



**CERTIFICATE OF ANALYSIS**  
**GemCell™ Bovine Calf Serum**  
**(Catalog Number 100-506)**

Lot Number: C424025

Date of Manufacture: Dec2022

Product Expiry: Dec2027

Origin: US

Storage Temperature: ≤ -10°C

For Cell Culture, further Manufacturing or Research use only. Not for direct Therapeutic use.

**Product Description:** *GemCell™ Bovine Calf Serum is sterile-filtered through a 0.2 µm filter prior to freezing.*

Test	Methodology	Specification	Analysis
<b>Biological Testing</b>			
Endotoxin	USP <85> & EP 2.6.14	Test and Report	<0.005 EU/mL
<b>Microbiological Testing</b>			
Sterility			
Bacteria	USP <71> & EP 2.6.1	No Growth	No Growth
Fungi	USP <71> & EP 2.6.1	No Growth	No Growth
Mycoplasma	Barile and Kern & Hoechst Fluorochrome Stain 9 CFR Part 113.53c	Not Detected	Not Detected
<b>Viral Testing</b>			
Bovine Viral Diarrhea		Not Detected	Not Detected
IBR		Not Detected	Not Detected
Para Influenza 3 Virus (PI3)		Not Detected	Not Detected
BTV		Not Detected	Not Detected
<b>Physical Testing</b>			
Osmolality	USP <785> & EP 2.2.35	Test and Report	282 mOsm/kg H <sub>2</sub> O
pH	USP <791> & EP 2.2.3	Test and Report	7.75
<b>Biochemistry Testing</b>			
Albumin		Test and Report	3.1 g/dL
Alkaline Phosphatase		Test and Report	158 IU/L
ALT (SGPT)		Test and Report	10 IU/L
AST (SGOT)		Test and Report	60 IU/L
Bilirubin, Total		Test and Report	0.3 mg/dL
BUN		Test and Report	7 mg/dL
Calcium		Test and Report	9.7 mg/dL
Chloride		Test and Report	97 mmol/L
Cholesterol		Test and Report	116 mg/dL
Creatinine		Test and Report	0.8 mg/dL
Glucose		Test and Report	55 mg/dL
Hemoglobin	USP <90>	Test and Report	10.48 mg/dL
Iron, Serum		Test and Report	534.18 µg/dL
Phosphorus		Test and Report	8.6 mg/dL
Potassium		Test and Report	5.8 mmol/L



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Test	Methodology	Specification	Analysis
Protein, Total	USP <1057> & EP 2.5.33	Test and Report	6.8 g/dL
Sodium		Test and Report	141 mmol/L
Triglycerides		Test and Report	16 mg/dL
Uric Acid		Test and Report	0.9mg/dL

Our bovine serum meets all USDA requirements and has passed ante- and post-mortem inspection by a licensed veterinarian. It is collected in countries recognized as being free of foot-and-mouth disease and rinderpest. The origin of all bovine serum is traceable by lot number, date and country of collection. Precipitates may develop in this product upon freezing and/or thawing; this occurrence does not impact culture performance.

The testing that has been performed as part of this lot release has been reviewed by Quality Assurance personnel and has confirmed that the testing meets the specifications presented on this Certificate of Analysis.

Isaiah Wells

Name

24 JUN 2024

Date

QC Associate I

Title