



Biomaterials Catalog

Antigens & Antibodies Supply

werfen

Werfen is a global, family-owned, diagnostics company focused in providing innovative specialized diagnostic solutions to improve patient healthcare, founded in 1966 in Barcelona, Spain.

Our Immunoassay Technology Center has consolidated experience in research, development and manufacturing of customized assays and biomaterials.

We offer end-to-end solutions for the IVD industry with the most innovative capabilities to enhance competitiveness and time-to-market.

Our mission is to become your partner of choice as a center of excellence in providing innovative end-to-end solutions (products & services) to IVD companies.



Innovation

Our Immunoassay Technology Center ranks among the top centers of excellence for immunoassay and biomaterial development and manufacturing in the industry. Our focus on technological advances ensures our customers access to state-of-the-art R&D and manufacturing capabilities. Werfen's innovative nature is strengthened through close relationships with prestigious universities and biotechnology research centers around the world.

Operational Excellence

Our key strength is the combination of the ongoing effort to improve our organizational processes, products and services with the Werfen mindset that embraces principles and tools to create a sustainable partnership with our customers and employees. Our Quality System is certified to ISO 13485:2016 / EN ISO 13485:2016, MDSAP and IVDR.

Commitment

Customers and patients benefit from the efficiency of a talented global team of qualified and specialized professionals who lend their enthusiasm, dedication and energy on a daily basis in order to provide high quality products & services.



Biomaterials for the IVD Industry

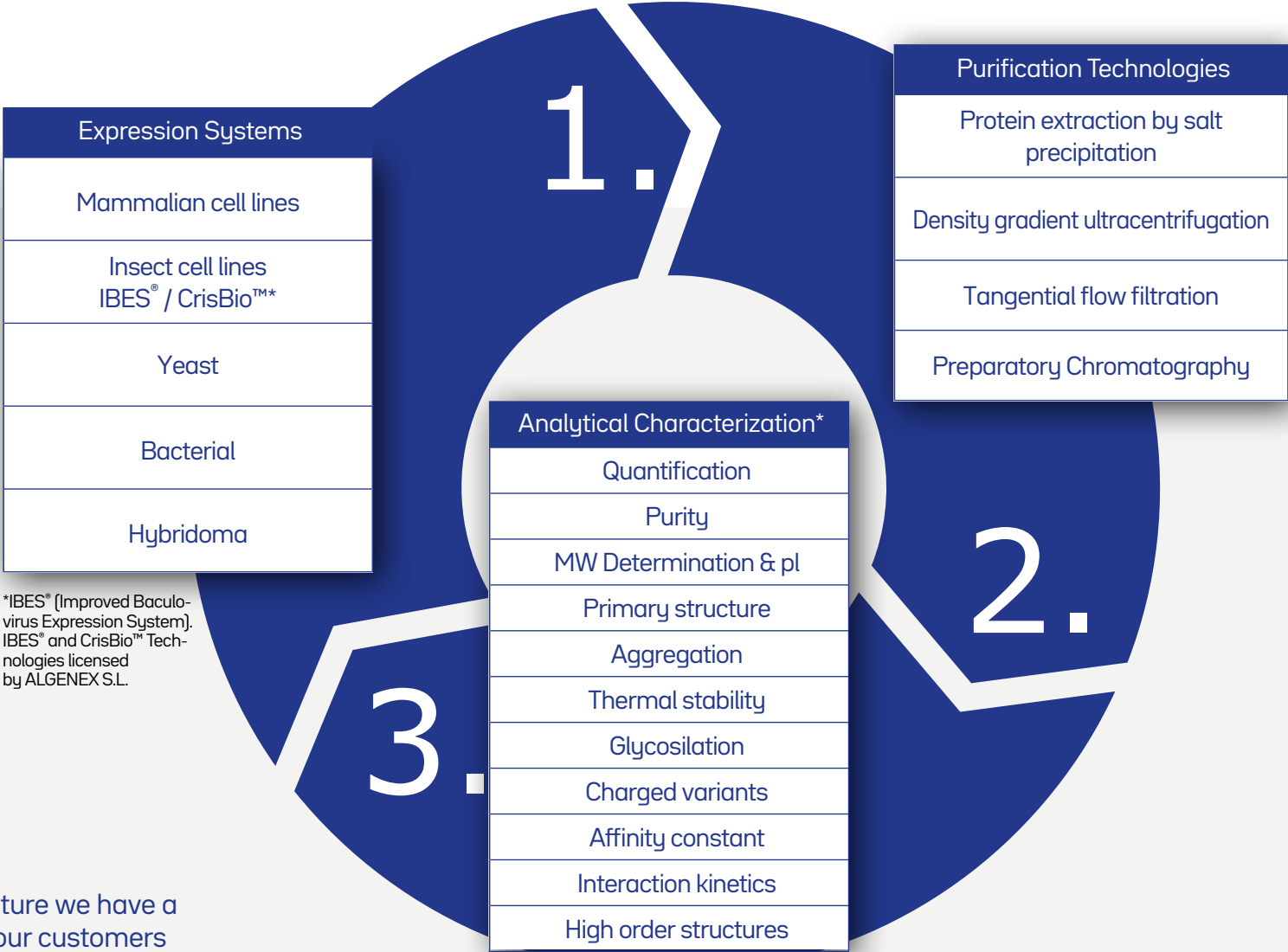
Werfen offers a broad range of biomaterials, including antigens, antibodies, obtained by following validated standards of quality procedures. Those procedures ensure the traceability, reproducibility and robustness of every single product. Our expertise is attested to by more than 200 biomaterials that are being used in diagnostic technologies.

