



Inspired by Dedication

Product Catalogue 2020/2021

serion\immunologics

Your Partner in Raw Material Sourcing

Table of Contents

Introduction	4
Company History	6
SERION antigens	8
Native Antigens	8
Recombinant Antigens	10
SERION plasma	11
SERION antibodies	14
SERION reagents	16
Coupling Reagents	16
Magnetic Beads	17
Bovine Serum Albumin	18
SERION customized	20
Contact	22

Your Partner in Raw Material Sourcing

Based on 40 years of experience and success in infectious disease diagnostics, the division SERION Immunologics was created in 2013 to focus on the raw material business of Virion\Serion.

The company was founded in 1978 in Germany and is an expert in manufacture and worldwide distribution of *in vitro* diagnostics (IVD) for infectious diseases. Especially in the field of ELISA systems, Virion\Serion enjoys a particularly high reputation. With a subsidiary in China as well as a global network of distributors, Virion\Serion's diagnostic products are sold in over 100 countries worldwide. All IVD products are represented by the division SERION Diagnostics.

The core of SERION Immunologics business is the product line SERION antigens, representing the in-house antigen production of Virion\Serion and including native as well as recombinant antigens. Current antigen production processes cover everything from conventional cell culture for virus propagation, cultivation of bacterial pathogens, such as *B. pertussis*, to advanced recombinant antigen production in *E. coli*,

yeast and insect cells expression systems (Baculovirus and S2 insect cells).

In order to address the needs of IVD manufacturers, SERION plasma and SERION antibodies are additional important parts of SERION Immunologics' product portfolio. These two product groups allow a quick and customer-specific choice of controls, calibrators and standards. Additionally, SERION customized also offers the possibility of special services such as ELISA plate coating and customized antigen or antibody development. Bovine serum albumin (BSA) was the first constituent of the product line SERION reagents. We are happy to continuously develop our reagents portfolio and to introduce now the newly developed SERION coupling reagents and SERION beads. Please refer to page 16-17 for more information.

Products

SERION Immunologics manufactures and provides a wide range of diagnostic raw materials and services, which are categorized in the following product groups:

Raw Materials

- SERION antigens
- SERION plasma
- SERION antibodies
- SERION coupling reagents
- SERION beads
- SERION reagents – BSA

SERION customized

- Antigen and antibody development
- ELISA plate coating
- Buffer production
- Lyophilization



High flexibility, experienced employees and competent customer support makes SERION Immunologics a strong and respected partner in the field of IVD related raw materials and components.

Quality is our standard

Institut Virion\Serion GmbH is a certified IVD manufacturer according to European IVD directive 98/79/EC. All diagnostic medical devices are CE marked. The quality management system is certified according to DIN EN ISO 13485.



Company History

- 
- 
- | | |
|-------------|--|
| 2019 | Introduction of SERION coupling reagents and SERION beads |
| 2018 | Launch of SERION Diagnostics |
| 2017 | Market launch of SERION antibodies |
| 2016 | Foundation of Virion\Serion Biotechnology (Shenzhen) Co., Ltd. |
| 2015 | Implementation of regular plasma screening process |
| 2013 | Launch of SERION Immunologics |
| 2011 | Expansion of antigen production department |
| 2007 | Market launch of SERION Immunomat |
| 2004 | Relocation and expansion to new headquarters |
| 2003 | Base in China (Beijing) |
| 2000 | CE Certification |
| 1981 | Market launch of the product line SERION ELISA <i>classic</i> |
| 1978 | Foundation of Institut Virion\Serion GmbH |

SERION antigens

Critical raw materials, such as antigens, are key factors for establishing reproducible and robust immunodiagnostic test systems. SERION Immunologics produces a variety of high-class infectious disease antigens for ELISA, lateral flow diagnostics (LFD), bead based assays (e.g. CLIA), as well as non-IVD applications.

Currently, SERION Immunologics has the capacity to produce antigens such as VZV, CMV or *Toxoplasma* in a multi-gram scale. The antigen production facilities are certified up to biosafety level 3 (BSL3) and are DIN EN ISO 13485 controlled, ensuring highest quality standards. This guarantees that industrial requirements can be fulfilled at any time. The product portfolio includes antigens isolated from pathogen cultivation, e.g. Measles, Mumps, *B. pertussis* (native antigens), or recombinant antigens (e.g. Rubella, SARS-CoV-2), altogether covering a range of more than 80 individual antigens that are produced on a routine basis. All antigens are purified

using a range of techniques to ensure optimal performance in diagnostic applications. This includes extraction, ultra-centrifugation, filtration and different types of state of the art chromatography processes. Native antigens are known for their high sensitivity in diagnostics applications, especially in IgM detection, and recombinant antigens are well known for their specificity, especially in IgG assays. SERION antigens covers a broad range of infectious diseases including viral, bacterial, fungal or parasitic diseases such as toxoplasmosis and are an ideal basis for the development and production of infectious disease kits and reagents.

