JellaGel™: Gelling Protocol

Pre-requisite: Prepare Reagents

- 10X Phosphate-buffered saline (PBS, with 25mg/litre phenol red)
- 2M Sodium hydroxide (NaOH) solution
- 0.2M NaOH solution
- Pre-harvest cells for addition to the hydrogel pre-incubation (Step 7)

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ALL STEPS TO BE CARRIED OUT AT ROOM TEMPERATURE

Step 1

Prepare reagents and centrifuge JellaGel™ material at 4°C to remove bubbles.

Step 2

Transfer JellaGel™ material into vessel of choice. Ideally a round, wide-bottom vessel is preferred that will allow for efficient mixing.

Step 3

Add 10x PBS with 25mg/litre Phenol Red in a ratio of 9:1 of Collagen:PBS.

Step 4

Under constant (gentle) stirring, add 2M Sodium Hydroxide Solution at 2% of total volume (e.g. add 88ul to 4.4ml collagen).
Make sure to minimise bubble formulation and ensure the solution is homogeneous (uniformly coloured solution) before continuing to the next step.

Step 5

Continue dropwise addition of 2M NaOH until 'peach' like colour is reached (refer to colour chart).
Make sure the solution is homogeneous before adding more 2M NaOH.

Colour chart

JellaGel™: Gelling Protocol - continued

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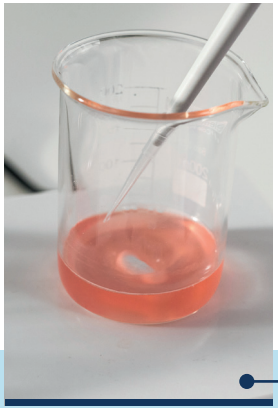
Step 6



Use 0.2M Sodium Hydroxide to make minor adjustments to reach pH 7.4.
Do not exceed pH 7.4. pH must be confirmed using pH paper or pH probe.

Step 7

Add pelleted cells immediately, distribute evenly by stirring/swirling, then stop agitation and leave stationary at room temperature for 15 minutes.
Take care not to agitate the gel during this time.

Step 8

Carefully transfer the preparate to an incubator at 37°C for 45-60 minutes without agitating until the hydrogel has fully contracted.

Step 9

Step 10

Aspirate excess media from around the hydrogel and replace with fresh cell media of choice.

Use the QR code to watch the protocol video or visit:
www.youtube.com/channel/UCNZj9nqSLwblZ4OSeT-02DQ

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