

Title:

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Date of Issue:	10-JAN-2022	Approved by:	Dr. Iman Kamranfar
Review Date:	10-JAN-2024	Signature:	Her

TECHNICAL DATA SHEET

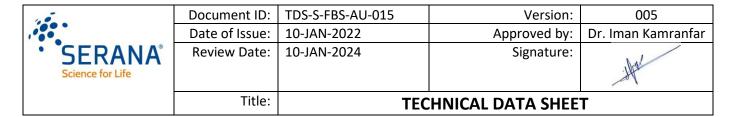
	SPECIMEN			
Product Name	Foetal Bovine Serum			
Filtration/Treatment	Triple 0.1 μm sterile filtered			
Origin	Australia			
Product Codes	S-FBS-AU-015			
Shelf Life	5 Years from DOM			
Storage Temperature	<-15°C			
Shipping Temperature	dry ice			
Physical and Chemical Analysis	Method	Specifications	Units	
Identity	Internally Validated	Bovine	n/a	
Appearance	Visual	Clear yellow-amber	n/a	
Specific Gravity	Mass Balance	> 1.01	g/ml	
рН	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	
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	Eur. Ph. 2.6.1	Pass		
Mycoplasma	gPCR	Not detected	n/a	
Wycopiasma	qi cir	Not detected	ii, u	
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	qPCR	Not detected Not detected	n/a	
Bluetongue Virus (BTV)	qPCR	Not detected Not detected	n/a	
BRSV	qPCR	Not detected Not detected	n/a	
Reo Virus	qPCR	Not detected Not detected	n/a	
BAV	qPCR	Not detected Not detected	n/a	
BoPV-1, -2	qPCR	Not detected Not detected	n/a	
BOF V-1, -2	yren	Not detected	11/ 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 Aspartate Aminotransferase (AST) Alanine Aminotransferase (ALT) Lactate Dehydrogenase (LDH) Alkaline Phosphatase (ALKP) Gamma-Glutamyl Trans. (GGT) Cholesterol (CHOL) Glucose (GLU) Urea (BUN) Creatinine (CREA) Uric Acid (URIC) Calcium (Ca) Phosphorus (PHOS) Total Bilirubin (TBIL) Magnesium (Mg) Sodium (Na) Potassium (K) Chloride (CL)	IDEXX Catalyst One	Record	U/L U/L U/L U/L U/L mmol/L mmol/L mmol/L μmol/L μmol/L mmol/L μmol/L μmol/L μmol/L
Alanine Aminotransferase (ALT) Lactate Dehydrogenase (LDH) Alkaline Phosphatase (ALKP) Gamma-Glutamyl Trans. (GGT) Cholesterol (CHOL) Glucose (GLU) Urea (BUN) Creatinine (CREA) Uric Acid (URIC) Calcium (Ca) Phosphorus (PHOS) Total Bilirubin (TBIL) Magnesium (Mg) Sodium (Na) Potassium (K)	IDEXX Catalyst One	Record	U/L U/L U/L U/L mmol/L mmol/L mmol/L µmol/L µmol/L mmol/L mmol/L mmol/L
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Calcium (Ca) Phosphorus (PHOS) Total Bilirubin (TBIL) Magnesium (Mg) Sodium (Na) Potassium (K)	IDEXX Catalyst One	Record Record Record	mmol/L mmol/L
Phosphorus (PHOS) Total Bilirubin (TBIL) Magnesium (Mg) Sodium (Na) Potassium (K)	IDEXX Catalyst One IDEXX Catalyst One IDEXX Catalyst One IDEXX Catalyst One	Record Record	mmol/L
Total Bilirubin (TBIL) Magnesium (Mg) Sodium (Na) Potassium (K)	IDEXX Catalyst One IDEXX Catalyst One IDEXX Catalyst One	Record	•
Magnesium (Mg) Sodium (Na) Potassium (K)	IDEXX Catalyst One IDEXX Catalyst One		
Sodium (Na) Potassium (K)	IDEXX Catalyst One		mmol/L
Potassium (K)		Record	mmol/L
	IDEXX Catalyst One	Record	mmol/L
cinoride (CL)	IDEXX Catalyst One	Record	mmol/L
	IDEAN Catalyst one	Necoru	mmolyE
Cell Culture Testing - Option 1			
	Mathad	Specifications	Doculto
Cell Line	Method	•	Results
L-929, HELA, MRC-5	Morphology	Tested vs. Control Serum	Scoring System 1
L-929, HELA, MRC-5	Density	Tested vs. Control Serum	Scoring System 2
L-929, HELA, MRC-5	Cell Count	Cell count [log10/ml]/dead cells vs. Control	Record
Scoring system	Meaning		Results
1 - Morphology	Dead Cells		0
	Many Cells degenerate and many dead cells		1
	Cells partially degenerate and many dead cells		2
	Few cells degenerate and few dead cells		3
	Without pathological findings		4
2 - Density	Single cells/cell aggregates		0
•	< 50% confluency		1
	50 - 90% confluency		2
	confluency		3
	overly confluent		4
			-
Cell Culture Testing - Option 2			
Cell Line	Method	Specifications	Units
BHK-21, MRC-5	Multiple Passage - Records results vs. control at day: 0, 3, 6, 12	>75% of control growth	%
BHK-21, MRC-5	Plating Efficiency - Records results vs. control at day: 0, 3, 6, 12	>75% PE vs. control PE	%
BHK-21, MRC-5	Cloning Efficiency - Records results vs. control at day: 0, 3, 6, 12	>75% CE vs. control CE	%





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.