Our know-how in biomaterials is focused on their application in commercial diagnostic assays that provides a low-risk, reliable and highly successful option for our customers to reduce time to market in their developments and secure their operations.

Acronym List

A₂₈₀	Absorbance at 280 nm	HEV	Hepatitis E Virus
Ab	Antibody	HPLC	High Performance Liquid Chromatography
Ag	Antigen	HTLV	Human T-lymphotropic Virus
αHBs	Anti-Hepatitis B Surface	IBES	Improved Baculovirus Expression System
ASO	Anti-Streptolysin O	IVD	In Vitro Diagnostics
CHO	Chinese Hamster Ovary	mAb	Monoclonal Antibody
CL	Chemiluminescence	MES	2-[N-morpholino]ethanesulfonic acid
ELISA	Enzyme-Linked ImmunoSorbent Assay	NTE	NaCl-Tris-EDTA buffer
GMP	Good Manufacturing Practices	pAb	Polyclonal Antibody
HBV	Hepatitis B Virus	PBS	Phosphate-Buffered Saline
HCV	Hepatitis C Virus	PIGF	Placental Growth Factor
HEPES	N-2-hydroxyethylpiperazine-N-2-ethane sulfonic acid	Rec	Recombinant
		sFlt-1	Soluble fms-like tyrosine kinase-1

Biomaterials Manufacturing Capabilities



Thanks to our partnering culture we have a vast experience of meeting our customers needs and their regulatory requirements in order to commercialize their products worldwide.

*This table compiles all the available analytical characterization methodologies. Depending on the biomaterial, there are methodologies applied on routine or upon request



Werfen is your partner with state-of-the-art manufacturing capabilities to have the supply of critical biomaterials that cover market needs in a continuous, reliable and low-risk manner securing your operations.

CAPABILITIES

- 38,000 m² [409,028 ft²] facilities of which 10,000 m² [107,639 ft²] are dedicated to production activities
- Extensive manufacturing scale-up capabilities
- Biosafety level 2 laboratories
- Positive and negative pressurized laboratories
- State-of-the-art equipment
- ISO 8 classified areas for production and filling
- Production under GMP's procedures
- Production under Lean Manufacturing
- 5S methodology implemented in all the production areas
- Final QC functional and physicochemical analysis



