



Product: **Charcoal:Dextran Stripped Fetal Bovine Serum**
Triple 0.1µm sterile-filtered

Catalog #: 100-119
Lot #: A02H02K
Origin: United States

Manufacture Date: Jun 2019
Expiration Date: Jun 2024

TEST	METHODOLOGY	SPECIFICATION	RESULTS
Biological Testing			
Endotoxin	USP<85>	<10.0 EU/mL	<0.1 EU/mL
Hemoglobin	Fleming, AF and Woolf, AJ (1965)	<20.0 mg/dL	6.49 mg/dL
Microbiological Testing			
Sterility			
Bacteria	USP<7.1>	Not Detected	Not Detected
Fungi		Not Detected	Not Detected
Mycoplasma	Barile, MF and Kern, J (1971)	Not Detected	Not Detected
Viral Testing			
9 CFR 113.53c [113.46, 113.47]			
Cytopathic Agents		Not Detected	Not Detected
Hemadsorbing Agents		Not Detected	Not Detected
Bovine Viral Diarrhea Ab Titer			
Type I			1:1
Type II			1:1
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 Viral Diarrhea (non-cytopathic)		Not Detected	Not Detected
Bovine Syncytial Virus		Not Detected	Not Detected
Bovine Rabies Virus		Not Detected	Not Detected
Reovirus		Not Detected	Not Detected
Physical Testing			
Electrophoretic Pattern	Cellulose Acetate	Normal	Normal
Osmolality	USP<785>	260-350 mOsm/kg	289 mOsm/kg
pH @ RT	USP<791>	6.5 - 8.5	7.42



GEMINI
BIO-PRODUCTS

Biochemical Testing

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TEST	METHODOLOGY	SPECIFICATION	RESULTS	
			Pre-Strip	Post-Strip
Albumin				1.7 g/dL
Alkaline Phosphatase				180 U/L
ALT (SGPT)				5 U/L
AST (SGOT)				28 U/L
GGT		<10 U/L		3 U/L
Bilirubin, Total				0.0 mg/dL
BUN				16 mg/dL
Calcium				2.9 mM
Chloride				97 mM
Cholesterol				31 mg/dL
Cortisol			8.22	<5.5 nM
Creatinine				0.0 mg/dL
Estradiol			156	81.4 pM
Glucose				4.3 mM
IgG	ELISA	<0.300 mg/mL*		0.057 mg/mL
Insulin			50.8	<16.4 pM
Iron, Serum				147 ug/dL
Phosphorus				2.9 mM
Potassium				9.9 mM
Progesterone			<0.3	<0.3 nM
Protein, Total	Biuret	2.5-6.0 g/dL		3.2 g/dL
Sodium				135 mM
Testosterone			0.16	<0.03 nM
T3			2.11	<0.154 nM
T4			232	90 nM
Triglycerides				57 mg/dL
Tetracycline				Pending
Uric Acid				0.0 mg/dL

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

Results shown were obtained prior to heat inactivation by carefully performed methods believed to be reliable. However, since some results may vary by methodology, it is suggested that tests for which results are particularly critical be repeated by the end user. Our fetal 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 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.*

[Signature] 21 Aug 2019

CREATED BY/ DATE

[Signature] 21 Aug 2019

VERIFIED BY/ DATE