Features and benefits:

- ✓ Large selection of antigens
- ✓ Scale up production
- ✓ DIN EN ISO 13485 quality management system
- ✓ Biosafety level 3 (BSL3) production
- ✓ Highest flexibility in customized antigen projects

Native Antigens

Antigen	Packaging	Order No.
Adenovirus Type 2 Hexon	1 mg	BA128VS
Aspergillus fumigatus	1 mL	BA132F01
Bordetella pertussis Filamentous Hemagglutinin (FHA)	1 mg	BA120VS3
Bordetella pertussis Toxin	1 mg	BA120VS4
Bordetella pertussis whole-cell Antigen	1 mg	BA120VS8
Borrelia afzelii	1 mg	BA121VS
Borrelia garinii	1 mg	BA121GVS
Brucella abortus	1 mg	BA116VS

Antigen	Packaging	Order No.
Campylobacter jejuni	1 mg	BA139VS
Candida albicans	1 mg	BA117VS
Chlamydia abortus	1 mg	BA1373VSER
Chlamydia pneumoniae	1 mg	BA1371VSER
Chlamydia pneumoniae - Premium	1 mg	BA1371VS
Chlamydia trachomatis	1 mg	BA1372VSER
Cytomegalovirus (CMV)	1 mg	BA109VS
Diphtheria Toxoid	1 mg	BA130VS
Echinococcus granulosus	1 mg	BA107VS
Helicobacter pylori	1 mg	BA118VS
Herpes Simplex Virus 1 (HSV-1)	1 mg	BA1051VS
Herpes Simplex Virus 2 (HSV-2)	1 mg	BA1052VS
Legionella pneumophila	1 mg	BA106VS
Leptospira biflexa	1 mg	BA125VS
Measles Virus	1 mg	BA102VS
Measles Virus - Premium	1 mg	BA102VS-S
Mumps Virus	1 mg	BA103VS
Mycoplasma pneumoniae	1 mg	BA127VS
Parainfluenza Virus Type 1	1 mg	BA1261VS
Parainfluenza Virus Type 2	1 mg	BA1262VS
Parainfluenza Virus Type 3	1 mg	BA1263VS
Respiratory Syncytial Virus (RSV)	1 mg	BA113VS
Rotavirus	1 mg	BA1193VS
Tetanus Toxoid	1 mg	BA108VS
Tick-borne encephalitis (TBE) Virus	1 mg	BA112VSL
Tick-borne encephalitis (TBE) Virus - Premium	1 mg	BA112VS
Toxoplasma gondii	1 mg	BA110VS
Varicella Zoster Virus (VZV)	1 mg	BA104VS
Varicella Zoster Virus (VZV) Glycoprotein	1 mg	BA104VSG
Yersinia enterocolitica 0:3 YOP	1 mg	BA138VS
Yersinia enterocolitica 0:8 YOP	1 mg	BA13808VS
Yersinia enterocolitica 0:9 YOP	1 mg	BA13809VS

All native antigens are verified to be pathogen inactivated and certified as non-infectious. Please let us know if you are interested in 0.25 mg test samples. However, 5 mg and 10 mg portions are just as possible as customer-specific package sizes.

Recombinant Antigens

Antigen	Packaging	Order No.
Borrelia afzelii Pko DbpA	1 mg	BA121R01
Borrelia afzelii Pko OspC	1 mg	BA121R02
Chikungunya Glycoprotein E1	1 mg	BA148R2
Chikungunya Glycoprotein E1 (A226V)	1 mg	BA148R3
Chikungunya Glycoprotein E2	1 mg	BA148R1
Chlamydia trachomatis MOMP	1 mg	BA1372VSR2
Coxsackievirus	1 mg	BA134VS01
Echovirus	1 mg	BA135VS01
Enterovirus	1 mg	BA133VS01
Epstein-Barr Virus (EBV) Capsid Antigen P18	1 mg	BA1361VSR22
Epstein-Barr Virus (EBV) Capsid Antigen P23	1 mg	BA1361VSR21
Epstein-Barr Virus (EBV) Early Antigen P138	1 mg	BA1363VSR6
Epstein-Barr Virus (EBV) Early Antigen P54	1 mg	BA1363P54VS
Epstein-Barr Virus (EBV) Nuclear Antigen EBNA1, P72	1 mg	BA1362VS
Herpes Simplex Virus 1 (HSV-1) Glycoprotein G	1 mg	BA1051RVS-G
Herpes Simplex Virus 2 (HSV-2) Glycoprotein G	1 mg	BA1052RVS-G
Mycoplasma pneumoniae P1	1 mg	BA127VSP1
Parvovirus NS1	1 mg	BA122VSNS1
Parvovirus PepA (VP1 unique)	1 mg	BA122VSP1A
Parvovirus PepB (VP2 C-term.)	1 mg	BA122VSP1B
Parvovirus PepC (VP1 N-term.)	1 mg	BA122VSP1C
Parvovirus PepD (VP1 C-term.)	1 mg	BA122VSP1D
Parvovirus VP1	1 mg	BA122VSP1
Parvovirus VP2	1 mg	BA122VSP1E
Parvovirus VP2 VLP	1 mg	BA122VSP2
Rubella Spike Ectodomain (E1-E2)	1 mg	BA129R01
SARS-CoV-2 Nucleoprotein	1 mg	BA400R04
SARS-CoV-2 Nucleoprotein (E. coli)	1 mg	BA400R07
SARS-CoV-2 Spike Ectodomain (S1-S2)	1 mg	BA400R03
Zika Virus NS1	1 mg	BA149R01

