

# CELL | ST™

Cell culture media  
**For better lives**

CELLIST™ BASAL CHO MX Medium

Shortcut to  
Official Channel



# CELLiST™ BASAL CHO MX Medium

## Overview

CELLiST provides an 'all in one' solution for all your biologics manufacturing needs. CELLiST BASAL CHO MX growth medium provides everything your CHO cell line requires for stable, high yield protein production. CELLiST BASAL CHO MX cell culture medium was developed through a collaboration with KBI Biopharma and JSR Life Sciences, leveraging KBI's knowledge of upstream cell culture processes to customize media formulations for optimal performance. CELLiST media is completely chemically-defined, animal origin-free, and is suitable for use with any CHO cell line.

## Properties

- Chemically-defined, protein-free medium without any animal-derived components, hydrolysates, extracts or other undefined components.
- Suitable for all CHO cell lines including CHO-M, CHO-GS, CHO-K1, CHO-S and CHO-DG44.
- Suitable for batch, fed-batch, and perfusion cell cultures, at any scale.
- High performance in both cell growth and protein production
- Test samples as well as bulk size orders are available
- Flexible application for easily replacing any existing media platform
- Manufactured in a cGMP-complid factory

## Specifications

- BASAL CHO MX growth medium provides optimal balance of amino acids and other nutrients to ensure adequate cell growth and maximum productivity of your process. BASAL CHO MX Medium is completely chemically-defined and does not contain any animal or plant-derived components.
- Does not contain thymidine or hypoxanthine.
- Does not contain L-glutamine source.
- Does not contain sodium bicarbonate.
- Contains 6.2 g/L Glucose.
- Contains Poloxamer



# Media Performance

Below are cell culture performance results for CELLIST BASAL CHO MX Medium and several other commercially-available media. The fed-batch process was performed using ambr15.

## Cell Growth

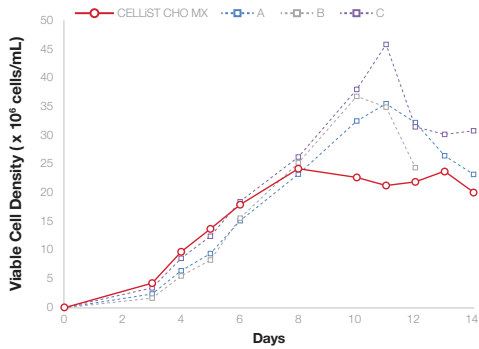


Figure 1. Viable cell density profiles during 14 days of culture.

## Protein Production

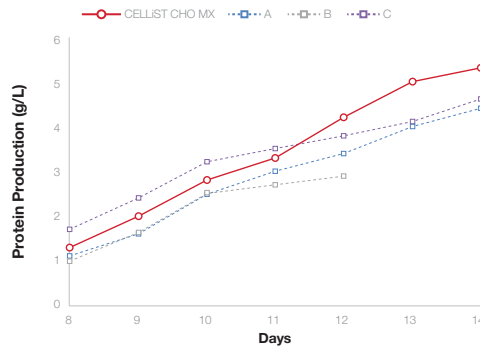


Figure 2. IgG titer profile. IgG concentration was measured by Cedex Bio HT.

## Scalability

As can be seen below, CELLIST BASAL CHO MX Medium is suitable for use from small-scale to larger scale 200L bioreactors.

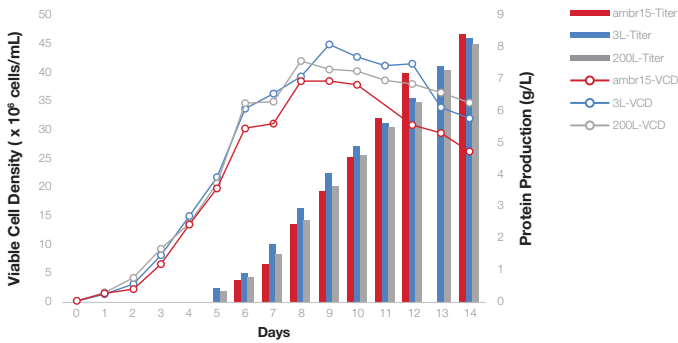


Figure 3. Viable cell density and IgG titer profiles. 3 kinds of bioreactor were used, which are ambr15, 3L bench-top reactor, and 200L bioreactor.



## Liquid Medium preparation

### CELLIST BASAL CHO MX Medium Reconstitution (1 L)

1. Prepare a suitable container and stir bar (magnetic bar). When preparing on a weight basis, measure the weight of the container and the stir bar.
2. Fill the container with about 90% volume (900 mL) of cell culture-grade water (at room temperature).
3. The total amount of this pouch (23.0 g) should be added to the container. Add a small amount of cell culture-grade water into the pouch to wash the remaining product into the container.
4. Add 2.1 g of Sodium Bicarbonate.
5. Mix using magnetic stirrer for 20 minutes (until all powder is dissolved).
6. Add cell culture-grade water to final volume of 1 L and mix the media for 10 minutes. Volume adjustments can also be done by weighing (see table above).
7. Check pH to ensure a proper range of 6.8-7.4. If out of range, adjust pH using HCl or NaOH solutions.
8. Filter the medium in a clean bench, using a membrane filter with pore size of 0.2 to 0.22  $\mu\text{m}$  in diameter.
9. Store in a refrigerated (2–8°C), dark environment until use.
10. Right before use, add L-glutamine or AminoStable™ to the solution (2-6 mM final concentration is recommended) as well as growth factor, such as insulin or IGF-I (at the desired concentration)

\*Usage

- This product is a cell culture medium used for research applications. Do not use it for any other purpose.

## CELLIST Global Customer Service Centers:



### CELL|ST | Solution Center Korea

70, Songdogwahak-ro, Yeonsu-gu, Incheon, Republic of Korea  
Tel: +82-32-210-2695 Fax: +82-32-210-2607  
Mail: yaron.silberberg.dk2@asv.ajinomoto.com

### CELL|ST | Solution Center India

Ahmedabad, India  
Mail: parshadg.hirapara.ut3@asv.ajinomoto.com

### CELL|ST | Solution Center China

Shanghai, China  
Mail: mingqi\_fan@ajinomoto.com.cn

### North America

JSR Life Sciences, LLC. 1280 North Matilda Ave. Sunnyvale, CA 94089  
Tel: +1-408-543-8800 E-Mail: bioprocess.us@jsrlifesciences.com

### Europe

JSR Micro NV. Technologielaan 8 B-3001 Leuven, Belgium  
Tel: +32 (0)16 832 832 E-Mail: bioprocess.eu@jsrlifesciences.com