

Supplementary materials

Supplementary Table S1 – Description of tissue specific media and supplementation regime

| Author | Tissue cultured | Normal or diseased | Baseline media used | Antibiotics prophylaxis | Growth factors supplementation | Amino acid supplementation | Steroid supplementation | Other |
|-----------------------|---|-------------------------------------|---|--|--|-----------------------------------|--------------------------------|---|
| Duray, P. (2005) | Tonsillar tissue | Normal | RPMI 1640 medium | NS | NS | NS | NS | NS |
| Midwoud, P. (2011) | Liver tissue | Normal | NS | NS | NS | NS | NS | NS |
| Drew, J. (2015) | Colon tissue | Normal | RPMI 1640 medium | NS | NS | NS | NS | NS |
| Paish, H. (2019) | Liver tissue | Normal | Hank's balanced salt solution | NS | TGF β 1 (3ng/ml)+ PDGF β (50ng/ml) | NS | NS | NS |
| Rodriquez, A. (2019) | Rectal tissue | Diseased (Metastatic rectal cancer) | DMEM/F12 | NS | NS | NS | NS | NS |
| Strehl, R. (2005) | Articular cartilage from femoral trochlear region | Normal | Serum-free DMEM/F12+ | Gentamycin (50mg/ml) + fungizone (2mg/ml) | NS | NS | NS | HEPES buffer + Ascorbic acid (50 μ g/mL) |
| Aiyangar, A. (2014) | Trabecular bone (L1 vertebrae) | Normal | Sterile saline | NS | NS | NS | NS | NS |
| Walter, B. (2014) | Intervertebral Disc | Normal | High glucose Dulbecco's Modified Eagle Medium | 1% penicillin/streptomycin, 0.5% fungizone | 10% fetal bovine serum | NS | NS | Ascorbic acid (50 μ g/mL), primocin (1:500) |
| Rosenzweig, D. (2016) | Intervertebral Disc | Normal | NS | NS | NS | NS | NS | NS |
| Margolis, L. (1999) | Prostatic tissue | Normal | RPMI-1640 | Fungizone (2.5 pg./ml.), timenitin (10 pg.lpl) | 15% fetal calf serum | Glutamine (100 pg./ml) | NS | NS |
| Ladd, M. (2009) | Juvenile prepuce | Normal | High-glucose Dulbecco's modified Eagle medium | NS | 10% fetal bovine serum | NS | NS | PSA 2% |
| Atac, B. (2013) | Juvenile prepuce | Normal | High-glucose Dulbecco's modified Eagle medium | 100 units/ml penicillin + 100ugml streptomycin | 10% foetal calf serum | 1% Glutamine | NS | NS |

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|----------------------|--|--|---|--|--|--------------------|----------------------|--|
| Perrard, M. (2016) | Testicular tissue | Normal | Dulbecco's modified Eagle medium | NS | NS | 10 µg/ml Insulin | Testosterone (10-7M) | Hepes buffer (15mM), vitamin C (10-4 M), retinoic acid (3.3 x 10-7 M), Sodium bicarbonate, Transferrin (10µg/ml), Vitamin E (10 µg/ml), retinol (3.3 x 10-7M), pyruvate (10-3 M) |
| Astolfi, M. (2016) | Ovarian and prostate tissue | Diseased (Ovarian and prostate cancer) | Hank's Buffered Saline Solutio | Gentamicin(55 mg L-1), Amphotericin B (600µgL-1) | Fetal Bovine Serum 10% | NS | NS | NS |
| Muraro, M. (2017) | Breast tissue | Diseased (Breast cancer) | Dulbecco's modified Eagle medium | NS | Autologoushuman serum 10%, Epidermal Growth Factor (25 ng/mL, 1% Kanamycin sulfate | 1% Glutamine | NS | 1% HEPES 1M , N-Acetyl-Cysteine 1 mM , Nicotinamide (10 mM), |
| Surowiec, S. (2000) | Saphenous vein | Normal | Low- glucose Dulbecco's modified Eagle medium | 10,000 U/ml penicillin G, 10,000mg/ml streptomycin sulfate, 25mg/ml amphotericin | NS | Glutamine (200 mM) | NS | NS |
| Cheah, L. (2010) | Heart tissue | Normal | Krebs-Henseleit buffer with 5mM glucose | 100 Unit mL-1 penicillin and 0.1 mg ml-1 streptomycin | NS | NS | NS | Krebs-Henseleit buffer (KH, 118 mM NaCl, 25 mM NaHCO3, 4.8 mM KCl, 1.2 mM KH2PO4, 1.2 mM MgCl2and 2.5 mM CaCl2) |
| Piola, M. (2017) | Saphenous vein | Normal | Dulbecco's modified Eagle medium | 1% Penicillin/Streptomycin | 10 % Fetal Bovine Serum | 1% L-Glutamine | NS | NS |
| Licato, L. (2001) | Melanoma tissue | Diseased | Dulbecco's modified Eagle medium | 100 I~g/ml streptomycin, 100 txg/ml kana-mycin, 100 U/ml ampicillin, and 50 ~g/ml gentamicin | 10 % Fetal Bovine Serum | 2mM Glutamine | NS | 20 mM N-2-hydroxyethylpiperazine-N'-2-ethane-sulfonic acid buffer, 2.5 ~g Fungizone |
| Ferrarini, P. (2013) | Bone marrow | Diseased (Multiple myeloma) | RPMI 1640 medium | NS | 10 % Fetal calf Serum | NS | NS | NS |
| Bower, R. (2017) | Laryngeal, oropharyngeal or oral cavity tissue | Diseased (Head and neck squamous cell carcinomas tissue) | dulbecco's modified Eagle medium | penicillin (0.1 U/ml) /streptomycin (0.1 mg/ml) | fetal Bovine Serum 10% | 2mM Glutamine | NS | HEPES Buffer, 4.5 g/l glucose, .1 mM NEAA (nonessential amino acids), 2.5 µg/ml Amphotericin B, |

NS – Not specified

