



CERTIFICATE OF ANALYSIS
GemCell™ Newborn Calf Serum
≤14 days of age
(Catalog Number 100-504)

Lot Number: C423019

Date of Manufacture: May2021

Product Expiry: May2026

Origin: United States

Storage Temperature: ≤ -10°C

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

Product description: GemCell™ Newborn 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	0.77 EU/mL
Hemoglobin	USP<90>	Test and Report	11.91 mg/dL
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
BPV		Not Detected	Not Detected
Rabies Virus		Not Detected	Not Detected
Physical Testing			
Osmolality	Osmometer	Test and Report	279.0 mOsm/kg
pH@RT	pH Meter	Test and Report	8.33
Biochemistry			
Albumin	Chemistry Analyzer	Test and Report	2.9 g/dL
ALT (SGPT)	Chemistry Analyzer	Test and Report	23 IU/L
AST (SGOT)	Chemistry Analyzer	Test and Report	82 IU/L
Bilirubin, Total	Chemistry Analyzer	Test and Report	1.10 mg/dL
BUN	Chemistry Analyzer	Test and Report	17 mg/dL
Calcium	Chemistry Analyzer	Test and Report	10.1 mg/dL
Chloride	Chemistry Analyzer	Test and Report	94 mEq/L
Cholesterol	Chemistry Analyzer	Test and Report	50 mg/dL



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Creatinine	Chemistry Analyzer	Test and Report	1.0 mg/dL
Glucose	Chemistry Analyzer	Test and Report	64 mg/dL
Iron, Serum	Chemistry Analyzer	Test and Report	87 µg/dL
Phosphorus	Chemistry Analyzer	Test and Report	7.1 mg/dL
Potassium	Chemistry Analyzer	Test and Report	5.8 mEq/L
Protein, Total	Chemistry Analyzer	Test and Report	5.60 g/dL
Sodium	Chemistry Analyzer	Test and Report	138 mEq/L
Uric Acid	Chemistry Analyzer	Test and Report	0.7 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

QA ASSOCIATE II
Title

12 JUN 2023
Date