Biomaterials Applications*

Fertility	
	Monoclonal Antibodies p. 8
	Anti-Placental Growth Factor mAb (PGF16M)
	Anti-Placental Growth Factor mAb (PGF03m)
	Anti-sFtl-1 mAb (SFT10m)
	Anti-sFtl-1 mAb (SFT18m)
Inflammation	
	ASO p. 10
	Recombinant Antigens
	Recombinant Streptolysin O
	Recombinant Streptolysin O Stabilized
Hepatitis B	
	Recombinant Antigens p. 12
	Recombinant HBc Antigen
	Recombinant HBsAg Ag
Hepatitis C	
	Recombinant Antigens p. 14
	Recombinant HCV Capsid Polypeptide
	Recombinant HCV NS3 Polypeptide
Syphilis	
	Recombinant Antigens p. 15
	Recombinant p15 (II) <i>Treponema pallidum</i> Ag
	Recombinant p17 <i>Treponema pallidum</i> Ag
	Recombinant p47 <i>Treponema pallidum</i> Ag
	Recombinant H-p17 <i>Treponema pallidum</i> Ag
	Recombinant H-p47 <i>Treponema pallidum</i> Ag
Herpes	
	Recombinant Antigens p. 18
	Recombinant gG1 Protein HSV-1
	Recombinant gG2 Protein HSV-2
Chagas	
	Recombinant Antigens p. 19
	Recombinant TcF Antigen

Chemiluminescence	ELISA	Turbidimetry	Rapid Test
●			
●			
●			
●			
		●	●
		●	●
●	●		
●			
●	●		
	●		
●	●		
●	●		
●	●		
●	●		
●	●		
●	●		
●	●		
●			

*Please note that this table is merely indicative. Other uses may be applicable depending on customer needs. For further technical information or requests please contact Immunoassay@werfen.com.



Fertility

The following products have been tested in the following applications. This information derives from use in commercial diagnostic assays and/or testing within our laboratories.

Fertility		Chemiluminescence	ELISA	Turbidimetry	Rapid Test
	Monoclonal Antibodies				
	Anti-Placental Growth Factor mAb (PGF16M)	●			
	Anti-Placental Growth Factor mAb (PGF03m)	●			
	Anti-sFlt-1 mAb (SFT10m)	●			
	Anti-sFlt-1 mAb (SFT18)	●			

Other uses may be applicable depending on customer needs. For further technical information or requests please contact Immunoassay@werfen.com.

Monoclonal Antibodies

The following products have been tested in the following applications. This information derives from use in commercial diagnostic assays and/or testing within our laboratories.

Product Description	Presentation	Reference	Storage
Anti-Placental Growth Factor mAb (PGF16M)	1 mg/vial	3000-5330	-70°C*
Anti-Placental Growth Factor mAb (PGF16M)	mg/custom size	3000-5329	-70°C*

The information contained in this catalogue is for informational purposes. Contact Immunoassay@werfen.com for further technical information and product availability.

*Avoid repeated freezing and thawing.

Details

Source	Hybridoma cell line
Storage Buffer	50 mM MES, 150 mM NaCl, pH 6
Purification Method	Protein A
Protein Concentration	≥ 1.00 mg/mL [A_{280}]
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Anti-Placental Growth Factor mAb (PGF03m)	1 mg/vial	3000-5332	-70°C*
Anti-Placental Growth Factor mAb (PGF03m)	mg/custom size	3000-5331	-70°C*

The information contained in this catalogue is for informational purposes. Contact Immunoassay@werfen.com for further technical information and product availability.

*Avoid repeated freezing and thawing.

Details

Source	Hybridoma cell line
Storage Buffer	50 mM MES, 150 mM, NaCl, pH 6
Purification Method	Protein A
Protein Concentration	≥ 1.00 mg/mL [A_{280}]
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Anti-sFtl-1 mAb (SFT10m)	1 mg/vial	3000-5334	-70°C*
Anti-sFtl-1 mAb (SFT10m)	mg/custom size	3000-5333	-70°C*

The information contained in this catalogue is for informational purposes. Contact Immunoassay@werfen.com for further technical information and product availability.

