



CERTIFICATE OF ANALYSIS
BenchMark™ Fetal Bovine Serum
(Catalog Number 100-106)

Lot Number: A424029

Date of Manufacture: NOV2023

Product Expiry: NOV2028

Origin: Chile

Storage Temperature: ≤ -10°C

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

Product Description: BenchMark™ Fetal Bovine Serum is sterile-filtered through a 0.1 µm filter prior to freezing.

Test	Methodology	Specification	Analysis
Biological Testing			
Endotoxin	LAL	<10.0 EU/mL	<0.100 EU/mL
Hemoglobin	USP <90>	<20.0 mg/dL	13.75 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]			
Cytopathic Agents		Not Detected	Not Detected
Hemadsorbing Agents		Not Detected	Not Detected
Extraneous Viruses (FAb)			
Bluetongue Virus		Not Detected	Not Detected
Bovine Adenovirus		Not Detected	Not Detected
Bovine Parvovirus		Not Detected	Not Detected
Bovine Viral Diarrhea (Cytopathic)		Not Detected	Not Detected
Bovine Respiratory Syncytial Virus		Not Detected	Not Detected
Rabies Virus		Not Detected	Not Detected
Reovirus		Not Detected	Not Detected
Physical Testing			
Electrophoretic Pattern	Protein Electrophoresis	Normal	Normal
Osmolality	Osmometer	260 – 350 mOsm/ kg	312.0 mOsm/ kg
pH	pH Meter	6.5 – 8.5	7.3
Biochemistry			
Albumin		Test and Report	1.5 g/dL
Alkaline Phosphatase		Test and Report	240 IU/L
ALT (SGPT)		Test and Report	13 IU/L
AST (SGOT)		Test and Report	49 IU/L
GGT		<10 U/L	4.0 IU/L



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Bilirubin, Total	ELISA	Test and Report	0.2 mg/dL
BUN		Test and Report	17.0 mg/dL
Calcium		Test and Report	13.8 mg/dL
Chloride		Test and Report	96.0 mEq/L
Cholesterol		Test and Report	32.0 mg/dL
Cortisol		Test and Report	<0.2 µg/dL
Creatinine		Test and Report	2.8 mg/dL
Glucose		Test and Report	89.0 mg/dL
IgG		<0.300 mg/mL*	0.5643 mg/mL
Insulin		Test and Report	7.840 µIU/mL
Iron, Serum		Test and Report	211.0 µg/dL
Phosphorus		Test and Report	9.7 mg/dL
Potassium		Test and Report	13.2 mEq/L
Progesterone		Test and Report	<0.06 ng/mL
Protein, Total		2.5 – 6.0 g/dL	3.8 g/dL
Sodium		Test and Report	134.0 mEq/L
Testosterone		Test and Report	<0.01 ng/mL
T3	Chemistry Analyzer	Test and Report	130.0 ng/dL
T4		Test and Report	11.7 µg/dL
Triglycerides		Test and Report	54.0 mg/dL
Uric Acid		Test and Report	2.4 mg/dL

Our fetal bovine serum meets all USDA requirements and has passed ante and post-mortem inspection. It is collected in countries recognized as being free of foot-and-mouth disease and rinderpest. The origin of all fetal 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. *Some geographic regions may test higher than 0.300 mg/mL. If this be the case, refer to GGT results less than 10 U/L to ensure FBS purity.

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.

Jaqueline Wilson
Name
QA Specialist
Title

07 MAY 2024
Date