



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

Lot Number: C424014

Date of Manufacture: Nov2018

Product Expiry: Nov2026

Origin: United States

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
Biological Testing			
Endotoxin	LAL	Test and Report	0.561 EU/mL
Microbiological Testing			
Sterility	9CFR 113.26		
Bacteria		No Growth	No Growth
Fungi		No Growth	No Growth
Mycoplasma	9CFR 113.28	Not Detected	Not Detected
Viral Testing	9CFR 113.53		
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
Physical Testing			
Osmolality	Osmometer	Test and Report	291.0 mOsm/kg H ₂ O
pH	pH Meter	Test and Report	7.5
Biochemistry Testing			
Albumin	Chemistry Analyzer	Test and Report	3.7 g/dL
Alkaline Phosphatase	Chemistry Analyzer	Test and Report	158 IU/L
ALT (SGPT)	Chemistry Analyzer	Test and Report	14 IU/L
AST (SGOT)	Chemistry Analyzer	Test and Report	104 IU/L
Bilirubin, Total	Chemistry Analyzer	Test and Report	0.1 mg/dL
BUN	Chemistry Analyzer	Test and Report	8.0 mg/dL
Calcium	Chemistry Analyzer	Test and Report	7.1 mg/dL
Chloride	Chemistry Analyzer	Test and Report	93.0 mEq/L
Cholesterol	Chemistry Analyzer	Test and Report	91.0 mg/dL
Creatinine	Chemistry Analyzer	Test and Report	0.7 mg/dL
Glucose	Chemistry Analyzer	Test and Report	63.0 mg/dL
Hemoglobin	USP<90>	Test and Report	6.70 mg/dL
Iron, Serum	Chemistry Analyzer	Test and Report	85.0 µg/dL
Phosphorus	Chemistry Analyzer	Test and Report	8.9 mg/dL
Potassium	Chemistry Analyzer	Test and Report	6.0 mEq/L
Protein, Total	Chemistry Analyzer	Test and Report	7.2 g/dL



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Sodium	Chemistry Analyzer	Test and Report	138.0 mEq/L
Triglycerides	Chemistry Analyzer	Test and Report	17.0 mg/dL
Uric Acid	Chemistry Analyzer	Test and Report	0.8 mg/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.

VANESSA YOUNG
Name

10 APR 2024
Date

QA SPECIALIST
Title