

Datasheet

Panserin 401

Serum-free Allround Medium for a Wide Variety of Different Cell Types

Product	Description	Catalogue-No.	Size
Panserin 401	Serum-free allround medium for a variety of different cell types	P04-710401M	100 ml
		P04-710401	500 ml
		P04-71040120	20 L

Product description

Panserin 401 is a fully defined ready-to-use medium for the serum-free cultivation of a multitude of adherent and non adherent cells.

Storage conditions

Storage: 2-8°C (in the dark)
 Stability: 10 months from date of production
 Size: 100 ml, 500 ml, 20 L other sizes on request

Composition

Based on Iscove's MEM, with additional trace elements, albumin, cholesterol, soy lipids and vitamins. It does not contain any growth or attachment factors. Protein and animal-derived components < 0.2 % w/v. Hydrolysates < 0.001 % w/v.

Suitability

Panserin 401 is a multi-purpose medium suitable for a variety of cells. As the medium contains no growth factors there is a possibility to investigate the effects of specific growth factors added to the cell culture. Panserin 401 does not contain any attachment factors. With some cell types a pre-treatment of the cell culture vessels with gelatine, collagen, poly-D-lysine or fibronectin may support or enable a culture under serum-free conditions. Please note that a coating may be especially important with low seeding densities.

Among others, the following cells have been cultivated successfully in Panserin 401:

- Hybridoma
- Lymphocytes
- Macrophages
- Fibroblasts
- Melanocytes
- Carcinoma cells
- HEK-cells
- HeLa-cells
- CHO-cells
- Megakaryocytic cell lines (HEL, Dami, CMK)
- HL60-cells

Instructions for use

With every adaptation to serum-free media, changes of the cells should be taken into consideration. These changes may concern morphology, karyotype, surface markers, and so on. Thus, cells in serum-free medium may not be identical with those from cultures containing serum in which they originated (selection).

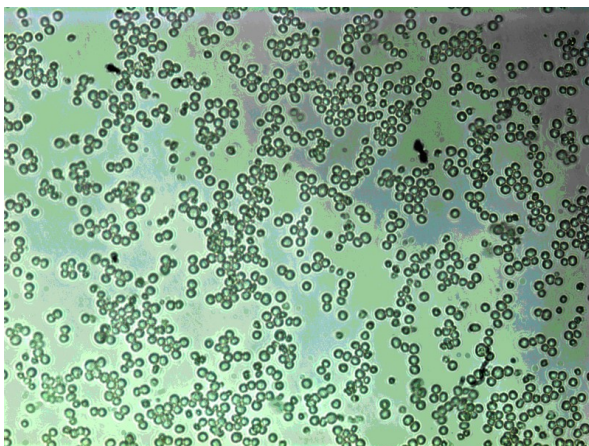
In many cases the switch from serum-containing to serum-free cultivation can be done without any special adaptation procedures. For those cells which do not tolerate an immediate switch we recommend a primary culture with serum containing medium and a stepwise reduction of medium towards a serum-free cultivation. We can provide you with an adaptation protocol for many different cell types. This stepwise adaptation will also be supported by higher cell seeds or using a lowered serum concentration after attachment of the cells in medium containing a higher amount of serum.

For the successful transfer into serum-free cultivation the vitality of the cells is an important factor. Thus the cells should be transferred in the logarithmic growth phase. According to our experience the transfer in the logarithmic growth phase will have higher prospects of success.

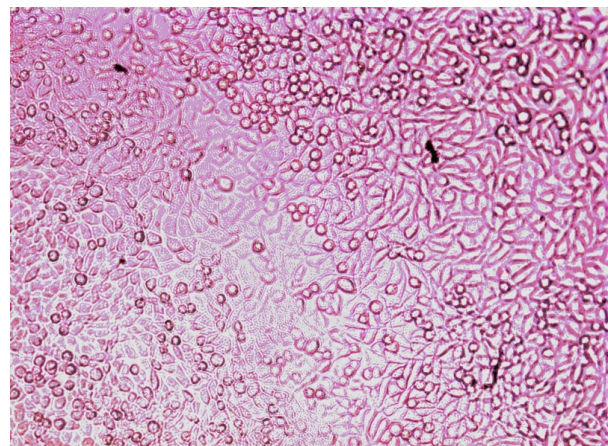
Panserin 401 does not contain any attachment factors. With some cell types a pre-treatment of the cell culture vessels with gelatine, collagen, poly-D-lysine or fibronectin may support or enable a culture under serum-free conditions. Please note that a coating may be especially important with low seeding densities.

In adherent cells it should be assured that - if trypsin is used for detachment - the enzyme is completely washed out or is inactivated by trypsin-inhibitors because there is no trypsin inactivating effect of FBS; use trypsin-inhibitor to stop trypsin activity. In some cases of very sensitive cells it could be also reasonable to do the stepwise adaptation and dilution not only with serum but also in the medium which has been used so far.

