglion neurons | R-eDrg-515 | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| R-Cb   | Rat cerebellar neurons                     | R-Cb-503   | PNGM™-A BulletKit™ | CC-4512 | CC-3256 | CC-4511, CC-4462 |
| R-HTh  | rat brain hypothalamic neurons             | R-HTh-507  | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| R-CxAs | Rat brain cortex astrocytes                | R-CxAs-520 | AGM™ BulletKit™    | CC-3186 | CC-3187 | CC-4123          |
| R-HiAs | Rat brain hippocampus astrocytes           | R-HiAs-521 | AGM™ BulletKit™    | CC-3186 | CC-3187 | CC-4123          |
| R-CpAs | Rat brain striatum astrocytes              | R-CpAs-522 | AGM™ BulletKit™    | CC-3186 | CC-3187 | CC-4123          |
| R-AsM  | Rat brain Cx-Hi-Cp mix astrocytes          | R-AsM-530  | AGM™ BulletKit™    | CC-3186 | CC-3187 | CC-4123          |
| R-G    | Rat Microglial Cells                       | R-G-535    |                    |         |         |                  |
| M-Cx   | Mouse CD1 brain cortex neurons             | M-Cx-400   | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| M-Cp   | Mouse CD1 brain striatum neurons           | M-Cp-402   | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| M-Cx   | Mouse C57 brain cortex neurons             | M-Cx-300   | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |
| M-Cp   | Mouse C57 brain striatum neurons           | M-Cp-302   | PNGM™ BulletKit™   | CC-4461 | CC-3256 | CC-4462          |

| Cell Abbreviation | Description                       | Cell Cat. No. | Recommended Medium | BulletKit™ Cat. No. | Basal Cat. No. | SingleQuot™ Cat. No. |
|-------------------|-----------------------------------|---------------|--------------------|---------------------|----------------|----------------------|
| M-AsM             | Mouse CD1 brain mixed astrocytes  | M-AsM-430     | AGM™ BulletKit™    | CC-3186             | CC-3187        | CC-4123              |
| M-AsM             | Mouse CD57 brain mixed astrocytes | M-AsM-330     | AGM™ BulletKit™    | CC-3186             | CC-3187        | CC-4123              |
| M-Hi              | Mouse brain hippocampus neurons   | M-Hi-401      | PNGM™ BulletKit™   | CC-4461             | CC-3256        | CC-4462              |

### Other Cell Types

|         |  |           |                                      |         |         |         |
|---------|--|-----------|--------------------------------------|---------|---------|---------|
| R-Ret   | Rat retinal cells                            | R-Ret-508 | PNGM™ BulletKit™                     | CC-4461 | CC-3256 | CC-4462 |
| R-OST   | Rat calvariae osteoblasts                    | R-Ost-583 |                                      |         |         |         |
| MEF     | Mouse embryonic fibroblasts                  | M-Fb-481  | DMEM high glucose containing 10% FBS |         |         |         |
| bMVEC-b | Bovine brain microvascular endothelial cells | AC-2509   |                                      |         |         |         |

## Cryopreserved Hepatocytes

| Cell Type | Format | Cell Cat. No. | Thawing media | Plating Media | Maintenance Media |
|-----------|--------|---------------|---------------|---------------|-------------------|
|-----------|--------|---------------|---------------|---------------|-------------------|

### Human Hepatocytes – Plateable

|   |                          |       |        |       |       |
|---|--------------------------|-------|--------|-------|-------|
| Human Hepatocytes, Induction Qualified            | Cryopreserved, plateable | HUCPI | MCHT50 | MP100 | MM250 |
| Human Hepatocytes, Metabolism Qualified           | Cryopreserved, plateable | HUCPM | MCHT50 | MP100 | MM250 |
| Human Hepatocytes, Qualyst Transporter Certified™ | Cryopreserved, plateable | HUCPQ | MCHT50 | MP100 | MM250 |

