

# FACTSHEET **HUMAN SERUM**



## BIOSOLUTIONS BY **PAN**<sup>TM</sup> **/ MEDIA / REAGENTS / BUFFER**



# HUMAN SERUM OVERVIEW



PAN-Biotech offers **three different categories** of human serum:  
“Off-the-clot”, “Seraclot” and “converted human serum”.



## / ADVANTAGES

- The raw material has been collected, prepared, tested and released in accordance with EU regulations and current version of the Good Manufacturing Practice.
- All manufacturing steps and test results are precisely documented to ensure full traceability and regulatory compliance.
- Each individual blood donation has been tested for HIV-1/2 antibodies, HCV antibodies and HBs antigen with methods cleared in compliance with the European Directive 98/79/EC, Annex II, List A and found negative or non-reactive.
- Low Endotoxin levels

## / FOR SPECIAL APPLICATIONS

Within these three categories it is possible to select either from **mixed blood groups**, **pooled human serum AB**, or **pooled human serum AB (male)**, all derived from preselected donor pools.

Human serum of **type AB** is widely used in research and diagnostics because it contains no antibodies against blood groups A and B. This makes it highly compatible with different cell types and supports reproducible results across a broad range of applications.

**Type AB male** serum is obtained exclusively from male donors. This reduces potential influences from pregnancy-related antibodies or hormonal factors, providing more consistent conditions for sensitive studies.

### BENEFITS AND APPLICATIONS:

- Universal usability due to absence of blood group antibodies (AB)
- High compatibility with various cell lines
- Consistent quality from male donors only (AB male)
- Suitable for cell culture, diagnostics, and *in vitro* test systems

## Off-the-clot

European Union Origin,  
virus and mycoplasma  
tested



**Product No.:**  
P30-2701M (20 ml)  
P30-2701 (100 ml)



→ [DIRECT LINK](#)

## Seraclot

European Union Origin,  
virus and mycoplasma  
tested



**Product No.:**  
P40-3011M (20 ml)  
P40-3011 (100 ml)



→ [DIRECT LINK](#)

## Human Serum

European Union Origin,  
virus and mycoplasma  
tested



**Product No.:**  
P30-2401M (20 ml)  
P30-2401 (100 ml)



→ [DIRECT LINK](#)

### KEY FEATURES

#### VERSATILITY:

Human serum off-the-clot is a highly sensitive material and is subject to strict safety EU regulations. It is collected from volunteer donors. The sample is taken from human, healthy donors in Europe certified donations institutions. The collection of blood follows the EU standards (Directive 2002/98/EC – quality and safety standards for the collection, testing, processing, storage and distribution of human blood and blood components).

#### COMPOSITION:

Human serum off-the-clot is a natural product. It is obtained from human whole blood collected without anti-coagulant, allowed to clot at room temperature and then centrifuged to remove the clot. Off-the-clot serum exclusively contains human components.

### KEY FEATURES

#### VERSATILITY:

Seraclot is a human serum, which is equal to the „off-the-clot“ serum in cell culture and in many cases exceeds its quality. Seraclot contains more human growth factors than Human serum. An increased content of human growth factors expands the possibilities in cell culture.

#### COMPOSITION:

Seraclot is perfectly suitable for research in tissue engineering and cell differentiation. Seraclot is composed exclusively of human material.

### KEY FEATURES

#### VERSATILITY:

Human serum may be more suitable for the cultivation of human cells than FBS, since both the serum and the cultured cells belong to the same species. Thus, the physiological and natural conditions *in vitro* are reproduced most similar to those *in vivo*. Therefore, human serum is particularly suitable for cell culture of human cells, e.g. research in cell and immune therapy, tissue engineering and other applications where the presence of animal derived components is unwanted.

#### COMPOSITION:

Human serum is a natural product and it is obtained from human plasma. The plasma is then converted to serum by a process of clotting. Serum is a component of the blood. Therefore it contains a complex composition of serum proteins, growth factors, hormones, lipids, amino acids, sugar etc.

### / FOR SPECIAL APPLICATIONS

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



→ [DIRECT LINK](#)

**Product No.:**  
P40-2701 (100 ml)

### / FOR SPECIAL APPLICATIONS

#### Seraclot Type AB, male



→ [DIRECT LINK](#)

**Product No.:**  
P40-3001 (100 ml)

### / FOR SPECIAL APPLICATIONS

#### Human Serum, Type AB



→ [DIRECT LINK](#)

**Product No.:**  
P30-2501 (100 ml)

#### Human Serum, Type AB, male



→ [DIRECT LINK](#)

**Product No.:**  
P30-2901 (100 ml)