Please let us know if you are interested in 0.25 mg test samples. However, 5 mg and 10 mg portions are just as possible as customer-specific package sizes.

SERION plasma

Human sera and plasma are essential reagents in serological diagnostic tests. Infectious disease state plasma/sera are used as manufacturing standards or as positive and negative controls or calibrators in most diagnostic test systems. SERION Immunologics offers numerous disease state sera, which are collected following applicable ethical guidelines.

Plasma is collected from single donors within a wide collection network. Based on continuous routine screening capacities, SERION Immunologics ensures constant plasma availability, even of rare disease state sera.

All plasma materials are obtained from qualified and registered donors by approved blood centers in the U.S. or Europe. All materials are tested and certified to comply with regulatory requirements (e.g. donor traceability through the blood bank, virus testing, etc.). The materials are offered as plasma or converted plasma (serum) depending on the customer's needs. The conversion of plasma into serum is performed by a well-established conversion process (re-calcification) to optimize stability and performance of the plasma materials. Since the pathogen specificity for plasma and serum articles is almost identical, only the serum articles are listed below. Please contact us if you are interested in plasma articles.

SERION Immunologics routinely performs screenings on the parameters listed in the following tables for specific antibody positive as well as single or multiple negative plasma/sera. Please contact us to check current availability or if you are explicitly interested in further specificities not listed below.

Features and benefits:

- ✓ Bulk quantities
- ✓ Broad portfolio
- ✓ Improved stability by plasma conversion
- ✓ Fast screening capacities



Specific Antibody Positive

Pathogen Specificity	Order No. IgA	Order No. IgG	Order No. IgM
Adenovirus	PLS128A	PLS128G	PLS128M
Aspergillus fumigatus	PLS132A	PLS132G	PLS132M
Bordetella pertussis	PLS120A	PLS120G	PLS120M
Bordetella pertussis Toxin	PLS1201A	PLS1201G	
Borrelia burgdorferi		PLS121G	PLS121M
Brucella abortus	PLS116A	PLS116G	PLS116M
Campylobacter jejuni	PLS139A	PLS139G	PLS139M
Candida albicans	PLS117A	PLS117G	PLS117M
Chlamydia pneumoniae	PLS1371A	PLS1371G	PLS1371M
Chlamydia trachomatis	PLS1372A	PLS1372G	PLS1372M
Cytomegalovirus (CMV)		PLS109G	PLS109M
Dengue Virus		PLS114G	PLS114M
Echinococcus granulosus		PLS107G	
Enterovirus	PLS133A	PLS133G	PLS133M
Epstein-Barr Virus (EBV) VCA		PLS1361G	PLS1361M
Francisella tularensis		PLS142G	PLS142M
Hantavirus Puumala		PLS145G	PLS145M
Helicobacter pylori	PLS118A	PLS118G	PLS118M
Herpes Simplex Virus 1 (HSV-1)		PLS1051G	PLS1051M
Herpes Simplex Virus 1/2 (HSV-1/2)	PLS105A	PLS105G	PLS105M
Herpes Simplex Virus 2 (HSV-2)		PLS1052G	PLS1052M
Influenza A Virus		PLS1231G	PLS1231M
Influenza B Virus		PLS1232G	PLS1232M
Legionella pneumophila		PLS106G	PLS106M
Leishmania		PLS147G	
Leptospira biflexa		PLS125G	PLS125M
Measles Virus		PLS102G	PLS102M
Mumps Virus		PLS103G	PLS103M
Mycoplasma pneumoniae	PLS127A	PLS127G	PLS127M
Parainfluenza Virus 1/2/3	PLS126A	PLS126G	PLS126M
Parvovirus B19		PLS122G	PLS122M
Respiratory Syncytial Virus (RSV)	PLS113A	PLS113G	
Rheumatoid Factor (RF)			PLS000RF
Rubella Virus		PLS129G	PLS129M
Tick-borne encephalitis (TBE) Virus		PLS112G	PLS112M
Toxoplasma gondii	PLS110A	PLS110G	PLS110M

