DyNAtrix®

Minimal Discovery Kit | #DM-MIDK-1

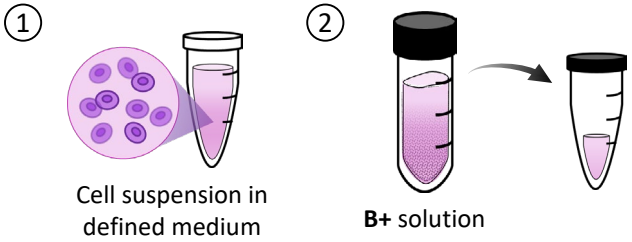
Quick Guide

V 5.1

General remarks

This guide describes standard cell culture in dome or microwell format (e.g. ibidi Cat. # 80409). The protocol can be adapted for different cell densities or culture formats.

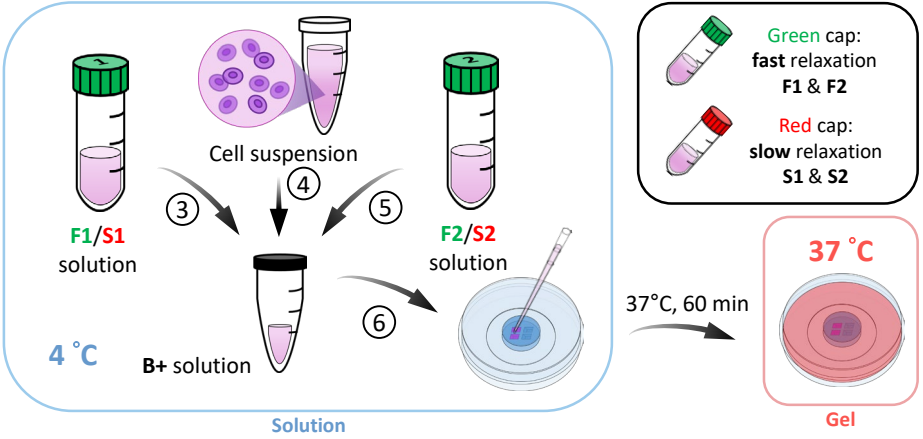
!!! *DyNAtrix* is optimized for fully defined media. **Do not add serum or conditioned media**, as they may degrade the matrix.



Preparation

1. Prepare cell suspension in a defined, serum-free medium.
   Recommended cell-stock density:
   1–4 × 10^6 cells/mL

2. Pipette 10 µL of **B+** into a tube. Keep it on ice.



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Cell embedding at 4 ˚C / on ice

Use the table below to identify the gel component volumes.

3. Add **F1** or **S1** to the 10 µL **B+**.
   Mix *thoroughly* by pipetting up and down.
4. Add 5 µL cell suspension. For types 3–4, also add 5 µL serum-free medium.
   Mix *thoroughly* by pipetting up and down.
5. Add **F2** or **S2** to the mixture from step 4.
   Mix *thoroughly* by pipetting up and down.
6. Immediately dispense 5 µL per microwell or ≥20 µL per dome.

Initiate culture conditions at 37 ˚C

1. Incubate at 37 ˚C, 5% CO_2 for **60 min**.
2. Gently cover the microwell insert or dome with serum-free medium.
3. Continue incubation at 37 ˚C, 5% CO_2.

Gel type	Select properties		Gel components (µL) per 25-µL mixture						
	Stiffness (G')	Stress-relaxation (τ)	B+	F1	F2	S1	S2	Serum-free medium	Cells
1	100 Pa	75 min	10	5	5				5
2	100 Pa	1.1 days	10			5	5		5
3	50 Pa	75 min	10	2.5	2.5			5	5
4	50 Pa	1.1 days	10			2.5	2.5	5	5

For detailed protocol, visit
www.dynamicmatrices.eu