

Serum-free Media

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

Composition

Based on Iscove's MEM, trace elements, albumin, cholesterol, soya lipids and vitamins were added to the medium. It does not contain any growth or attachment factors.

Suitability

Panserin 401 is a multi-purpose medium suitable for a variety of cells. In Panserin 401 adherent as well as non adherent cells can be cultivated. 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. 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).

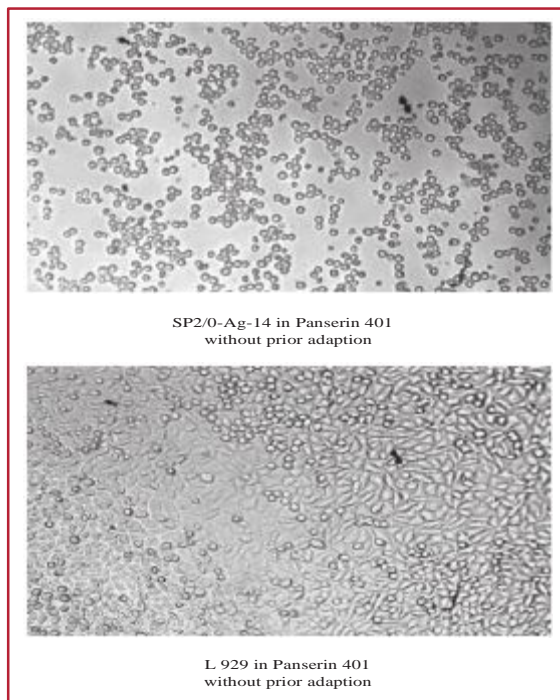


Fig 1. : SP2/O-Ag-14 and L929 in Panserin 401

| | | |
|-----------------------------|------------------|---------------------------|
| Panserin 401 ⁽¹⁾ | 100 ml 500 ml | P04-710401M P04-710401 |
|-----------------------------|------------------|---------------------------|

(1) usually on stock, (2) minimum order 10 L, (3) available on request

Among others the following cells have been cultivated successfully:

- Hybridoma
- Lymphocytes
- Macrophages
- Fibroblasts
- Melanocytes
- Carcinoma cells
- HEK-cells
- HeLa-cells
- CHO-cells

Instructions for use

Detailed instructions will be provided with the accompanying datasheet for Panserin 401. In addition, instructions for use can also be found at www.pan-biotech.com.

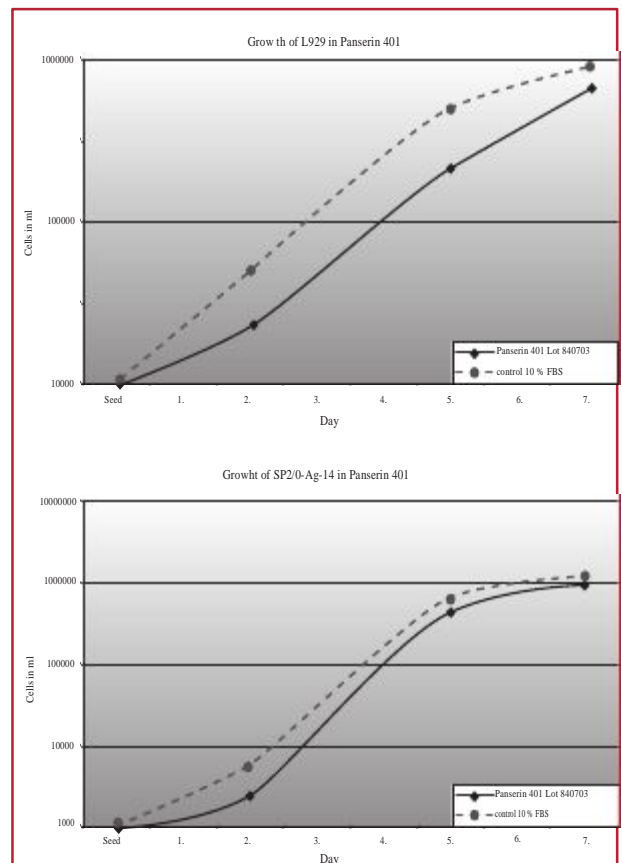


Fig 2. : Growth curves for L929 and SP2/O-Ag-14 in Panserin 401

References

- a) Pilar S et al. (2002) Contribution of CD3y to TCR regulation and signaling in human mature T lymphocytes. *International Immunology* 11:1357
- b) Toptan T et al. (2010) Rhadinovirus vector-derived human telomerase reverse transcriptase expression in primary T cells. *Gene Therapy* 17:653
- c) Martin F et al. (2005) Lentiviral vectors transcriptionally targeted to hematopoietic cells by WASP gene proximal promotor sequences. *Gene Therapy* 12:715
- d) 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

Serum-free Media

Panserin 411 is a complete, ready-to-use medium for the serum-free cultivation of a multitude of adherent and non adherent cells which are Insulin-dependent (e.g. CHO-cells).

Composition

Based on Iscove's MEM, trace elements, albumin, cholesterol, soya lipids, vitamins and insulin were added to the medium. It does not contain any growth or attachment factors.

Suitability

Panserin 411 is a multi-purpose medium suitable for a variety of cells. In Panserin 411 adherent as well as non adherent cells can be cultivated. 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 411 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.

With every adaption 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).

Instructions for use

Detailed instructions will be provided with the accompanying datasheet for Panserin 411. In addition, instructions for use can also be found at www.pan-biotech.com.

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|------------------------------|--------|-------------|
| Panserin 411 ⁽¹⁾ | 100 ml | P04-710411M |
| | 500 ml | P04-710411 |
| Panserin 411S ⁽¹⁾ | 100 ml | P04-7411S1 |
| | 500 ml | P04-71411S |

Panserin 411S is a complete, ready-to-use medium for the serum-free cultivation of myeloid and lymphoid cells for cytological examination.

Composition

Based on RPMI 1640 medium, additional trace elements, albumin, cholesterol, soya lipids, vitamins and hormones are added.

Suitability

Panserin 411S is a serum-free complete medium for the cultivation of myeloid and lymphoid cells from peripheral blood or bone marrow. It is therefore suitable for a rapid expansion of blood cells in order to investigate leukemic diseases (ALL, AML, CLL, CML, MPN, MDS). The state of the art diagnostic techniques of leukemic diseases are based on the interaction of cytomorphology including cytochemistry with immunophenotyping, chromosome banding analysis, FISH and molecular genetics. In Panserin 411S the number and quality of metaphases are significantly higher and independent of individual batches as compared to serum-containing media.

Suitability

Cells (1×10^7) are seeded in 5 ml Panserin 411S. Depending on the assay or quality of raw material, an un-stimulated culture and another 1-3 cultures with appropriate growth factors are prepared. The culture time is 24 to 72 hours at 37° C in an incubator with 5% CO₂.

The processing of the metaphases is done with hypotonic KCl solution and Carnoy's fixative.

Instructions for use

Detailed instructions will be provided with the accompanying datasheet for Panserin 411S. In addition, instructions for use can also be found at www.pan-biotech.com.

(1) usually on stock, (2) minimum order 10 l, (3) available on request