Pathogen Specificity	Order No. IgA	Order No. IgG	Order No. IgM
Varicella Zoster Virus (VZV)	PLS104A	PLS104G	PLS104M
West Nile Virus		PLS141G	PLS141M
Yersinia enterocolitica	PLS138A	PLS138G	PLS138M

Specific Antibody Negative

Pathogen Specificity	Order No. IgG
Borrelia burgdorferi IgG negative	PLS121GN
Cytomegalovirus (CMV)	PLS109GN
Epstein-Barr Virus (EBV) VCA and EBNA1	PLS136GN
Herpes Simplex Virus 1/2 (HSV-1/2)	PLS105GN
Measles Virus	PLS102GN
Mumps Virus	PLS103GN
Measles/ Mumps/ Rubella/ VZV IgG negative	PLS_MMRZ_GN
Measles/ Mumps/ VZV/ EBV IgG & IgM negative	PLS_MMZE_N
Respiratory Parameter IgA, IgG & IgM negative	PLS_RESP_N
Adenovirus/ Chlamydia pneumoniae/ Mycoplasma pneumoniae/ Parainfluenza Virus 1/2/3/ Parvovirus B19/ Respiratory Syncytial Virus (RSV)	
Rubella Virus	PLS129GN
Toxoplasma gondii	PLS110GN
Toxoplasma/ Rubella/ CMV/ HSV-1/2 IgG & IgM negative	PLS_ToRCH_N
Vaccine Parameter IgG negative	PLS_VAC_GN
Measles/ Mumps/ Rubella/ VZV/ Diphtheria/ Tetanus/ Tick-borne encephalitis (TBE)	
Varicella Zoster Virus (VZV)	PLS104GN

Available packaging sizes are 1 mL, 50 mL, 100 mL, 250 mL, and 500 mL. 1 mL test samples can be offered free of charge.

SERION antibodies

As a highly reliable and readily available alternative to human serum, SERION Immunologics also offers humanized monoclonal antibodies.

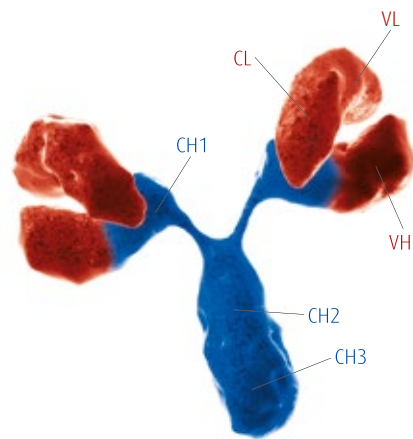


Figure 1:
 VH/VL/CL = Mouse constant and variable regions of heavy and light chain
 CH1/CH2/CH3 = Human region of heavy chain

The performance of these monoclonal antibodies, in comparison to human disease state sera, has been tested extensively, showing that the antibodies behave similar to sera. Therefore, they can be optimally and alternatively used for preparation of calibrators, controls and standards.

SERION antibodies are produced in transgenic mice by replacing the mouse sequence of the heavy chain constant region (IgM, IgG or IgA loci) with the corresponding human sequence. After immunization with the antigen of interest, generated antibody clones are cultivated by standard hybridoma techniques. These consist of the human constant region of the heavy chain, mouse variable region of the heavy chain and mouse light chain. The human constant region of the heavy chain can be directly recognized by the anti-human conjugate, which is used in numerous *in vitro* diagnostic assays.

The monoclonal antibodies are offered in two different matrices. The original product line is provided as a cell culture supernatant packaged in 1 mL up to 1 L quantities. The new generation of antibodies is available in IgG depleted and delipidized human serum matrix with 100 µg up to 25 mg packaging sizes. Production lots are usually offered with a concentration between 100 µg/mL and 150 µg/mL.

Features and benefits:

- ✓ High affinity
- ✓ High specificity
- ✓ Industrial batch sizes
- ✓ Constant availability
- ✓ Constant quality and performance

SERION antibodies in cell culture supernatant

Pathogen Specificity	Antibody Class	Clone	Order No.
Anti-Chlamydia pneumoniae	IgM	G12B2	MAB1371.001
Anti-Cytomegalovirus (CMV)	IgM	Z11E4F7	MAB109.001
Anti-Cytomegalovirus (CMV)	IgM	Z3A3B8	MAB109.002
Anti-Dengue Virus	IgM	V11F8H3	MAB114.001

