

Datasheet and Instructions for Use

Spodopan

Protein-free Complete Medium for an Optimized Growth of Insect Cells

Product	Description	Catalogue-No.	Size
Spodopan	Protein-free complete medium for an optimized growth of insect cells	P04-850100 P04-850500 P04-851000	100 ml 500 ml 1000 ml

Product description

Spodopan is a protein-free medium for an optimized growth of insect cells such as Sf9 and Sf21 (*Spodoptera frugiperda*) in suspension culture. Insect cells are often used for the industrial production of recombinant proteins. Spodopan has been developed for the cultivation of insect cells and the production of recombinant proteins (Baculovirus expression vector system, BEVS)

Storage conditions

Storage: 2-8° C (in the dark)
 Stability: 1 year from date of production

Composition

Spodopan contains amino acids, vitamins, salts, trace elements, lipids and growth promoting factors in a formulation optimized for insect cells. It contains no protein or any other components of human or animal origin.

Special advantages

Spodopan with its protein-free formulation is free of any human or animal components. This allows the production of recombinant proteins for medical and therapeutic purposes. The protein-free formulation also facilitates an easier and more economic purification of final products from the cell culture. Spodopan guarantees a high cell density with increased production of recombinant proteins.



Sf9 Cells in Spodopan

Instructions for use

Adaption to a protein-free culture

The optimal temperature range for most insect cells is 25° C to 30° C (27° C incubation ± 0.5° C).
The pH for cell culture with Lipidoptera cells should be between pH 6.0 and pH 6.4.

The osmolality for insect cell media should be 345 – 380 mOsm/kg.
For optimized oxygen supply, slightly unscrew the caps of the culture vessels.

Insect cells from a serum-containing culture should be adapted to the protein-free culture. This could be done either by direct or sequential adaptation.

Suspension cells should be taken from the middle exponential growth phase with a viability of over 90% (Trypan Blue Exclusion Staining).

Direct adaptation to Spodopan

- Transfer the cells from the serum-containing culture (e.g. TNM-FH, FBS 5-10%) directly into pre-warmed (27°C) protein-free Spodopan with a cell density of 5×10^5 cells/ml.
- When the culture reaches a cell density of $>2 \times 10^6$ cells/ml (after 4-7 days) subculture cells in new protein-free medium with a cell density of 5×10^5 cells/ml.
- Repeat subculture until a viability of at least 80% is obtained.

Indirect adaptation to Spodopan

- Subcultivate cells from the serum-containing culture in a 1:1 ratio with the original culture medium and Spodopan. Seeding density 5×10^5 cells/ml
- When the culture reaches a cell number of $>1 \times 10^6$ cells/ml subculture the cells with fresh protein-free medium in a 1:1 ratio.
- Repeat this process until serum levels are below 0.1% and the cell viability is $> 80\%$. The cell number should exceed 1×10^6 cells/ml.

Suitability

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY!

Not for use in animal or human clinical or diagnostic application. Not for consumption.

Technical support

For technical support or questions please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com)