

## **Datasheet**

# **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 serum-free and protein-free medium for optimized growth of insect cells such as Sf9 and Sf21 (*Spodoptera frugiperda*) in suspension culture.

## Storage conditions

Storage: 2-8°C (in the dark)

Stability: 1 year from date of production

Size: 100 ml, 500 ml, 1000 ml, other sizes on request

### 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, only traces of animal-derived components (< 0.2 % w/v) and hydrolysates (< 0.7 % w/v).

## Suitability

Spodopan is suitable for the cultivation of insect cells and the production of recombinant proteins and virus (Baculovirus expression vector system, BEVS).



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 Lepidoptera 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 or use filter screw caps.

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 5x10<sup>5</sup> cells/ml.
- When the culture reaches a cell density of >2x10<sup>6</sup> cells/ml (after 4-7 days) subculture cells in new protein-free medium with a cell density of 5x10<sup>5</sup> 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 5x10<sup>5</sup> cells/ml
- When the culture reaches a cell number of >1x10<sup>6</sup> 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 1x10<sup>6</sup> cells/ml.

#### **Technical support**

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (<a href="mailto:info@pan-biotech.com">info@pan-biotech.com</a>) or phone +49-8543-601630.

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