Pathogen Specificity	Antibody Class	Clone	Order No.
Anti-Epstein-Barr Virus (EBV) VCA P18	IgM	A12F10	MAB1361.001
Anti-Herpes Simplex Virus 1/2 (HSV-1/2)	IgM	K11A12D11	MAB105.001
Anti-Measles Virus	IgM	P5H6	MAB102.001
Anti-Mumps Virus	IgM	F11E4A7	MAB103.001
Anti-Mumps Virus	IgM	F19B9A5	MAB103.002
Anti-Mycoplasma pneumoniae	IgM	NA15F4A12	MAB127.001
Anti-Rubella Virus	IgM	B16B11F8	MAB129.001
Anti-Rubella Virus	IgM	A7A11H3	MAB129.002
Anti-Toxoplasma gondii	IgM	A13H1E4	MAB110.001
Anti-Varicella Zoster Virus (VZV)	IgM	D30B3D1	MAB104.001
Anti-Varicella Zoster Virus (VZV)	IgM	D20F3C7	MAB104.002
Anti-Zika Virus	IgM	JA10E10	MAB149.001

SERION antibodies in human matrix

Pathogen Specificity	Antibody Class	Clone	Order No.
Anti-Chlamydia pneumoniae in human matrix	IgM	G12B2	MAB1371.001H
Anti-Cytomegalovirus (CMV) in human matrix	IgM	Z11E4F7	MAB109.001H
Anti-Cytomegalovirus (CMV) in human matrix	IgM	Z3A3B8	MAB109.002H
Anti-Dengue Virus in human matrix	IgM	V11F8H3	MAB114.001H
Anti-Epstein-Barr Virus (EBV) VCA P18 in human matrix	IgM	A12F10	MAB1361.001H
Anti-Herpes Simplex Virus 1/2 (HSV-1/2) in human matrix	IgM	K11A12D11	MAB105.001H
Anti-Measles Virus in human matrix	IgM	P5H6	MAB102.001H
Anti-Mumps Virus in human matrix	IgM	F11E4A7	MAB103.001H
Anti-Mumps Virus in human matrix	IgM	F19B9A5	MAB103.002H
Anti-Mycoplasma pneumoniae in human matrix	IgM	NA15F4A12	MAB127.001H
Anti-Rubella Virus in human matrix	IgM	B16B11F8	MAB129.001H
Anti-Rubella Virus in human matrix	IgM	A7A11H3	MAB129.002H
Anti-Toxoplasma gondii in human matrix	IgM	A13H1E4	MAB110.001H
Anti-Varicella Zoster Virus (VZV) in human matrix	IgM	D30B3D1	MAB104.001H
Anti-Varicella Zoster Virus (VZV) in human matrix	IgM	D20F3C7	MAB104.002H
Anti-Zika Virus in human matrix	IgM	JA10E10	MAB149.001H

Test samples can be offered free of charge.

Further antibodies are under development. If you need another monoclonal antibody, please contact us. Customer-specific development is possible as well.

A cooperation with



SERION coupling reagents

Ready-to-use alternatives to standard coupling methods.

Every biomolecule is different! Many applications require stable immobilization of biomolecules on solid supports, e.g. microspheres. However, standard covalent coupling methods are often laborious and fail in certain cases. Alternatively, intrinsic properties of biomolecules such as charge, H-bond donor/acceptor sites and hydrophobicity can be used to generate multiple attractive interactions resulting in stable coupling.

SERION Immunologics offers a set of water-based SERION coupling reagents designed to activate charged surfaces, e.g. negative carboxylate or positive amine surfaces, within ≤ 20 min at room temperature. The reagents are available alone or as screening kits allowing you to tailor your surface to match your biomolecule. They can be used to activate commercially available microspheres or MagSERION carboxy/amine beads. Combined with automated bead handling devices for magnetic particles, SERION coupling kits facilitate versatile and fast screening for the most efficient coupling reagent to bind your target molecule.

Features and benefits:

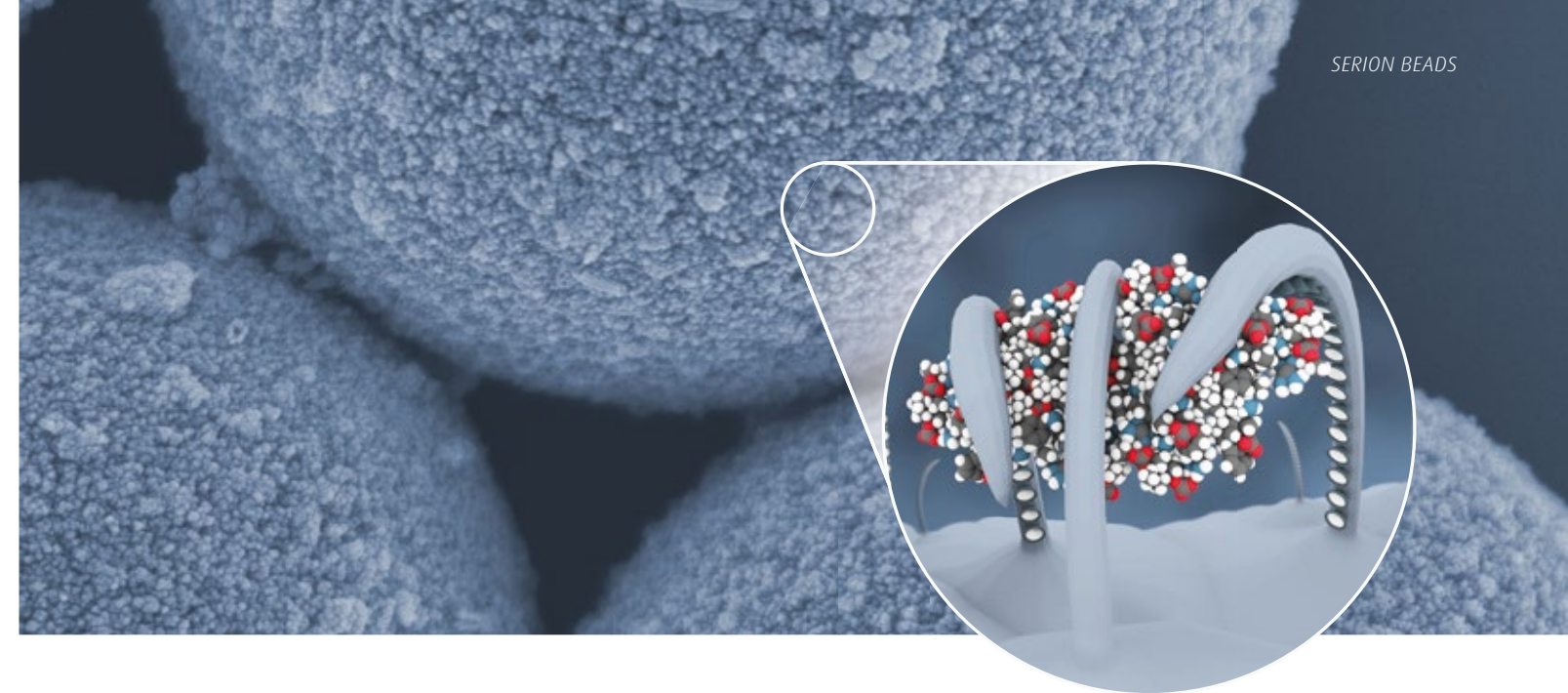
- ✓ Individual surface design
- ✓ Ready-to-use
- ✓ Surface activation in ≤ 20 min
- ✓ Bead-based automation



Products

SERION coupling kit	Description	Order No.
SERION coupling kit N w/o beads	Coupling kit for negative surfaces 7 coupling reagents for negative surfaces, blocking buffer	CKN01
SERION coupling kit N with beads	Coupling kit for negative surfaces 7 coupling reagents for negative surfaces, blocking buffer, MagSERION carboxy beads	CKN02
SERION coupling kit P w/o beads	Coupling kit for positive surfaces 7 coupling reagents for positive surfaces, blocking buffer	CKP01
SERION coupling kit P with beads	Coupling kit for positive surfaces 7 coupling reagents for positive surfaces, blocking buffer, MagSERION amine beads	CKP02

Please contact us for ordering information about individual SERION coupling reagents in bulk quantities.



SERION beads

New superparamagnetic microspheres for use in automated bead assays.

The new product line SERION beads was developed for automated bead assays, e.g. CLIA. We offer two different kinds of functionalized magnetic beads – MagSERION carboxy beads and MagSERION amine beads. Their small size of approximately 3 μm provides a large surface area for biomolecule coupling and their superparamagnetic properties allow a fast magnetic separation. SERION beads can be activated using standard coupling methods for carboxy or amine surfaces or SERION coupling reagents for efficient binding of your target biomolecule.

Features and benefits:

- ✓ Functional surface groups
- ✓ Fast magnetic separation
- ✓ Large surface area
- ✓ Suitable for automation

Products

SERION beads	Functionalization	Size (Size Range)	Concentration	Packaging	Order No.
MagSERION carboxy beads	Carboxy groups	3 μm (2.40 μm - 3.70 μm with 10 % CV)	100 mg/mL	100 mg	031MP-C
MagSERION amine beads	Amine groups	3 μm (2.40 μm - 3.70 μm with 10 % CV)	100 mg/mL	100 mg	031MPSS

SERION reagents — Bovine Serum Albumin

To support our customers in the challenging IVD environment, SERION Immunologics opted to create a line for selected reagents and components such as different BSA formulations. Further products will be continuously added and we are always open for the development of customized reagents for various applications.