*Avoid repeated freezing and thawing.

Details

Source	Hybridoma cell line
Storage Buffer	50 mM MES, 150 mM, NaCl, pH 6
Purification Method	Protein A
Protein Concentration	≥ 1.00 mg/mL [A_{280}]
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Anti-sFtl-1 mAb (SFT18)	1 mg/vial	3000-5336	-70°C*
Anti-sFtl-1 mAb (SFT18)	mg/custom size	3000-5335	-70°C*

The information contained in this catalogue is for informational purposes. Contact Immunoassay@werfen.com for further technical information and product availability.

*Avoid repeated freezing and thawing.

Details

Source	Hybridoma cell line
Storage Buffer	PBS, pH 7.4
Purification Method	Protein G
Protein Concentration	≥ 1.00 mg/mL [A_{280}]
Preservative	No Preservative Added

Inflammation

The following products have been tested in the following applications. This information derives from use in commercial diagnostic assays and/or testing within our laboratories.

Inflammation	Chemiluminescence	ELISA	Turbidimetry	Rapid Test
ASO				
Recombinant Antigens				
Recombinant Streptolysin O			●	●
Recombinant Streptolysin O Stabilized			●	●

Other uses may be applicable depending on customer needs. For further technical information or requests please contact Immunoassay@werfen.com.



ASO

Recombinant Antigens

Product Description	Presentation	Reference	Storage
Recombinant Streptolysin O	mg/custom size*	3000-5258	-70°C**

*For large quantities, packaging available upon request - minimum size 5 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Source	<i>Escherichia coli</i>
Storage Buffer	Tris-HCl, pH 8.5
Purification Method	Metal Affinity Chromatography
Protein Concentration	2.00 - 4.00 mg/mL ($A_{280} \times 0.79$)
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Recombinant Streptolysin O stabilized	1 mg/mL	3000-5311	-70°C**
Recombinant Streptolysin O stabilized	mg/custom size*	3000-5259	-70°C**

*For large quantities, packaging available upon request - minimum size 5 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Source	<i>Escherichia coli</i>
Storage Buffer	Tris-HCl, pH 8.2
Purification Method	Metal Affinity Chromatography
Protein Concentration	1.00 - 2.00 mg/mL (Lowry Method)
Preservative	No Preservative Added

Infectious Diseases

Hepatitis B

The following products have been tested in the following applications. This information derives from use in commercial diagnostic assays and/or testing within our laboratories.

Hepatitis B		Chemiluminescence	ELISA	Turbidimetry	Rapid Test
	Recombinant Antigens				
	Recombinant HBc Antigen	●	●		
	Recombinant HBsAg ay	●			

Other uses may be applicable depending on customer needs. For further technical information or requests please contact Immunoassay@werfen.com.

Recombinant Antigens

Product Description	Presentation	Reference	Storage
Recombinant HBc Antigen	1 mg/vial	3000-5100	-20°C**
Recombinant HBc Antigen	mg/custom size*	3000-5102	-20°C**

*For large quantities, packaging available upon request - minimum size 5 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Source	<i>Escherichia coli</i>
Storage Buffer	PBS, pH 7.4
Purification Method	Ultracentrifugation
Protein Concentration	0.20 - 1.00 mg/mL [Lowry Method]
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Recombinant HBsAg ay	mg/custom size	3000-7069	-20°C**

*These products are in R&D Stage. The information contained in this catalogue is for informational purposes. Contact Immunoassay@werfen.com for further technical information and product availability.

Specifications

Source	CHO Cells
Storage Buffer	Phosphate Buffer , Sodium Chloride
Purification Method	Immunoaffinity
Protein Concentration	0.50 to 2.00 mg/mL
Preservative	No Preservative added



Hepatitis C

The following products have been tested in the following applications. This information derives from use in commercial diagnostic assays and/or testing within our laboratories.

Hepatitis C		Chemiluminescence	ELISA	Turbidimetry	Rapid Test
	Recombinant Antigens				
	Recombinant HCV Capsid Polypeptide	●	●		
	Recombinant HCV NS3 Polypeptide	●	●		

Other uses may be applicable depending on customer use. For further technical information or requests please contact Immunoassay@werfen.com.

