



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

**Lot Number:**C018003

**Date of Manufacture:** Sep2018

**Origin:** US

**Product Expiry:** Sep2023

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

**Storage Temperature:** ≤ -10°C

**Product description:** *GemCell™ Newborn Calf Serum is sterile-filtered through a 0.2 μm filter prior to freezing.*

Test	Methodology	Specification	Analysis
<b>Biological Testing</b>			
Endotoxin	USP<85>	Test and Report	<1.0 EU/mL
Hemoglobin	Fleming, AF and Woolf, AJ (1965)	Test and Report	13.20 mg/dL
<b>Microbiological Testing</b>			
Sterility	USP<71>		
Bacteria		No Growth	No Growth
Fungi		No Growth	No Growth
Mycoplasma	Barile, MF and Kern, J (1971)	Not Detected	Not Detected
<b>Viral Testing</b>			
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		Not Detected	Not Detected
<b>Physical Testing</b>			
Osmolality	USP <785>	Test and Report	308.0 mOsm/kg
pH@RT	USP<791>	Test and Report	7.80
<b>Biochemistry</b>			
Albumin		Test and Report	3.3 g/dL
ALT (SGPT)		Test and Report	18 IU/L
AST (SGOT)		Test and Report	48 IU/L
Bilirubin, Total		Test and Report	1.10 mg/dL
BUN		Test and Report	18 mg/dL
Calcium		Test and Report	11.7mg/dL
Chloride		Test and Report	100 mEq/L
Cholesterol		Test and Report	63 mg/dL



Test	Methodology	Specification	Analysis
Creatinine		Test and Report	1.0 mg/dL
Glucose		Test and Report	74 mg/dL
Iron, Serum		Test and Report	94 µg/dL
Phosphorus		Test and Report	8.50 mg/dL
Potassium		Test and Report	6.7 mEq/L
Protein, Total		Test and Report	6.4 g/dL
Sodium		Test and Report	149 mEq/L
Uric Acid		Test and Report	1.0 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.

Drashni B kumar

QC Associate

Name  
11 FEB 2021

Title

Date