



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

Lot Number: C423012

Date of Manufacture: Nov2021

Origin: United States

Product Expiry: Nov2026

For Cell culture, Further Manufacturing or Research
use Only. Not for Direct Therapeutic Use.

Storage Temperature: ≤ -10°C

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	0.602 EU/mL
Microbiological Testing			
Sterility	9CFR 113.26		
Bacteria		No Growth	No Growth
Fungi		No Growth	No Growth
Mycoplasma	PCR	Not Detected	Not Detected
Viral Testing	9CFR 113.53c,113.46,113.47		
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	300.0 mOsm/kg H ₂ O
pH	pH Meter	Test and Report	7.1
Biochemistry			
Albumin	Chemistry Analyzer	Test and Report	3.0 g/dL
Alkaline Phosphatase	Chemistry Analyzer	Test and Report	69.0 IU/L
ALT (SGPT)	Chemistry Analyzer	Test and Report	26.0 IU/L
AST (SGOT)	Chemistry Analyzer	Test and Report	118.0 IU/L
Bilirubin, Total	Chemistry Analyzer	Test and Report	0.3 mg/dL
BUN	Chemistry Analyzer	Test and Report	11.0 mg/dL
Calcium	Chemistry Analyzer	Test and Report	9.6 mg/dL
Chloride	Chemistry Analyzer	Test and Report	96.0 mEq/L
Cholesterol	Chemistry Analyzer	Test and Report	72.0 mg/dL
Creatinine	Chemistry Analyzer	Test and Report	1.2 mg/dL
Glucose	Chemistry Analyzer	Test and Report	62.0 mg/dL



Test	Methodology	Specification	Analysis
Hemoglobin	USP<90>	Test and Report	28.4 mg/dL
Iron, Serum	Chemistry Analyzer	Test and Report	105.0 µg/dL
Phosphorus	Chemistry Analyzer	Test and Report	7.2 mg/dL
Potassium	Chemistry Analyzer	Test and Report	6.4 mEq/L
Protein, Total	Chemistry Analyzer	Test and Report	8.0 g/dL
Sodium	Chemistry Analyzer	Test and Report	141.0 mEq/L
Triglycerides	Chemistry Analyzer	Test and Report	15.0 mg/dL
Uric Acid	Chemistry Analyzer	Test and Report	0.9 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.

Korrina Nicewonger
Name

QC Associate I
Title

03MAY2023
Date