



**CERTIFICATE OF ANALYSIS**  
**GemCell™ Adult Bovine Serum**  
**0.2µm sterile filtered**  
**(Catalog Number 100-101)**

Lot Number: C121017

Date of Manufacture: Nov2021

Product Expiry: Nov2026

Origin: United States

Storage Temperature: ≤-10°C

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

Test	Methodology	Specification	Analysis
<b>Biological Testing</b>			
Endotoxin	LAL	Report	0.602 EU/mL
Hemoglobin	USP <90>	Report	28.4 mg/dL
<b>Microbiological Testing</b>			
Sterility	9CFR 113.26		
Bacteria		No Growth	No Growth
Fungi		No Growth	No Growth
Mycoplasma	PCR	Not Detected	Not Detected
<b>Viral Testing</b>			
	9CFR 113.53c [113.46, 113.47]		
Cytopathic Agents		Not Detected	Not Detected
Hemadsorbing Agents		Not Detected	Not Detected
<b>Extraneous Viruses (FAb)</b>			
Bluetongue Virus		Not Detected	Not Detected
Bovine Viral Diarrhea		Report	Not Detected
<b>Physical Testing</b>			
Osmolality		Report	300.0 mOsm/kg H <sub>2</sub> O
pH @ RT		Report	7.1
<b>Biochemistry</b>			
Albumin		Report	3.0 g/dL
ALT (SGPT)		Report	26.0 IU/L
AST (SGOT)		Report	118.0 IU/L
Bilirubin, Total		Report	0.3 mg/dL
Calcium		Report	9.6 mg/dL
Chloride		Report	96.0 mEq/L
Cholesterol		Report	72.0 mg/dL
Creatinine		Report	1.2 mg/dL



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Glucose		Report	62.0 mg/dL
Iron, Serum		Report	105.0 µg/dL
Phosphorus		Report	7.2 mg/dL
Potassium		Report	6.4 mEq/L
Protein, Total		Report	8.0 g/dL
Sodium		Report	141.0 mEq/L
Triglycerides		Report	15.0 mg/dL

*Results shown were obtained by carefully performed methods believed to be reliable. However, since some results may vary by methodology, it is suggested that tests for which results are particularly critical be repeated by the end user. 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.

Karen Zuniga  
Name

QA Associate I  
Title

14FEB2023  
Date