

Materials List for:

Development of a Multicellular Three-dimensional Organotypic Model of the Human Intestinal Mucosa Grown Under Microgravity

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Materials

| Name | Company | Catalog Number | Comments |
|--|-------------------|----------------|---|
| Quad Rotator/Independent Rotating Wall Vessel (RWV) bioreactor | Synthecon | RCCs-4DQ | For up to 4 vessels. Models with more or less vessels are also available. |
| Disposable 50 ml-vessel | Synthecon | D-405 | Box with 4 vessels |
| HCT-8 epithelial cells | ATCC | CCL-244 | |
| CCD-18Co Fibroblasts | ATCC | CRL-1459 | |
| Human Umbilical Vein Endothelial Cells | ATCC | CRL-1730 | HUVEC |
| Fibroblast Growth Factor-Basic | Sigma | F0291 | bFGF |
| Stem Cell Factor | Sigma | S7901 | SCF |
| Hepatocyte Growth Factor | Sigma | H1404 | HGF |
| Endothelin 3 | Sigma | E9137 | |
| Laminin | Sigma | L2020 | Isolated from mouse Engelbreth-Holm-Swarm tumor |
| Vascular Endothelial Growth Factor | Sigma | V7259 | VEGF |
| Leukemia Inhibitory Factor | Santa Cruz | sc-4377 | (LIF |
| Adenine | Sigma | A2786 | |
| Insulin | Sigma | I-6634 | |
| 3,3',5-triiodo-L-thyronine | Sigma | T-6397 | T3 |
| Cholera Toxin | Sigma | C-8052 | |
| Fibronectin | BD | 354008 | Isolated from human plasma |
| apo-Transferrin | Sigma | T-1147 | |
| Heparin | Sigma | H3149 | |
| Heparan sulfate proteoglycan | Sigma | H4777 | Isolated from basement membrane of mouse Engelbreth-Holm-Swarm tumor |
| Collagen IV | Sigma | C5533 | Isolated from human placenta |
| Heat-inactivated fetal bovine serum | Invitrogen | 10437-028 | |
| D-MEM, powder | Invitrogen | 12800-017 | |
| 10% formalin-PBS | Fisher Scientific | SF100-4 | |
| Bovine type I collagen | Invitrogen | A1064401 | |
| Trypsin-EDTA | Fisher Scientific | MT25-052-CI | |
| Sodium pyruvate | Invitrogen | 11360-070 | |
| Gentamicin | Invitrogen | 15750-060 | |

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|------------------------------------|------------|-----------|-------|
| Penicillin/streptomycin | Invitrogen | 15140-122 | |
| L-Glutamine | Invitrogen | 25030-081 | |
| Hepes | Invitrogen | 15630-080 | |
| Ham's F-12 | Invitrogen | 11765-054 | |
| Basal Medium Eagle | Invitrogen | 21010-046 | BME |
| RPMI-1640 | Invitrogen | 11875-093 | |
| Endothelial Basal Medium | Lonza | CC-3156 | EBM-2 |
| Endothelial cell growth supplement | Millipore | 02-102 | ECGS |