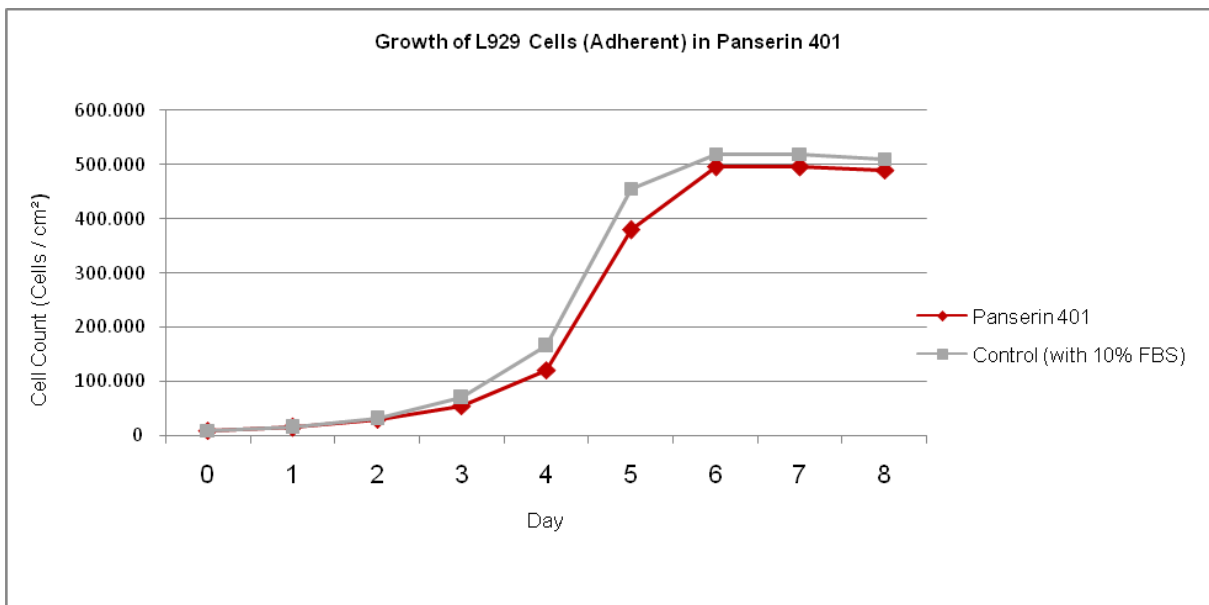
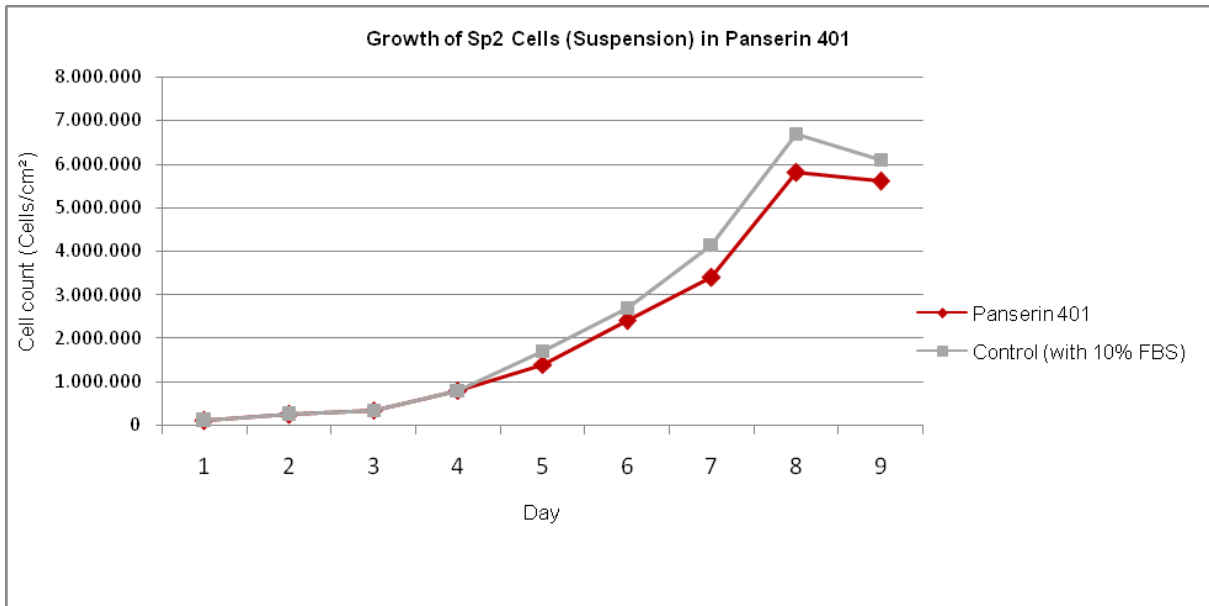
Panserin media were developed to support cell growth without the use of serum. The allround version Panserin 401 does not contain any growth factors. Studies on the effect of externally added growth factors will give undistorted results, with low to no background. For cells which are dependent on specific growth factors these factors should be added in the required concentrations.



SP2/0-Ag-14 in Panserin 401 without prior adaptation



L929 in Panserin 401 without prior adaptation



References

- 1) Pilar S et al. (2002) Contribution of CD3γ to TCR regulation and signalling in human mature T lymphocytes. *International Immunology* 11:1357
- 2) Toptan T et al. (2010) Rhadinovirus vector-derived human telomerase reverse transcriptase expression in primary T cells. *Gene Therapy* 17:653
- 3) Martin F et al. (2005) Lentiviral vectors transcriptionally targeted to hematopoietic cells by WASP gene proximal promoter sequences. *Gene Therapy* 12:715
- 4) Montzka K et al. (2010) Expansion of human bone marrow-derived mesenchymal stromal cells: serum-reduced medium is better than conventional medium. *Cytherapy* 5:587

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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