

The User's Manual—Tobitec FedVigor01

Basic Information Introduction

Product Introduction

Tobitec FedVigor01 is chemically-defined (CD) feed media, contains amino acids, vitamins, glucose, inorganic salts and trace elements, without protein, protein hydrolysate, growth factor and any animal-derived components. Tobitec FedVigor01 is an efficient feeding formula specially designed to improve the growth and stable transfection expression of CHO and HEK293 cells, which can meet the nutritional requirements of high-density cell culture and high product expression.



Application Scope

Tobitec FedVigor01 can be applied to the stable transfection expression of CHO and HEK293 cells, effectively improving the cell density and product expression. It can be used in the research and further manufacturing of protein/antibody and virus related products, but cannot be directly used in the human body or used as a medication.

Shipping, Storage and Validity Period

Product	Catalog No.	Storage	Shipping	Validity period
Tobitec FedVigor01	LQ46, Liquid	2°C ~ 8°C, Protect from light	2°C ~ 8°C, Protect from light	6 months
Tobitec FedVigor01	DP46, Powder	2°C ~ 8°C, Protect from light	2°C ~ 8°C, Protect from light	24 months

Protocol for Hydration of Powder Medium

1. Fill the mixing container with purified water (20 ~ 30°C) at 70% of the final volume.
2. Slowly add 196.23 g/L of powder medium with gentle stirring. Mix for 30 minutes.
3. Adjust the pH to 6.8 ~ 7.2 using 5M NaOH solution. Mix for more than 30 minutes.
4. Adjust the solution volume to 100% with purified water. Mix for 5 ~ 10 minutes.
5. Filter immediately the media with a 0.22 µm membrane filter.

Quality Index of Powder and Liquid Media

Product Index	Tobitec FedVigor01(LQ46, Liquid)	Tobitec FedVigor01 (DP46), Powder
Appearance	Red, clear liquid	Off-pink powder
pH	6.6 ~ 7.4	6.6 ~ 7.4 (pre-filter)
Osmolality (mOsmol/kg)	220 ~ 320 (5-fold dilutions)	240 ~ 320 (5-fold dilutions)
Solubility	--	Dissolve well according to the protocol for hydration of powder medium
Endotoxin (EU/mL)	< 10	< 10
Sterility	Negative	--
Bioburden	--	Aerobic bacteria: < 200CFU/g Molds and yeasts: < 50CFU/g

Reference Fed Feeding Strategy

Application of Tobitec FedVigor01 in CHO Cell Stable Expression

1. Seed cells at 0.5×10^6 cells/mL into CHO basal media.
2. Starting from day D3, fed feeding according to the following feeding strategy:

Feeds/Time	D3	D5	D7	D9	D11	D13
Tobitec FedVigor01	2%	2%	2%	2%	2%	2%
Tobitec FedVigor01	3%	3%	3%	3%	3%	3%
Tobitec FedVigor01	4%	4%	4%	4%	4%	4%
Glucose	When the glucose concentration is below 4 g/L, glucose is added at the final concentration of 6 g/L					

Suggestions:

It is suggested that the density of viable cells in the first feeding should be $4 \sim 6 \times 10^6$ cells/mL, and the feeding can be advanced or delayed according to the growth of cells.

In order to maintain high cell density and high viability during fed batch culture, it is recommended to lower the culture temperature when the viable cell density exceed 15×10^6 cells/mL.

【Technical Support】:

According to the terms of sales, please contact our technicians with any problems :

Tel: +86 21-64909996-393 Fax: +86 21-64909996-730

Email: bioreagent@tofflon.com