

**PAN**<sup>TM</sup>  
**BIOTECH**  
Success in Cell Culture

**Pharmaceutical and  
Biotechnological Industry**





Since 1988 PAN-Biotech demonstrated its strength with innovative, first-class quality products and excellent services for cell culture around the globe. Specialized in the manufacture and distribution of cell culture products including serum, media, serum-free systems, reagents, biologicals and more we deliver our goods to customers from research, clinics and the biopharmaceutical industry.

Our highly skilled team with operating experience in various fields of cell technology guarantees a product development based on the needs and requirements of our customers.

Individual wishes are always welcome.

Production takes place in Aidenbach, Bavaria: Quality „made in Germany“!

PAN-Biotech - Success in Cell Culture.







**We don't simply sell products.  
We offer solutions!**





## SERUM

**Transparent. Reliable. Safe.**

### Advantages

- ✓ Licensed according to EU 1069/2009
- ✓ EDQM approved
- ✓ Constant supply from EU/FDA approved countries
- ✓ Full traceability
- ✓ Complete EMEA testing available
- ✓ Highest production and safety standards for serum manufacturing

To meet the demands of the biopharmaceutical industry PAN – Biotech offers a broad range of serum products. High-quality, extensively tested FBS, NBCS and Bovine Serum from FDA and EU approved regions is continuously available. All serum is exclusively processed in our own facilities in Aidenbach, Germany.



### Human Serum by PAN-Biotech

#### Human Serum

Human Serum, Type AB

Human Serum, Type AB, male

Human Serum off-the-clot

Human Serum off-the-clot, Type AB, male

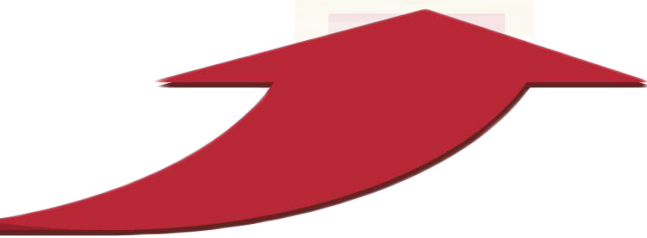
Seraclot, Type AB, male, Human Serum, sterile filtered

Where the use of animal derived components is unwanted, e.g. due to regulatory aspects, Human Serum can be a suitable alternative.

The raw material for PAN – Biotech Human Serum has been collected, prepared, tested and released in accordance with all relevant EU regulations and the current version of the Good Manufacturing Practice Annex 14.



# SERUM-FREE SYSTEMS



## Panexin. The future of cell nutrition.

### Advantages

- ✓ No extensive batch testing necessary
- ✓ Simplified downstreaming process
- ✓ High reproducibility
- ✓ Minimizes contamination risks
- ✓ Price - competitive and price-stable
- ✓ Less storage capacity needed

**Panexin, the serum replacement** developed by PAN-Biotech can be used for many cell types to replace FBS. Due to carefully selected and pretested raw materials Panexin batches are very homogeneous. Therefore the complex batch testing known from FBS can be omitted.

Until today Panexin has been successfully applied in the industry not only as FBS replacement, but also as an efficient supplement in Feed-Media.

## Serum-free Media by PAN-Biotech

With more than 16 years of professional experience in providing serum-free solutions for customers worldwide, PAN-Biotech has developed a portfolio of more than 450 different media products for a wide range of cell cultures.

Customers of PAN-Biotech are not only the users of our products but also become part of our extensive network of experts in various fields of cell technology.

Medium	Suitable Cells	SFM	PF	ADCF	HDCF	FD
Panserin 401	Wide range of different cells	✓				✓
Panserin C6000	CHO (suspension culture)	✓	✓	✓	✓	
Panserin H4000	Hybridoma (suspension cells)	✓	✓	✓	✓	
Panserin 293A	HEK-293 (adherent culture)	✓				
Panserin 293S	HEK-293 (suspension culture)	✓		✓	✓	
Spodopan	Insect cells (suspension culture)	✓	✓	✓	✓	

**And many more!**

**SFM:** Serum Free Medium    **PF:** Protein Free    **ADCF:** Animal Derived Components Free    **HDCF:** Human Derived Components Free    **FD:** Fully Defined



## SERVICES

### The Cell Culture Experts

Some of the recent industry trends include expanded single-use applications, shifts towards continuous bioprocessing, smaller-scale bioreactors and of course demands for greater efficiency and productivity.

Leaner productions for biopharmaceuticals in modular and multi-purpose facilities become increasingly visible.

That has an impact on the production of process liquids as well. Reliable partners for the outsourcing of media and buffer preparation become more and more crucial.

From pre-clinical development to the final commercialization of your product you will benefit from our long time experience in the manufacture of cell culture products.

**Concentrate on your core business.  
Go easy on your resources.  
We handle the rest.**



Success in Cell Culture

- ✓ Certified ISO 9001:2008 and ISO 13485:2012 (Medical devices)
- ✓ 30 years experience in R&D and manufacturing of cell culture products
- ✓ Licensed according to EU 1069/2009 with Vet.No. DE 09 275 0001 14
- ✓ Raw material selection and traceability according to highest standards
- ✓ Sterile filling in cleanroom-atmospheres according to EU GMP criteria
- ✓ Support in regulatory aspects
- ✓ Audit-ready at any time

### Development of Cell & Media Systems

No matter if our R&D department designs a brand new media formulation with our client's cells, optimizes an already existing formulation or customizes standard media for you:

Our goal always is to boost your cell growth and productivity. Automated cell culture processes allow fast results and increased turnaround times in your product developments.

### OEM and contract manufacturing

Profit from our outstanding experience in the manufacture of cell culture products.

Whether you need a partner for OEM production or you want to outsource the manufacturing of media or buffers: PAN – Biotech has a proven track record of being a reliable partner for national and international industrial customers.



## SERVICES



### Flexible packing solutions in 2D and 3D single-use bags

We can fulfill the main aspect of a suiting packaging option: A seamless integration into your production process. Just-in-time delivery with in-house shipping capabilities available.

PAN-Biotech 2D bags are available in volumes from 5L to 50L and 3D-bags in volumes from 100L up to 1000L. A broad variety of connections and tubings can be provided. All systems are supplied sterile and according to your specifications.

**NEW!**

**Complete container-bag-system for 3D-bags available.**



### Benefit from PAN-Biotech single-use-bags:

- ✓ Improved safety
- ✓ Reduced risk of cross-contamination
- ✓ Optimize capacity utilization
- ✓ Minimized cost and time consuming CIP & SIP operations

### Rapid Response Production


You urgently need serum, media or reagents to save your production?

You regularly need your products delivered on short notice? Ask us for our Rapid Response Production program.

Advanced production planning allows us to react very flexible to your needs and realise a short order-to-delivery time.





The background of the entire page is filled with a light gray, semi-transparent pattern of various chemical structures, including hexagons, pentagons, and rings with attached atoms, representing a molecular or biotech theme.

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