### Human Hepatocytes – Suspension

|                                  |  |         |        |  |       |
|----------------------------------|--|---------|--------|--|-------|
| Human Hepatocytes, 10 donor pool | Cryopreserved, pooled suspension       | HUCS10P | MCHT50 |  | MM250 |
| Human Hepatocytes, 20 donor pool | Cryopreserved, pooled suspension       | HUCS20P | MCHT50 |  | MM250 |
| Human Hepatocytes                | Cryopreserved, single donor suspension | HUCSD   | MCHT50 |  | MM250 |

### Animal Hepatocytes – Plateable

|                                  |                          |        |        |       |       |
|----------------------------------|--------------------------|--------|--------|-------|-------|
| Dog (Beagle) Hepatocytes         | Cryopreserved, plateable | DBCPO1 | MCAT50 | MP100 | MM250 |
| Monkey (Cynomolgus) Hepatocytes  | Cryopreserved, plateable | CYCP01 | MCAT50 | MP100 | MM250 |
| Mouse (C57Bl/6) Hepatocytes      | Cryopreserved, plateable | MBCP01 | MCRT50 | MP100 | MM250 |
| Mouse (CD-1) Hepatocytes         | Cryopreserved, plateable | MCCP01 | MCRT50 | MP100 | MM250 |
| Rat (Fisher) Hepatocytes         | Cryopreserved, plateable | RFCP01 | MCRT50 | MP100 | MM250 |
| Rat (Sprague Dawley) Hepatocytes | Cryopreserved, plateable | RSCP01 | MCRT50 | MP100 | MM250 |
| Rat (Wistar Han) Hepatocytes     | Cryopreserved, plateable | RWCP01 | MCRT50 | MP100 | MM250 |
| Rat (Wistar) Hepatocytes         | Cryopreserved, plateable | RICP01 | MCRT50 | MP100 | MM250 |

### Animal Hepatocytes – Suspension

|                          |                           |        |        |  |       |
|--------------------------|---------------------------|--------|--------|--|-------|
| Dog (Beagle) Hepatocytes | Cryopreserved, suspension | DBCS01 | MCAT50 |  | MM250 |
|--------------------------|---------------------------|--------|--------|--|-------|

| Cell Type                        | Format                    | Cell Cat. No. | Thawing media | Plating Media | Maintenance Media |
|----------------------------------|---------------------------|---------------|---------------|---------------|-------------------|
| Monkey (Cynomolgus) Hepatocytes  | Cryopreserved, suspension | CYCS01        | MCAT50        |               | MM250             |
| Mouse (C57Bl/6) Hepatocytes      | Cryopreserved, suspension | MBCS01        | MCRT50        |               | MM250             |
| Mouse (CD-1) Hepatocytes         | Cryopreserved, suspension | MCCS01        | MCRT50        |               | MM250             |
| Rat (Fisher) Hepatocytes         | Cryopreserved, suspension | RFCS01        | MCRT50        |               | MM250             |
| Rat (Sprague Dawley) Hepatocytes | Cryopreserved, suspension | RSCS01        | MCRT50        |               | MM250             |
| Rat (Wistar Han) Hepatocytes     | Cryopreserved, suspension | RWCS01        | MCRT50        |               | MM250             |
| Rat (Wistar) Hepatocytes         | Cryopreserved, suspension | RICS01        | MCRT50        |               | MM250             |

### Cryopreserved Human Liver Non-Parenchymal Cells

|                                   |               |       |  |         |         |
|-----------------------------------|---------------|-------|--|---------|---------|
| Human Kupffer Cells               | Cryopreserved | HUCLK |  | MCKP250 | MCKM250 |
| Human Stellate Cells              | Cryopreserved | HUCLS |  |         | MCST250 |
| Human Liver Non-Parenchymal Cells | Cryopreserved | HUCNP |  | MP100   | MP100   |

## Fresh Human and Animal Primary Cells

These are available upon request. Contact our Scientific Support Team for additional details. See contact information on back cover.

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CD-LI015 01/17

