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(7) Trophoblast Organoid Media (TOM)

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ABSTRACT

Media is also used with flipped TOs. Media can be stored at 4C and used within 1 month.

OPEN ACCESS



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Protocol status: Working We use this protocol and it's working

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Recipe

1 In a 50 mL conical add 40 mL of F12/DMEM. Mix in the following components:

1.1 B27 <u>A 1 mL</u>

stock is 10X, final is 1X

supplier: ThermoFisher (Gibco), cat#: 17504044

1.2 N-Acetyl-L-Cystine (NAC) Δ 625 μL

stock is 100 mM in H₂0, final is 1.25 mM

supplier: Sigma, cat#: A9165

1.3 N2 <u>Δ</u> 500 μL

stock is 10X, final is 1X

supplier: ThermoFisher (Gibco), cat#: 17502048

1.4 L-Glutamine \angle 500 μ L

stock is 200 mM, final is 200 mM

supplier: ThermoFisher (Gibco), cat#: A2916801

1.5 Nicotinamide (NTM) \triangle 500 μ L

stock is 1 M in H₂0, final is 10 mM

supplier: Sigma-Aldrich, cat#: N0636

1.6 Primocin 4 100 µL

stock is 50 mg/ml, final is 100 µg/ml

supplier: Inviogen, cat #: NC9141851

1.7 Y-27632 Δ 100 μL

stock is 2.5 mM in H_20 , final is 5 μ M

1.8 hEGF Δ 25 μL

stock is 100 $\mu g/ml$ in H_20 , final is 50 ng/ml

supplier: Peprotech, cat#: AF-100-15

1.9 hFGF2 Δ 25 μL

stock is 200 µg/ml in 5mM Tris pH 7.6, final is 100 µg/ml

supplier: Peprotech, cat#: 100-18C

1.10 hHGF Δ 25 μL

stock is 100 μ g/ml in H₂0, final is 50 ng/ml

supplier: Peprotech, cat#: 100-39

1.11 R-spondin1 Δ 25 μL

stock is 160 μ g/ml in PBS+0.1% BSA, final is 80 μ g/ml

supplier: Bio-techne, cat#: 4645-RS

1.12 PGE2

☐ 25 µL

stock is 5 mM in acetone, final is 2.5 µM

supplier: Sigma, cat#: P0409

1.13 A83-01 Δ 5 μL

stock is 5 mM in DMSO, final is 500 nM

supplier: Tocris, cat#: 2939

1.14 CHIR99021 Δ 5 μL

stock is 15 mM in DMSO, final is 1.5 μ l

supplier: Tocris, cat#: 4423

1.15 FBS 5 mL

supplier: Cytiva, cat# SH30088.03HI