



Customized solutions for cell cultures.

Protocol

Production of **TC-42 with IGF Medium** from powder

Please note, this document may be periodically updated in order to ensure the most current practices are in place. It is the user's responsibility to ensure the latest release of this protocol is applied. Valid versions are made available via Xell's webshop.

Production of liquid TC-42 with IGF from powder

Material:

- We recommend preparing the whole powder container in a single batch! For that, please adjust the amounts/volumes per L given in this protocol according to your container/batch size!
 - TC-42 (use at 23.32 g/L) Xell (Cat. 510-XXXXDPM)
 - approx. 1 L H₂O per L medium (WFI or equivalent quality)
 - 2.1 g/L NaHCO₃ Ph. Eur.
 - 2 mL/L ESK Supplement (Cat. 703-XXXX)
 - 0.05 - 0.1 mL/L LONG® R3 IGF-I (Cat. No. 1006-XXXX; recommended 0.08 mL/L) *The value corresponds to the use of 0.05- 0.10 mg/L LONG® R3 IGF-I*
- We recommend wearing a dust mask during preparation!



Visual control:

Check:

- A. Container **Sealed and without any damage.**
- B. Appearance **Free flowing powder** (record color).



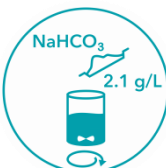










Color: _____

Procedure:

Check:

1.	15 - 35 °C 80 %	Fill 0.8 L per 1 L final medium 15-35°C water (WFI or equivalent quality) into the stirred tank/blending vessel.	<input type="checkbox"/>
2.	80 %	Start the stirrer of the system. Due to foam formation during medium production, the vortex should not reach the stirrer.	<input type="checkbox"/>
3.	80 %	Add 23.32 g/L of TC-42 slowly to the stirred water. Avoid clumping. Note: <i>We recommend preparing the whole powder kit at once.</i>	<input type="checkbox"/>

4.		Rinse the empty medium container with a suitable amount (0.05 L/L) of water (WFI or equivalent quality) and pour liquid into the stirred tank.	<input type="radio"/>
5.		Stir for 60 minutes . Note: <i>The powder will completely be dissolved at this stage! If powder is not completely dissolved, stepwise increase mixing time by 10 min.</i>	<input type="radio"/>
6.		Add 2.1 g/L NaHCO₃ to the stirred tank. <i>Adjust volume according to batch size.</i> Note: <i>pH at this stage should be pH 7.0 - pH 7.5.</i>	<input type="radio"/>
7.		Add an appropriate volume of water (WFI or equivalent quality) to reach the final volume. <i>Final volume depends on batch/container size!</i>	<input type="radio"/>
8.		Stir the solutions for 10 minutes .	<input type="radio"/>
9.		Add 2.0 mL/L ESK Supplement to the stirred tank.	<input type="radio"/>
10.		Stir the solutions for 10 minutes .	<input type="radio"/>

11.		Check pH (pH 7.1 - pH 7.6) and osmolality (275 - 305 mOsmol/kg).	<input type="radio"/>
12.		Add 0.05 - 0.1 mL/L Growth Factor Solution LONG® R3 IGF-I to the stirred tank (recommended 0.08 mL/L) from Xell stock solution. <i>The value is corresponding to the use of 0.05-0.1 mg/L LONG® R3 IGF-I (recommended 0.08 mg/L) directly from powder or an appropriate stock solution.</i> Note: Adjustment of growth hormone concentration for optimization is possible, but depends on used cell line and application.	<input type="radio"/>
13.		Stir for 10 minutes .	<input type="radio"/>
14.		The Medium can now be sterile filtered (0.45 µm + 0.2 µm or 0.45 µm + 0.1µm) and bottled .	<input type="radio"/>

For further information or assistance contact us.

www.xell.de
info@xell.de

Xell AG
Alte Verler Straße 1
33689 Bielefeld
Germany

Fon: +49 (0)521 96989-200
Fax: +49 (0)521 96989-201

