

Document ID:	TDS-S-FBS-SA-025	Version:	
Date of Issue:	21-DEC-2021	Approved by:	Di
Review Date:	10-JAN-2023	Signature:	

oved by: Dr. Iman Kamranfar gnature:

005

Title: TECHNICAL DATA SHEET

SPECIMEN

		SPECIMEN	
Product Name	Foetal Bovine Serum		
Filtration/Treatment	Heat Inactivated		
Origin	Brazil	Brazil	
Product Codes	S-FBS-SA-025		
Shelf Life	5 Years from DOM		
Storage Temperature	<-15°C		
Shipping Temperature	dry ice		
Physical and Chemical Analysis	Method	Specifications	Units
Identity	Internally Validated	Bovine	n/a
Appearance	Visual	Clear yellow-amber	n/a
Specific Gravity	Mass Balance	> 1.01	g/ml
pH	Electronic pH Meter	6.8 - 8.2	n/a
Osmolality	Osmometer	260 - 340	mOsm/kg
Endotoxin	LAL Kinetic	< 10	EU/ml
Free Hemoglobin	Colorimetric	< 25	mg/dl
0 ···			
Protein Profile			
Total Protein	IDEXX Catalyst One	3.0 - 4.5	g/dl
Albumin	IDEXX Catalyst One	1.4 - 3.4	g/dl
Globulin	IDEXX Catalyst One	0.4 - 2.4	g/dl
IgG	ELISA	< 400	μg/ml
Electrophoretic Pattern	Capillary Electrophoresis	Normal	n/a
Sterility			
Sterility	Internally Validated	Pass	
Mycoplasma	qPCR	Not detected	n/a
Antibiotic Testing			
Tetracycline	IDEXX Snap Test	Test and report	n/a
Oxytetracycline	IDEXX Snap Test	Test and report	n/a
Chlortetracycline	IDEXX Snap Test	Test and report	n/a
Virus Testing			
BVDV/BHV-1/PI-3 (CPE)	Cell Culture	Not detected	n/a
Rabies Virus	gPCR	Not detected	n/a
Bluetongue Virus (BTV)	qPCR	Not detected	n/a
BRSV	qPCR	Not detected	n/a
Reo Virus	qPCR	Not detected	n/a
BAV	qPCR	Not detected	n/a
BoPV-1, -2	qPCR	Not detected	n/a
Antibody Testing			
BVDV - Antibody Type 1	Serum Neutralization Test (Cell Culture) or Detection of Antibodies (ELISA)	Test and report	n/a
BVDV - Antibody Type 2	Serum Neutralization Test (Cell Culture) or Detection of Antibodies (ELISA)	Test and report	n/a
BHV-1	Detection of Antibodies (ELISA)	Test and report	n/a
PI-3	Detection of Antibodies (ELISA)	Test and report	n/a



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Biochemistry				1
Alamine Amminotransferase (ALT) IOEXX Catalyst One Record U/L	Biochemistry			
Lactate Dehydrogenase (LDH) IDEXX Catalyst One Record U/L	Aspartate Aminotransferase (AST)	IDEXX Catalyst One	Record	U/L
Alkaline Phosphatase (ALKP) IDEXX Catalyst One Record U/L	Alanine Aminotransferase (ALT)	IDEXX Catalyst One	Record	U/L
Comman-Glutamyl Trans.(GGT) IDEXX Catalyst One Record Minol/L	Lactate Dehydrogenase (LDH)	IDEXX Catalyst One	Record	U/L
Cholesterol (CHOL)	Alkaline Phosphatase (ALKP)	IDEXX Catalyst One	Record	U/L
Citicose (GIU) IDEXX Catalyst One Record mmol/L	Gamma-Glutamyl Trans.(GGT)	IDEXX Catalyst One	Record	U/L
Urea (BUN) IDEXX Catalyst One Record mmol/L	Cholesterol (CHOL)	IDEXX Catalyst One	Record	mmol/L
Creatinine (CREA) IDEXX Catalyst One Record µmol/L Unic Acid (URIC) IDEXX Catalyst One Record µmol/L Calcium (Ca) IDEXX Catalyst One Record mmol/L Phosphorus (PHOS) IDEXX Catalyst One Record µmol/L Total Billrubin (TBIL) IDEXX Catalyst One Record µmol/L Magnesium (Mg) IDEXX Catalyst One Record mmol/L Sodium (Na) IDEXX Catalyst One Record mmol/L Potassium (K) IDEXX Catalyst One Record mmol/L Chloride (CL) IDEXX Catalyst One Record mmol/L Chloride (CL) IDEXX Catalyst One Record mmol/L Chloride (CL) IDEXX Catalyst One Record mmol/L Cell Count Record mmol/L mmol/L Cell Count Specifications Results Specifications Results L-929, HELA, MRC-5 Density Tested vs. Control Serum Scoring System 1 Scoring System 2 Cell Count Record Scoring s	Glucose (GLU)	IDEXX Catalyst One	Record	mmol/L
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	BHK-21, MRC-5	,	>75% PE vs. control PE	%
	BHK-21, MRC-5		>75% CE vs. control CE	%

 $Please \ note: the \ results \ shown \ on \ the \ Certificate \ of \ Analysis \ will \ be \ for \ the \ non-heat \ inactivated \ product.$





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HEAT INACTIVATION OF SERUM:

Serana uses a validated method of heat inactivation of serum, and has the necessary equipment and procedures in place to process large numbers of containers efficiently and effectively.

RECOMMENDED USE:

Storage

To effectively preserve the integrity of animal serum, it should be stored frozen and protected from light. The recommended storage temperature is <-15°C.

Multiple thaw/freeze cycles should be avoided, as they will accelerate the degradation of serum nutrients and can encourage the formation of insoluble precipitates. For this reason, serum should never be stored in "frost-free" freezers. These types of freezers periodically warm themselves to avoid internal ice deposits and are detrimental to the stability of frozen serum products.

Suggested Thawing Procedure

- 1. Remove the serum bottles from the freezer and allow them to adjust to room temperature for approximately 10 minutes.
- 2. Place each container in a 30 to 37 °C water bath or incubator. Excessive temperatures will degrade heat labile nutrients. If using a water bath, prevent the bottle caps from being submerged.
- 3. Gently agitate the bottles every 10 15 minutes until the serum is completely thawed.

Efficient and Effective Usage

After thawing, use the serum promptly. Liquid serum may be stored refrigerated (2 to 8 °C) up to four weeks. To avoid thaw/freeze cycles or long periods of refrigeration, it is recommended that any unused serum be immediately dispensed into small, useful aliquots and refrozen for future use.

THIS PRODUCT IS NOT INTENDED FOR HUMAN OR ANIMAL CONSUMPTION OR THERAPEUTIC USE.