Recombinant Antigens

Product Description	Presentation	Reference	Storage
Recombinant HCV Capsid Polypeptide	mg/custom size*	3000-5103	-70°C**
Recombinant HCV Capsid Polypeptide	1 mg/vial	3000-5314	-70°C**

*For large quantities, packaging available upon request - minimum size 1 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Source	<i>Escherichia coli</i>
Storage Buffer	Acetate, NaCl, pH 5.5
Purification Method	Ion Exchange Chromatography
Protein Concentration	0.50 - 2.00 mg/mL [A_{280}]
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Recombinant HCV NS3 Polypeptide	mg/custom size*	3000-5104	-70°C**
Recombinant HCV NS3 Polypeptide	1 mg/vial	3000-5105	-70°C**

*For large quantities, packaging available upon request - minimum size 1 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Source	<i>Escherichia coli</i>
Storage Buffer	Tris-HCl, NaCl, pH 8.6
Purification Method	Affinity Chromatography
Protein Concentration	0.50 - 2.00 mg/mL [A_{280}]
Preservative	No Preservative Added

Syphilis

The following products have been tested in the following applications. This information derives from use in commercial diagnostic assays and/or testing within our laboratories.

Syphilis		Chemiluminescence	ELISA	Turbidimetry	Rapid Test
	Recombinant Antigens				
	Recombinant p15 (II) <i>Treponema pallidum</i> Ag	●	●		
	Recombinant p17 <i>Treponema pallidum</i> Ag	●	●		
	Recombinant p47 <i>Treponema pallidum</i> Ag	●	●		
	Recombinant H-p17 <i>Treponema pallidum</i> Ag	●	●		
	Recombinant H-p47 <i>Treponema pallidum</i> Ag	●	●		

Other uses may be applicable depending on customer needs. For further technical information or requests please contact Immunoassay@werfen.com.

Recombinant Antigens

Product Description	Presentation	Reference	Storage
Recombinant p15 (II) <i>Treponema pallidum</i> Ag	mg/custom size*	3000-5289	-70°C**
Recombinant p15 (II) <i>Treponema pallidum</i> Ag	1 mg/vial	3000-5306	-70°C**

*For large quantities, packaging available upon request - minimum size 1 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Tag	GST
Source	<i>Escherichia coli</i>
Storage Buffer	Tris-HCl, NaCl, pH 8.0
Purification Method	Affinity Chromatography
Protein Concentration	3.00 - 7.00 mg/mL ($A_{280} \times 0.74$)
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Recombinant p17 <i>Treponema pallidum</i> Ag	mg/custom size*	3000-5280	-70°C**
Recombinant p17 <i>Treponema pallidum</i> Ag	2 mg/vial	3000-5305	-70°C**

*For large quantities, packaging available upon request - minimum size 2 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Tag	GST
Source	<i>Escherichia coli</i>
Storage Buffer	Tris-HCl, NaCl, pH 8.0
Purification Method	Affinity Chromatography
Protein Concentration	8.00 - 12.00 mg/mL [$A_{280} \times 0.78$]
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Recombinant p47 <i>Treponema pallidum</i> Ag	mg/custom size*	3000-5284	-70°C**
Recombinant p47 <i>Treponema pallidum</i> Ag	1 mg/vial	3000-5307	-70°C**

*For large quantities, packaging available upon request - minimum size 1 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Tag	GST
Source	<i>Escherichia coli</i>
Storage Buffer	Tris-HCl, NaCl, pH 8.0
Purification Method	Affinity Chromatography
Protein Concentration	4.00 - 6.00 mg/mL [$A_{280} \times 0.8$]
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Recombinant H-p17 <i>Treponema pallidum</i> Ag	mg/custom size*	3000-5254	-70°C**
Recombinant H-p17 <i>Treponema pallidum</i> Ag	1 mg/vial	3000-5308	-70°C**

