Datasheet

HybridBoost

Serum-free medium for Hybridoma cell lines

Product	Description	Catalogue-No.	Size
HybridBoost	**Improved serum-free medium for the cultivation of Hybridoma cell lines, w: stable Glutamine, w: Insulin human rec., w/o: Phenol red, w: 2.438 g/L $NaHCO_3$**	**P04-995905 P04-995910**	**500 ml 1000 ml**

Product description

HybridBoost is a serum-free and defined culture medium specifically designed for enhanced *in vitro* growth and proliferation of hybridoma cell lines. The optimized formulation allows the generation of a high yield of monoclonal antibodies (mAb). Because it does not contain hydrolysates and only negligible amounts of animal-derived components (< 0.1% w/v) and proteins (< 0.1% w/v), it is ideal for large-scale production of mAb.

Storage conditions

Storage conditions: 2 – 8 °C
Stability: 1 year from date of production

Composition

HybridBoost is formulated with stable Glutamine and is free of phenol red. Additionally, it includes a surfactant, eliminating the need of additional supplements for agitated suspension culture.

Suitability

HybridBoost is highly efficient for diverse hybridoma systems. Cholesterol-dependent cell lines should be supplemented with a lipoprotein preparation or other cholesterol sources. HybridBoost is compatible with several antibiotics, including Penicillin/Streptomycin, Gentamicin, Puromycin, or Fungizone. Nevertheless, the use of antibiotics may lead to a decrease in the yield and efficiency of hybridoma cell lines.

Instructions for Use

HybridBoost is a ready to use medium for cultivation of hybridoma cell lines at 37 °C in a humidified atmosphere with 5 % CO_2.

Adaption to serum free medium

In most cases, transitioning to serum-free culture with HybridBoost medium can be achieved directly, but an indirect adaptation sequence can also be beneficial for sensitive cell lines. For both methods, it is crucial to harvest cells during the mid-log phase and with high viability. The success of the adaptation process depends on the specific cell line and culture conditions used.
It is advisable to keep a backup culture in the original medium until a successful transition to HybridBoost is accomplished.

Direct adaption

1. Transfer the cells that are growing in serum-supplemented medium to pre-warmed HybridBoost medium. Ensure that the seeding density is consistent with the typical seeding

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density of the cell line. Subsequently, incubate the cells at 37°C in a humidified environment containing 5% CO_2.

2. Monitor cell growth and viability while subculturing the cell line for 4-8 passages.
3. If acceptable growth and viability are not sustained after 4-8 passages, use the indirect adaptation protocol.

Indirect adaption:

1. Seed cells at twice the regular density in a mixture containing 3 parts of serum-supplemented medium and 1 part of serum-free medium.
2. Once the cell concentration reaches 10^6 cells/mL, transfer cells to a new culture vessel with a 1:1 mixture of serum-supplemented and serum-free medium.
3. After reaching 10^6 viable cells/mL subculture into a new culture vessel containing a mixture of 1 part serum-supplemented medium and 3 parts serum-free medium.
4. Once the cell density reaches 10^6 cells/mL, transfer cells to a new culture vessel containing 100% serum-free medium.

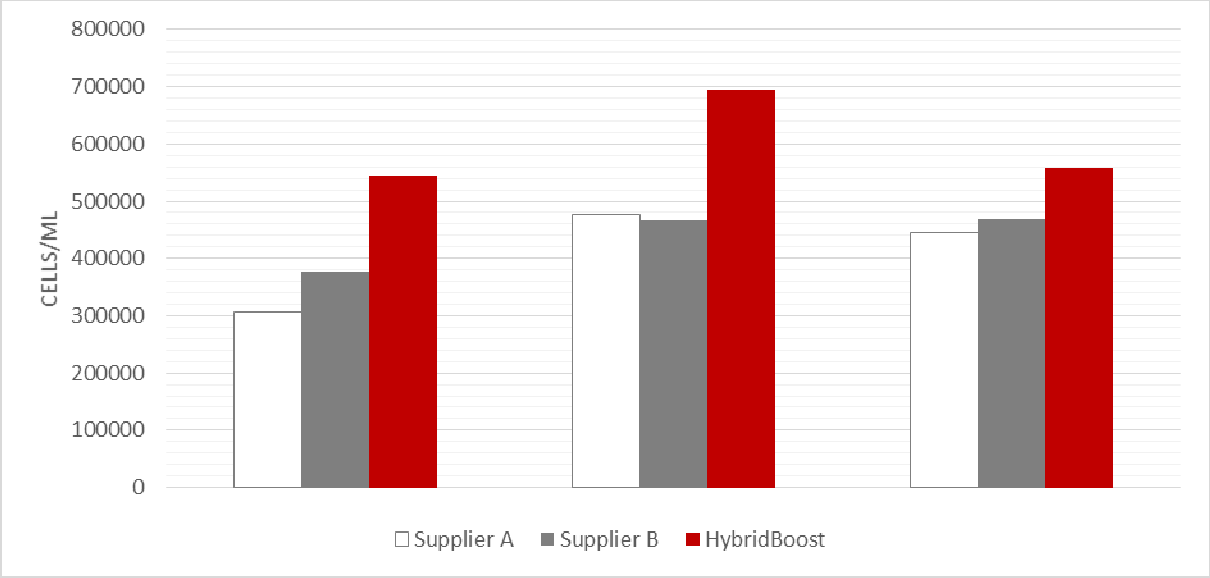

Figure 1: Comparison of the growth of Sp2/0-Ag14 cells in different serum-free media. The experiment involved seeding 1000 cells/mL and monitoring the results after direct adaption and four days of cultivation.

Technical support

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

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