



**CERTIFICATE OF ANALYSIS**  
**GemCell™ U.S. Origin SuperCalf Serum**  
**(Catalog Number 100-510)**

Lot Number: C424005

**Date of Manufacture:** Dec2022

**Product Expiry:** Dec2027

**Origin:** United States (100%)

**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	USP <85> & EP 2.6.14	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>			
Cytopathic Agents		Not Detected	Not Detected
Hemadsorbing Agents		Not Detected	Not Detected
Extraneous Viruses (FAb)			
Bovine Viral Diarrhea (non-cytopathic)		Not Detected	Not Detected
Bluetongue Virus		Not Detected	Not Detected
<b>Physical Testing</b>			
Osmolality	USP <785> & EP 2.2.35	Report	282 mOsm/kg
pH @ RT	USP <791> & EP 2.2.3	Report	7.75
<b>Biochemistry</b>			
Albumin		Report	3.1 g/dL
Alkaline Phosphatase		Report	158 IU/L
ALT (SGPT)		Report	10 IU/L
AST (SGOT)		Report	60 IU/L
Bilirubin, Total		Report	0.3 mg/dL
BUN		Report	7 mg/dL
Calcium		Report	9.7 mg/dL
Cholesterol		Report	116 mg/dL
Creatinine		Report	0.8 mg/dL
Glucose		Report	55 mg/dL
Hemoglobin	Spectrophotometric Method	Report	10.48 mg/dL
Iron, Serum			534.18 µg/dL



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Phosphorus		Report	8.6 mg/dL
Potassium		Report	5.8 mmol/L
Protein, Total	USP <1057> & EP 2.5.33	Report	6.8 g/dL
Sodium		Report	141 mmol/L
Triglycerides		Report	16 mg/dL
Uric Acid		Report	0.9 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 serums 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.

Korrina Nicewonger  
Name

QC Associate II  
Title

01FEB2024  
Date