*For large quantities, packaging available upon request - minimum size 1 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Tag	HIS
Source	<i>Escherichia coli</i>
Storage Buffer	Tris-HCl, NaCl, pH 8.0
Purification Method	Metal Affinity Chromatography
Protein Concentration	2.00 - 5.00 mg/mL ($A_{280} \times 1.38$)
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Recombinant H-p47 <i>Treponema pallidum</i> Ag	mg/custom size*	3000-5263	-70°C**
Recombinant H-p47 <i>Treponema pallidum</i> Ag	1 mg/vial	3000-5309	-70°C**

*For large quantities, packaging available upon request - minimum size 1 mg/vial. **Avoid repeated freezing and thawing.

Specifications

Tag	HIS
Source	<i>Escherichia coli</i>
Storage Buffer	Tris-HCl, NaCl, pH 8.0
Purification Method	Metal Affinity Chromatography
Protein Concentration	2.00 - 5.00 mg/mL ($A_{280} \times 0.91$)
Preservative	No Preservative Added

Herpes

The following products have been reported to work in the following applications. This information derives from use in commercial diagnostic assays and/or testing within our laboratories.

Herpes		Chemiluminescence	ELISA	Turbidimetry	Rapid Test
Recombinant Antigens					
Recombinant gG1 Protein HSV-1		●	●		
Recombinant gG2 Protein HSV-2		●	●		

Other uses may be applicable depending on customer needs. For further technical information or requests please contact Immunoassay@werfen.com.

Recombinant Antigens

Product Description	Presentation	Reference	Storage
Recombinant gG1 Protein HSV-1*	0.5 mg/vial	3000-5288	-70°C**
Recombinant gG1 Protein HSV-1*	mg/custom size*	3000-5279	-70°C**

*For large quantities, packaging available upon request - minimum size 5 mg/vial. **Avoid repeated freezing and thawing.

#This product is manufactured using CrisBio™ technology from ALGENEX S.L

Specifications

Source	<i>Trichoplusia ni</i> .
Storage Buffer	HEPES, NaCl, pH 7.5
Purification Method	Ion Exchange and Affinity Chromatography
Protein Concentration	0.50 - 2.00 mg/mL [$A_{280} \times 6.95$]
Preservative	No Preservative Added

Product Description	Presentation	Reference	Storage
Recombinant gG2 Protein HSV-2*	0.5 mg/vial	3000-5282	-70°C**
Recombinant gG2 Protein HSV-2*	mg/custom size*	3000-5283	-70°C**

*For large quantities, packaging available upon request - minimum size 5 mg/vial. **Avoid repeated freezing and thawing.

#This product is manufactured using CrisBio™ technology from ALGENEX S.L.

Specifications

Source	<i>Trichoplusia ni</i> .
Storage Buffer	HEPES, NaCl, pH 8.2
Purification Method	Ion Exchange and Affinity Chromatography
Protein Concentration	0.80 - 1.50 mg/mL [$A_{280} \times 5.45$]
Preservative	No Preservative Added

Chagas

The following products have been tested in the following applications. This information derives from use in commercial diagnostic assays and/or testing within our laboratories.

Chagas		Chemiluminescence	ELISA	Turbidimetry	Rapid Test
Recombinant Antigens					
Recombinant TcF Antigen		●			

Other uses may be applicable depending on customer needs. For further technical information or requests please contact Immunoassay@werfen.com.

Recombinant Antigens

Product Description	Presentation	Reference	Storage
Recombinant TcF Ag	mg/custom size*	3000-5321	-70°C**
Recombinant TcF Ag	4 mg/vial	3000-5322	-70°C**

*For large quantities, packaging available upon request - minimum size 1 mg/vial. **Avoid repeated freezing and thawing.

Details

Source	<i>Escherichia coli</i>
Storage Buffer	Tris, NaCL, pH 8.0
Purification Method	Chromatography
Protein Concentration	1.00 - 4.00 mg/mL [BCA method]
Preservative	No Preservative Added



Powering Patient Care

werfen

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