Bovine serum albumin (BSA) is a globular serum protein of approx. 66.5 kDa. Due to its high stability and its lack of interference in many biological reactions, BSA is widely used in diagnostics test systems. Typical applications include the use as protein calibrator, stabilizer or as a blocking reagent.

BSA is often referred to as „Fraction V“, based on the original fractionation of human plasma developed by Edwin Cohn. Primarily developed for human albumin production, the process was later adapted to bovine serum albumin. In modern manufacturing processes, Cohn fractionation is now replaced by a modified, more effective heat shock method, resulting in a BSA of significantly higher degree of purity (>98 %).

SERION Immunologics offers a variety of BSA products especially selected to cover the needs of the diagnostic industry.

All bovine products are sourced from controlled abattoirs and are manufactured in the U.S. All animals receive ante- and post-mortem inspections in order to meet regulatory requirements and are classified as „free from infectious diseases and parasites“.

Products

Product Description	Packaging	Order No.
Bovine Serum Albumin, Standard Grade, U.S. origin	10 g	BSA-0010SG
Bovine Serum Albumin, Standard Grade, U.S. origin	100 g	BSA-0100SG
Bovine Serum Albumin, Standard Grade, U.S. origin	1000 g	BSA-1000SG
Bovine Serum Albumin, Protease Free, U.S. origin	10 g	BSA-0010PF
Bovine Serum Albumin, Protease Free, U.S. origin	100 g	BSA-0100PF
Bovine Serum Albumin, Protease Free, U.S. origin	1000 g	BSA-1000PF
Bovine Serum Albumin, Fatty Acid Free, U.S. origin	10 g	BSA-0010FF
Bovine Serum Albumin, Fatty Acid Free, U.S. origin	100 g	BSA-0100FF
Bovine Serum Albumin, Fatty Acid Free, U.S. origin	1000 g	BSA-1000FF
Bovine Serum Albumin, Sulfhydryl Blocked, U.S. origin	10 g	BSA-0010SH
Bovine Serum Albumin, Sulfhydryl Blocked, U.S. origin	100 g	BSA-0100SH
Bovine Serum Albumin, Sulfhydryl Blocked, U.S. origin	1000 g	BSA-1000SH
Bovine Serum Albumin, 30 % Solution, with 0.1 % Sodium Azide, U.S. origin	1 L	BSA-001SL
Bovine Serum Albumin, 30 % Solution, with 0.1 % Sodium Azide, U.S. origin	10 L	BSA-010SL



SERION customized

SERION Immunologics offers a range of customized services including antigen development and production, manufacturing of coated ELISA plates as well as buffer preparation and lyophilization. In addition, together with our partner ArkAb (Limoges, France), SERION Immunologics now offers custom development and manufacturing of monoclonal antibodies, especially for IgM. If you have any project in mind, please contact us to discuss feasibility and the best possible production procedure.

Antigens and antibodies:

Due to the long-term experience of Virion\Serion as a developer and manufacturer of high performing and recognized IVD infectious disease antigens, SERION Immunologics is capable of developing and manufacturing a wide range of antigens. Based on the additional expertise of our cooperation partner ArkAb (Limoges, France), we are also the right partner for the development of new monoclonal antibodies.

ELISA plate coating:

SERION Immunologics offers a fully automated production line for ELISA coating, incubation and vacuum packaging. A modular system enables processing of up to four different lots with individual requirements in one production flow. Embedded in a DIN EN ISO 13485 certified production environment the state-of-the-art coating system is ready for your batch production.

Buffer production:

