



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

Lot Number: C42J00L

Date of Manufacture: Feb 2020

Origin: United States

Product Expiry: Feb 2025

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
Biological Testing			
Endotoxin	USP<85>	Test and Report	1.00 EU/mL
Hemoglobin	Fleming, AF and Woolf, AJ (1965)	Test and Report	12.1 mg/dL
Microbiological Testing			
Sterility	USP<71>		
Bacteria		No Growth	No Growth
Fungi		No Growth	No Growth
Mycoplasma	Barile, MF and Kern, J (1971)	Not Detected	Not Detected
Viral Testing			
Bovine Viral Diarrhea		Not Detected	Not Detected
IBR		Not Detected	Not Detected
Para Influenza 3 Virus (PI3)		Not Detected	Not Detected
BPV			
Rabies		Not Detected	Not Detected
Physical Testing			
Osmolality	USP <785>	Test and Report	311 mOsm/kg
pH@RT	USP<791>	Test and Report	7.54
Biochemistry			
Albumin		Test and Report	2.5 g/dL
ALT (SGPT)		Test and Report	11 U/L
AST (SGOT)		Test and Report	45 U/L
Bilirubin, Total		Test and Report	0.8 mg/dL
BUN		Test and Report	15 mg/dL
Calcium		Test and Report	10.5 mg/dL
Chloride		Test and Report	101 mM
Cholesterol		Test and Report	27 mg/dL



Test	Methodology	Specification	Analysis
Creatinine		Test and Report	1.1 mg/dL
Glucose		Test and Report	114 mg/dL
Iron, Serum		Test and Report	85 µg/dL
Phosphorus		Test and Report	7.7 mg/dL
Potassium		Test and Report	6.9 mM
Protein, Total		Test and Report	4.8 g/dL
Sodium		Test and Report	145 mM
Uric Acid		Test and Report	1.6 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.

Megha Khairani
Name
03 Apr 2020
Date

QA Associate III
Title