

# Datasheet

# Optipan

# Serum-free Medium for Adherent Cells

Product	Description	Catalogue-No.	Size
Optipan	Serum-free medium for adherent cells	P04-08501M P04-08501	100 ml 500 ml

#### **Product description**

Optipan is a ready-to-use complete medium for the serum-free or serum reduced cultivation of a variety of cells.

#### Storage conditions

Storage:	2-8°C
Stability:	1 year from date of production
Size:	100 ml, 500 ml, other sizes on request

## Composition

Based on MEM Eagle, w: EBSS, trace elements, albumin, lipoproteins, vitamins, hormones and attachment factors were added to the medium. The medium does not contain any growth hormones.

#### Suitability

Cultivation of a variety of adherent cells in a serum-free or serum reduced culture (e.g. HEK, L929, CHO, MDCK, MDBK, 3T3A).

#### Special advantages

Optipan is a ready to use serum-free medium for the cultivation of a variety of adherent cells. The addition of attachment factors allows the cultivation of even highly demanding cells after a short adaptation phase. It contains no undefined peptones or hydrolysates.

#### Instructions for use

Adaptation to the serum-free culture.

Many cell lines can be directly transferred from the serum containing adherent culture in the serumfree culture with Optipan. After a few passages with slower growth afterwards the cells reach growth rates comparable to serum containing culture conditions.



## Direct adaptation to Optipan

- Use adherent cells in the log phase of a serum containing culture (for example high glucose DMEM with 10% FBS).
- Evacuate serum containing medium with pipette.
- Wash cell layer with DPBS (without Mg<sup>2+</sup>/Ca<sup>2+</sup>).
- Cover cell layer with trypsin / EDTA (0.25%, 0.02%) (about 2 ml per T25 bottle).
- Evacuate trypsin after about 1 minute.
- Incubate the cells until the show a round figure and detach from the surface (after about 5 minutes).
- Eliminate remaining trypsin activity with a trypsin inhibitor (1 mg/ml-solution, 1-2 ml trypsin inhibitor solution per T25 bottle).
- Transfer cells into Optipan and centrifuge again.
- Transfer cells into Optipan and count the cell number.
- Seed 5 x 10<sup>4</sup> 1 x 10<sup>5</sup> cells/ml in preheated Optipan. Incubation at 37°C and 5% CO<sub>2</sub> fumigation in the incubator.
- Transfer cells in fresh Optipan at a confluence of about 80%.

## Indirect adaptation to Optipan

- Use adherent cells in the log phase of a serum containing culture (for example high glucose DMEM with 10% FBS).
- Evacuate serum containing medium with pipette.
- Wash cell layer with DPBS (without Mg<sup>2+</sup>/Ca<sup>2+</sup>).
- Cover cell layer with trypsin / EDTA (0.25%, 0.02%) (about 2 ml per T25 bottle).
- Evacuate trypsin after about 1 minute.
- Incubate the cells until the show a round figure and detach from the surface (after about 5 minutes).
- Eliminate remaining trypsin activity with a trypsin inhibitor (1 mg/ml-solution, 1-2 ml trypsin inhibitor solution per T25 bottle).
- Transfer cells into Optipan and centrifuge again.
- Transfer cells into Optipan and count the cell number.
- Seed  $5 \times 10^4$   $1 \times 10^5$  cells/ml in preheated Optipan with addition of 5% FBS.
- Incubation at 37°C and 5% CO<sub>2</sub> fumigation in the incubator.
- Transfer cells in fresh Optipan with 2% FBS at a confluence of about 80%.
- At the next splitting steps transfer cells in to Optipan with 1% FBS and finally with 0,1% FBS (the same procedure as described).

#### **Technical support**

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

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