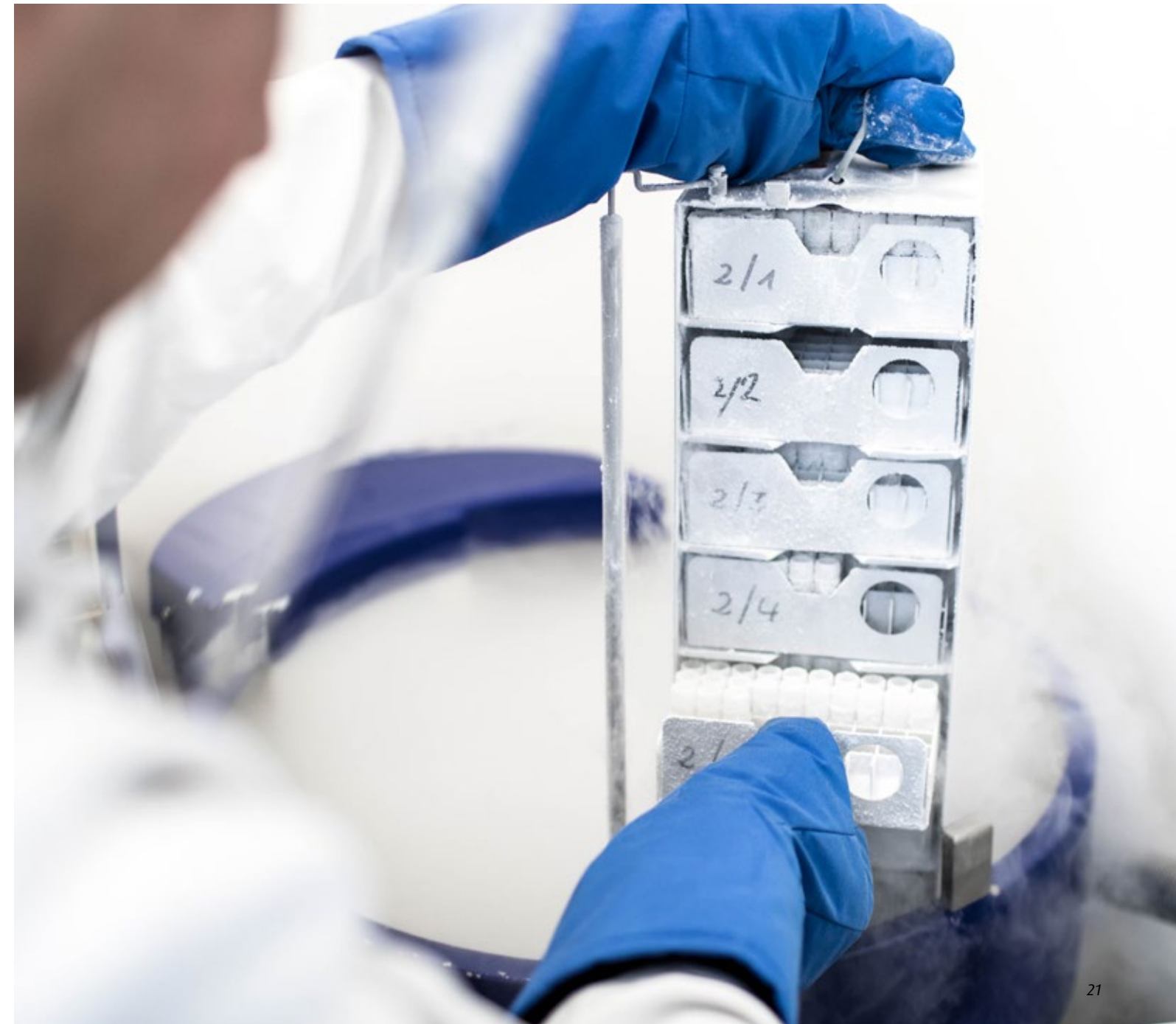
SERION customized also comprises the production of tailor-made reagents or buffer formulations, beginning from a simple bottling up to the production of complex buffer solutions. Based on Institut Virion\Serion GmbH's certification for the production of in vitro diagnostics according to DIN EN ISO 13485, all products are manufactured to the highest standards.

Lyophilization:

Freeze drying often increases the shelf-life of sensitive biological substances, such as antigens or antibodies, significantly. Therefore, this method is widely used in the manufacture of diagnostic reagents and components, such as CFT reagents or conjugates. Lyophilized products can be easily reconstituted with water or a suitable buffer and the reagent can be instantly used in a diagnostic test. Therefore, lyophilization is often the method of choice if a sensitive biological substance needs to be preserved for long-term storage or to remove the need for shipping of cooled or frozen reagents. Currently batch sizes of up to several thousand vials per lyophilization run can be freeze-dried under continuous quality conditions according to DIN EN ISO 13485.

Features and benefits – SERION customized

- ✓ Maximum flexibility
- ✓ Proven track record
- ✓ Technical customer support
- ✓ DIN EN ISO 13485 quality management system



Contact

Stefan Papadileris

International Sales Manager

Phone: +49 931 30 45 561
Mobile: +49 172 67 05 053
Fax: +49 931 30 45 556
s.papadileris@virion-serion.de

Gledys Natacha Ortiz-Michel

Sales Support Team

Phone: +49 931 30 45 216
Fax: +49 931 3045 556
g.ortiz-michel@virion-serion.de

Dr. Claudia Dollack

Scientific Product Manager

Phone: +49 931 30 45 562
Mobile: +49 162 43 63 846
Fax: +49 931 30 45 556
c.dollack@virion-serion.de

Dr. Thomas Schumacher

Director

Phone: +49 931 30 45 560
Mobile: +49 172 65 58 749
Fax: +49 931 30 45 556
t.schumacher@virion-serion.de

virion\serion

Institut Virion\Serion GmbH

Friedrich-Bergius-Ring 19
97076 Würzburg, Germany
Phone +49 931 30 45 0
Fax +49 931 30 45 100
info@virion-serion.de
www.virion-serion.de

2020|09